



中鋁國際工程股份有限公司

China Aluminum International Engineering Corporation Limited

(A joint stock limited company incorporated in the People's Republic of China with limited liability)

Stock Code: 2068

2023 INTERIM REPORT



IMPORTANT NOTES

- I. The Board, Board of Supervisors, directors, supervisors and senior management of the Company guarantee that the contents of the interim report are truthful, accurate and complete, free from any false statement, misleading representation or major omission, and are legally liable therefor on a several and joint basis.
- II. All directors of the Company attended the Board Meeting.
- III. This interim report is unaudited.
- IV. LI Yihua, the person in charge of the Company, ZHAO Hongmei, the person in charge of accounting work, and WEI Xin, the person in charge of the accounting organ (the person in charge of the accounting function) undertake that: the financial report in this interim report is truthful, accurate and complete.
- V. Proposal for Profit Distribution or Proposal for Converting Capital Reserve into Share Capital for the Reporting Period as Resolved to Pass by the Board

No

- VI. Forward-looking Risk Statements

Applicable Not applicable

This report contains some predictive statements based on subjective assumptions and judgments about future policies and economic trends. Subject to many variable factors, actual results or trends may deviate from these predictive statements.

Forward-looking statements such as future plans mentioned in this report do not constitute the Company's substantive undertakings to investors. Investors should be aware of investment risks.

- VII. Whether funds occupied by the controlling shareholder or its related parties for non-operating purpose?

No

- VIII. Whether guarantee provided for any third party in violation of required decision procedures?

No

- IX. Whether more than half of the directors could not guarantee the authenticity, accuracy and completeness of the interim report disclosed by the Company?

No

IMPORTANT NOTES

X. Material Risk Disclosure

The Company may be mainly exposed to cash flow risk, debt risk, litigation risk, operational risk, market risk. For details, please refer to “V. Other Disclosures – (I) Potential Risks” under “Section 3 Management Discussion and Analysis” of this Report. Investor attention is drawn thereto.

XI. Other

Applicable Not applicable

For the purpose of this report, all amounts are expressed in RMB unless otherwise specified.



CONTENTS

Section 1	Definitions	4
Section 2	Company Profile and Key Financial Indicators	6
Section 3	Management Discussion and Analysis	12
Section 4	Corporate Governance	41
Section 5	Environmental and Social Responsibility	47
Section 6	Key Matters	50
Section 7	Changes in Shares and Shareholders	65
Section 8	Particulars of Preferred Stock	74
Section 9	Information on Bonds	75
Section 10	Financial Report	76



SECTION 1 DEFINITIONS

For the purpose of this report, unless the context otherwise requires, the following terms have the following meanings:

DEFINITION OF TERMS

“the Company”, “Company”, “Chalieco”	China Aluminum International Engineering Corporation Limited (中鋁國際工程股份有限公司)
“Group”	the Company and its subsidiaries
“Chinalco”	Aluminum Corporation of China (中國鋁業集團有限公司), our controlling shareholder
“Luoyang Institute”	Luoyang Engineering & Research Institute for Nonferrous Metals Processing (洛陽有色金屬加工設計研究院有限公司), one of our promoters and shareholders
“Ministry of Finance”	the Ministry of Finance of the People’s Republic of China
“SASAC”	the State-owned Assets Supervision and Administration Commission of the State Council
“CSRC”	the China Securities Regulatory Commission
“SSE”	the Shanghai Stock Exchange
“Stock Exchange”	the Stock Exchange of Hong Kong Limited
“Listing Rules of the Stock Exchange”	the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited
“IAS(s)”	the International Accounting Standards and their interpretations
“Board”	the board of directors of the Company
“Board of Supervisors”	the board of supervisors of the Company
“Audit Committee”	the audit committee of the Board
“Risk Management Committee”	the risk management committee of the Board
“GAMI”	Guiyang Aluminum & Magnesium Design Institute Co., Ltd. (貴陽鋁鎂設計研究院有限公司), a wholly-owned subsidiary of the Company
“CINF”	Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy (長沙有色冶金設計研究院有限公司), a wholly-owned subsidiary of the Company
“Kunming Survey and Design Institute”	Kunming Survey and Design Institute Co., Ltd. of China Nonferrous Metals Industry (中國有色金屬昆明勘察設計研究院有限公司), a wholly-owned subsidiary of the Company
“Kunming Institute”	Kunming Non-ferrous Metallurgical Design and Research Institute Corporation (昆明有色冶金設計研究院股份公司), a subsidiary owned as to 67% by the Company
“Sixth Metallurgical Company”	Sixth Metallurgical Construction Company of China Nonferrous Metals Industry (中國有色金屬工業第六冶金建設有限公司), a wholly-owned subsidiary of the Company

SECTION 1 DEFINITIONS

“Great Wall Construction”	China Aluminum Great Wall Construction Co., Ltd. (中鋁長城建設有限公司), a wholly-owned subsidiary of Sixth Metallurgical Company which is a wholly-owned subsidiary of the Company
“Ninth Metallurgical Company”	Ninth Metallurgical Construction Co., Ltd. (九冶建設有限公司), a subsidiary owned as to 73.17% by the Company
“Fifth Branch of Ninth Metallurgical Company”	Fifth Engineering Company of Ninth Metallurgical Construction Co., Ltd., a branch company of Ninth Metallurgical Company which is a controlled subsidiary of the Company
“Twelfth Metallurgical Company”	China Nonferrous Metals Industry’s 12th Metallurgical Construction Co., Ltd. (中色十二冶金建設有限公司), a wholly-owned subsidiary of the Company
“Tianjin Construction”	Chalieco (Tianjin) Construction Co., Ltd. (中鋁國際(天津)建設有限公司), a wholly-owned subsidiary of the Company
“SAMI”	Shenyang Aluminum & Magnesium Engineering and Research Institute Company Limited (瀋陽鋁鎂設計研究院有限公司), a wholly-owned subsidiary of the Company
“YAIC”	Yunnan Aluminum International Company Limited (雲鋁國際有限公司), a subsidiary of Chinalco
“CNPT”	China Nonferrous Metals Processing Technology Co., Ltd. (中色科技股份有限公司), a subsidiary owned as to 92.35% by the Company
“Chinalco Finance”	Chinalco Finance Company Limited, a subsidiary of Chinalco
“Chinalco Commercial”	Chinalco Commercial Factoring Co., Ltd., a subsidiary of Chinalco

SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

I. CORPORATE INFORMATION

Chinese Name of the Company	中鋁國際工程股份有限公司
Abbreviation of Chinese Name of the Company	中鋁國際
English Name of the Company	China Aluminum International Engineering Corporation Limited
Abbreviation of English Name of the Company	CHALIECO
Legal Representative of the Company	LI Yihua

II. CONTACTS AND CONTACT INFORMATION

	Secretary to the Board, Joint Company Secretary ^{note}	Representative for Securities Affairs
Name	ZHAO Hongmei	MA Shaozhu
Contact address	Building C, No. 99 Xingshikou Road, Haidian District, Beijing	Building C, No. 99 Xingshikou Road, Haidian District, Beijing
Tel	010-82406806	010-82406806
Fax	010-82406666	010-82406666
E-mail	IR-chalieco@chalieco.com.cn	IR-chalieco@chalieco.com.cn

Note: The Company appointed Ms. ZHAO Hongmei and Ms. Ng Ka Man as the joint company secretaries.

III. CHANGES IN BASIC INFORMATION

Registered address of the Company	Building C, No. 99 Xingshikou Road, Haidian District, Beijing
Historical changes in the registered address of the Company	The registered address was “No. B12, Fuxing Road, Haidian District, Beijing” at the time of establishment of the Company; the registered address was changed to “Building C, No. 99 Xingshikou Road, Haidian District, Beijing” in June 2009
Domestic office of the Company	Building C, No. 99 Xingshikou Road, Haidian District, Beijing
Postal code for domestic office of the Company	100093
Hong Kong office of the Company	Room 4501, Far East Finance Centre, 16 Harcourt Road, Admiralty, Hong Kong
Website of the Company	http://www.chalieco.com.cn
E-mail	IR-chalieco@chalieco.com.cn
Index of changes during the reporting period	No changes during the reporting period

SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

IV. CHANGES IN THE PLACES FOR INFORMATION DISCLOSURE AND REFERENCE

The Company's designated press media for information disclosure	Securities Daily
Designated website for the interim report	www.sse.com.cn; www.hkex.com.hk
The interim report is available at	Board Office of Chalieco at Building C, No. 99 Xingshikou Road, Haidian District, Beijing
Index of changes during the reporting period	No changes during the reporting period

V. STOCK PROFILE

Share Class	Listed on	Stock Abbreviation	Stock Code	Previous Stock Abbreviation
A Share	The SSE	中鋁國際	601068	–
H Share	The Stock Exchange	中鋁國際	2068	–

VI. OTHER RELEVANT INFORMATION

Applicable Not applicable

Accounting firm engaged by the Company	Name Office address Names of accountants who signed the review report	Grant Thornton (Special General Partnership) 5th Floor, Scitech Palace, 22 Jianguomen Wai Avenue, Chaoyang District, Beijing Huang Zhibin, Li Yang
Legal advisor as to PRC laws	Name Office address	Jia Yuan Law Office F408, Ocean Plaza, 158 Fuxing Men Nei Street, Xicheng District, Beijing
Legal advisor as to overseas laws	Name Office address	Clifford Chance 27th Floor, Jardine House, One Connaught Place, Central, Hong Kong
A Share Registrar of the Company	Name Office address	China Securities Depository and Clearing Co., Ltd. Shanghai Branch 188 South Yanggao Road, Pudong New Area, Shanghai
H Share Registrar of the Company	Name Office address	Computershare Hong Kong Investor Services Limited Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong

SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

VII. KEY ACCOUNTING FIGURES AND FINANCIAL INDICATORS OF THE COMPANY

(I) Key Accounting Figures

Unit: '0,000 Currency: RMB

Key Accounting Figures	This reporting period (From January to June)	The corresponding period of last year		Changes for this reporting period as compared with the corresponding period of last year (%)
		After adjustment	Before adjustment	
Operating revenue	962,205.59	1,051,709.11	1,035,314.73	-8.51
Net profit attributable to shareholders of the listed company	-83,064.20	12,364.47	6,632.78	-771.8
Net profit attributable to shareholders of the listed company, net of non-recurring gain or loss	-102,051.90	9,188.97	6,168.31	-1,210.59
Net cash flow from operating activities	-86,286.93	-104,007.53	-110,712.09	N/A
	As at the end of this reporting period	As at the end of the previous year		Changes for this reporting period as compared with the end of the previous year (%)
		After adjustment	Before adjustment	
Net assets attributable to shareholders of the listed company	663,173.50	752,981.55	752,981.55	-11.93
Total assets	4,185,075.60	4,739,128.86	4,739,128.86	-11.69

SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

(II) Key Financial Indicators

Key Financial Indicators	This reporting period (From January to June)	The corresponding period of last year		Changes for this reporting period as compared with the corresponding period of last year (%)
		After adjustment	Before adjustment	
Basic earnings per share (RMB/share)	-0.30	0.04	0.02	-850.00
Diluted earnings per share (RMB/share)				
Basic earnings per share, net of non-recurring gain or loss (RMB/share)	-0.36	0.03	0.02	-1,300.00
Weighted average return on net assets (%)	-18.93	2.09	0.99	Down by 21.02 percentage points
Weighted average rate of return on net assets, net of non-recurring gain or loss (%)	-23.02	1.48	0.9	Down by 24.50 percentage points

Reasons for retrospective adjustment or restatement

Kunming Institute, under the control of Chinalco, was included in the Group on 31 December 2022. The Company during the previous period of the report retrospectively adjusted the items of the income statement and cash flow statement Kunming Institute from January to June 2022.

Explanation of key accounting figures and financial indicators of the Company

Applicable Not applicable

During this reporting period, the Company took into account the continuous changes in the customer's situation, and in order to more accurately and objectively reflect the customer's credit risk, the Company's asset status and operating results, the Company changed the method of accruing contract asset impairment provisions. The change resulted in an increase of RMB1.208 billion in asset impairment losses accrued for the current period, and a corresponding decrease of RMB960 million in net profit attributable to owners of the parent.

SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

VIII. DIFFERENCES IN ACCOUNTING FIGURES UNDER DOMESTIC AND FOREIGN ACCOUNTING STANDARDS

Applicable Not applicable

IX. ITEMS AND AMOUNTS OF NON-RECURRING PROFIT OR LOSS

Applicable Not applicable

Unit: '0,000 Currency: RMB

Non-recurring Profit or Loss	Amount	Note (as applicable)
Gain or loss on disposal of non-current assets	255.85	
Tax return, reduction or exemption arising from ultra vires approval, without official approval document, or on an occasional basis		
Government subsidies recorded in current P&L (except government subsidies closely related to business operations granted continuously in a fixed amount or quota according to the unified national standards)	891.23	
Financing fee income from non-financial enterprises recorded in current P&L	987.45	
Gains or losses on debt restructuring	-60.59	
Restructuring costs, such as employee settlement cost and integration cost		
Gain or loss in excess of fair value arising from transactions at obviously unfair prices		
Net profit or loss of a subsidiary arising from business combination under common control for the period from the beginning of the reporting period to the combination date		
Gains or losses on contingencies not related to usual operations of the Company		

SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

Non-recurring Profit or Loss	Amount	Note (as applicable)
Gains on investment in the fair value of the held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities and derivative financial liabilities held by the Company 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 other than the valid hedging services related to the normal operating activities of the Company		
Reversal of impairment provisions on receivables and contract assets tested for impairment individually	20,093.85	
Gain or loss on entrusted loans		
Gain or loss on changes in the fair value of investment property subsequently measured at fair value		
Impact of non-off adjustments to current P&L as required by taxation and accounting laws and regulations		
Trustee fee income from entrusted operations		
Other non-operating revenue and expenses other than above items	-471.22	
Other items falling within the definition of non-recurring gain or loss		
Less: Impact of income tax	2,445.09	
Impact of minority interests (after tax)	263.77	
Total	18,987.70	

For the items of the non-recurring profit and loss defined by the Company in accordance with the definition in the “Explanatory Announcement No.1 on Information Disclosure for Companies Offering Their Securities to the Public – Extraordinary Profit and Loss”, and the items of the non-recurring profit and loss listed in the “Explanatory Announcement No.1 on Information Disclosure for Companies Offering Their Securities to the Public – Extraordinary Profit and Loss” are defined as the items of recurring profit and loss, the reasons should be explained.

Applicable Not applicable

X. OTHER INFORMATION

Applicable Not applicable

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

I. DESCRIPTION OF THE INDUSTRY AND PRINCIPAL BUSINESS OF THE COMPANY FOR THE REPORTING PERIOD

(I) Principal businesses and operation modes

The Company is a leading technology, service, equipment and comprehensive product solutions provider in the nonferrous metals industry in China, capable of providing a full range of integrated technical and engineering design and construction services for various businesses in the entire nonferrous metals industry chain. The Company's businesses mainly include engineering survey, design and consultancy, engineering and construction contracting and equipment manufacturing.

Chalieceo ranked 98th and 199th respectively in the list of "THE TOP 150 GLOBAL DESIGN FIRMS" and "THE TOP 225 INTERNATIONAL DESIGN FIRMS" of 2023 unveiled by Engineering News Record (ENR) of the United States.

1. Engineering survey, design and consultancy business

Engineering survey, design and consultancy are the Company's traditional key business, covering mining, ore dressing, smelting and processing in the non-ferrous metal industry, geological survey and building construction in the construction industry, as well as engineering design in energy, chemical and environmental protection, etc. The Company's main customers are non-ferrous metal smelting and processing enterprises, and employers in construction and other industries. The Company's technicians have expertise in over 40 professional fields such as geological survey, process design, equipment design, electrical automation, general layout and transportation design, civil engineering, public facilities construction, environmental protection, project budget and technical economy, and have provided engineering design and consultancy services for over 2,000 key construction projects of the state and various industries as well as over 100 overseas projects.

2. Engineering and construction contracting business

The Company's engineering and construction contracting business covers metallurgy industry, housing construction, highways, building materials, electricity, water conservancy, chemical industry, mining, municipal utilities, steel structure and other fields. The Company adopts a couple of engineering and construction contracting business modes, including EPC, E+P, E+C, P+C and EPCM, etc. With its technology and experience, the Company has established a leading position in China's non-ferrous metal industry, particularly in the area of engineering contracting for the aluminum industry. In recent years, the Company has undertaken many large-scale EPC projects at home and abroad.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

3. Equipment manufacturing business

Equipment manufacturing is a high-tech industry that the Company develops vigorously. The Company insists on independent technological innovation, and focuses on research and development of new process, new technologies, advanced materials and new equipment of non-ferrous metal, leading the direction of technology development of China's non-ferrous metal industry. The Company's equipment manufacturing segment mainly provide customized core metallurgical and processing equipment, environmental protection equipment, mechanical and electronic equipment, industrial automation systems and mine safety monitoring and emergency response intelligent systems. The Company's products are used in many areas in the non-ferrous metal industry chain, including mining, ore dressing, smelting and metal material processing.

(II) Specific business models for engineering design and consultancy, and engineering and construction contracting

The Company has long been engaging in survey, design and project contracting in the non-ferrous metal field. With technological innovation and industrialization as its core competitiveness, the Company has its business covering engineering survey and design and consultancy, engineering and construction, equipment manufacturing and other fields. The Company is committed to providing customers with services and products that cover the whole life cycle, the whole industry chain and the whole professional field. Among them, the engineering and construction contracting business covers metallurgical industry, housing construction, highways, municipal engineering and other fields, and adopts various business development modes such as construction contracting and general engineering contracting (including EPC, E+P, E+C, P+C and EPCM, etc.).

1. The Company's engineering design and consultancy business involves compiling relevant technical data and provide technical services based on the engagement of owners, and to carry out engineering consultancy, design and survey services according to the design consultation process to ensure compliance with the requirements stipulated in the contract. Rights and obligations: based on the true and accurate basic information provided by the owner, we have the obligation to provide qualified technical products as agreed in the contract, and also have the right to collect service fees in a timely manner as agreed in the contract. Pricing mechanism: service fees are charged generally by reference to national fee rates for engineering survey and market conditions and based to specific conditions such as the complexity of the project. Relying on the Company's technical advantages in the non-ferrous metallurgy industry, this business brings a higher profit margin compared with engineering construction projects. As to payment terms in the contract, usually an advance payment of about 10%-20% is required, and the remaining amount is paid in installments according to the amount of work completed (as for engineering design business) or settled in full upon delivery of the consultation report (as for engineering consultancy business). The Company bears the risks associated with product design quality and progress pursuant to the contract.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

2. The Company's engineering and construction contracting business covers metallurgical industry, housing construction, highways, mines, municipal utilities and other fields. The Company adopts a number of business modes, including traditional contracting, EPC (including EP and PC), etc. Risks: under the traditional contracting mode, the Company acts as a contractor and is responsible for project construction and equipment installation; under the EPC mode, the Company takes charge of the whole design process, procurement of materials and equipment, construction, equipment installation and testing, and is liable to the proprietor for the quality, safety, on-time delivery and cost of the project. The main risk for the Company involves material difference not higher than a certain rate as agreed in the contract, while the proprietor assumes compliance risks of the project and ensures the availability of project funds; under the PC mode, the Company undertakes the procurement and construction of the project according to the contract, and is liable for the quality, safety, progress and cost of the project. Pricing: through participating in competitive bidding, the Company will conduct detailed research on the proposed project in deciding the bid. Specifically, based on on-site visit, the Company will analyze and study on technical conditions, commercial conditions and other factors, forecast the project costs, and based on this, adds proposed gross profit to derive the bid price. Payment collection: mainly project progress payments, settled and collected according to the monthly progress or milestones, and advance payment (if any) is collected according to the contract.

(III) Industry overview

In the first half of 2023, as the economy and society fully resumed its normal operation, macro policies showed their effects and power, the national economy rebounded and improved, and high-quality development was steadily promoted. Industrial production experienced a stable recovery, with a relevantly fast grow of equipment manufacturing industry; fixed asset investment continued to grow, showing a two-tier state of differentiation, the increase of growth of high-tech service industry investment was obvious, with a significant decrease in the infrastructure investment growth and real estate development investment.

The non-ferrous metal industry operation in general showed a momentum of improvement on a period to period basis, the added value of industrial enterprises was in line with expectations, non-ferrous metal production experienced a steady and relatively fast growth; fixed asset investment growth rate is higher than the national industrial level; the total import and export trade of products increased year-on-year; the price of the main varieties of non-ferrous metals declined; and the profits of the enterprise decreased significantly.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

It is expected that in the second half of the year, under the influence of the complex and challenging external environment, the growth momentum of major overseas economies will continue to weaken, and the uncertainty of the economic outlook will further increase. The continued strength of the macro policies to expand domestic demand and improve expectations of the State is expected to keep the economy on a moderate course of repair, and the endogenous momentum of economic recovery will gradually increase. However, the foundation of economic recovery is still not solid, and the lack of effective demand is still the main contradiction restricting economic growth. Influenced by the weak end-level consumption, the non-ferrous metal industry would gradually enter a weak cycle, and it is expected that in the second half of the year, non-ferrous metal prices would be riskier on the downside and exports would be hindered.

With regard to fixed asset investment, the State has successively launched policies to accelerate infrastructure construction and promote private investment, which have led to a downward trend in market interest rates; the successive introduction of policies on the transformation of urban villages in mega-mega-cities and on the construction of “flat and urgent dual-purpose” public infrastructure is expected to boost the sustained growth of investment in the manufacturing sector and in infrastructure.

II. ANALYSIS OF CORE COMPETITIVENESS FOR THE REPORTING PERIOD

Applicable Not applicable

(I) Technology and talent advantages

The Company has strong scientific and technological research and technological innovation capabilities, with 5 Class A design research institutes and 2 state-level Class A survey and design research institutes, 3 large-scale integrated construction and installation enterprises, an experienced team of professional and technical personnel, as at 30 June 2023, Chalieceo had one national engineering survey and design master, 31 provincial, ministerial and non-ferrous industrial engineering survey and design masters, 19 personnel enjoying special allowances from the State Council or provincial governments, and 5,913 professional and technical personnel of various types, including 380 personnel with full-senior title and 2,077 personnel with vice-senior title. As of the end of June 2023, the Company has 9 national level engineering technology research centres and national enterprise technology centres, 4 national level enterprise post-doctoral research stations, 22 provincial level technology centres, 2 provincial level post-doctoral innovation practice bases, 1 provincial level post-doctoral research station, and 1 key provincial level engineering laboratory.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

In the “eight major fields” of survey and exploration, alumina, electrolytic aluminium and carbon for aluminium, mining, non-ferrous metal processing, heavy non-ferrous and rare metal smelting, construction and emerging business; in the “five major directions” of “dual carbon” governance, key process technology and equipment for the non-ferrous industry, big data service and intelligent manufacturing, comprehensive utilization of resources and municipal public service, and with the Company’s scientific and technological plan and the guide of technology research and development for the “14th Five-Year Plan” as a guidance, we will strengthen the research and development of core technology, continuously enhance the leading edge of science and technology. In the first half of the year, more than 300 patents were newly applied for, of which more than 49% were inventions; more than 150 patents were newly granted both at home and abroad; 20 technical standards of various kinds were newly established; 4 provincial and ministerial level scientific and technological progress awards were received, 2 provincial scientific and technological progress second prizes were awarded to us as the first unit of completion and 2 ministerial scientific and technological progress prizes were awarded; and the “energy-saving and long-life aluminium cathode manufacturing technologies and equipment” independently researched and developed by the Company was successfully selected as one of the “Innovation China” green and low-carbon field leading technologies list for the year of 2022, and one state-level “new, distinctive, specialised and sophisticated” “Little Giant” enterprise was added.

(II) “Triple Full” advantages

The Company is an industry-leading engineering technology service provider covering the full range of metal categories, the full industry chain and the full life cycle of engineering, it has a professional and wide range of technology integration capabilities and comprehensive competitiveness of the full industrial chain, and its business covers engineering survey, engineering design and consultation, engineering construction, equipment manufacturing, operation and maintenance, etc. With strong technology as a link, refined management as the backbone and comprehensive professional services as the reliance, the Company can provide customers with all-round services covering engineering design and consultancy, engineering construction, operation management and specialized equipment manufacturing, solving customers’ routine problems as well as high-tech, deep, difficult and specific problems.

(III) Qualification advantages

The Company has a total of 351 qualifications in various types for construction enterprises, of which: 1 comprehensive engineering design qualification (Grade A), 2 comprehensive survey qualifications (Grade A), 4 design industry qualifications (Grade A), 3 general contracting qualifications (Special Grade), and 13 project supervision qualifications (Grade A).

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(IV) Market advantages

The Company's domestic business focuses on sectors such as the general contracting of metallurgical industry projects, urban infrastructure and utilities construction, ecological environment management, among others, including fields such as metallurgy, transport, housing construction, municipal utilities, building materials, electric power, water conservancy and chemical industry, etc., with rich experience and notable performance, with more than 500 construction projects winning the Luban Prize for Building Construction, the National Prize for Quality Engineering, the National Customer Satisfaction Project, the National Outstanding Welding Projects, Provincial and Ministerial Quality Projects, among other awards. The Company's geographical distribution is in more than 30 provinces, municipalities and autonomous regions in China save for Taiwan.

The Company adheres to the strategy of "going global", and has exported technologies and equipment to dozens of countries and regions, such as India, Venezuela, Brazil, Vietnam, Indonesia, Italy, Saudi Arabia, Kazakhstan, etc.; it has also established cooperative relationships with enterprises, scientific research institutes and universities in more than 40 countries and regions, and has carried out EPC general contracting, demonstrating the strength and level of Chalico.

III. OPERATING RESULTS DISCUSSION AND ANALYSIS

The Group's net profit attributable to shareholders of listed companies for the first half of 2023 was RMB-831 million, representing an decrease of RMB955 million as compared to RMB124 million for the same period of the previous year, which was mainly because: During the reporting period, the Company further increased the gross profit margin of its principal business, optimized its financing structure, reduced financing costs, and continuously improved its profitability. However, after considering the continuous changes in the Company's customer situation, in order to more accurately and objectively reflect the credit risk of the customers, the Company's asset status and operating results, the accounting estimate on the method of accruing contract asset impairment provisions was changed. The change in accounting estimates resulted in an increase of RMB1.208 billion in the asset impairment provision accrued in the current period, and the impact of the change on the net profit attributable to the owner of the parent company amounts to RMB960 million, resulting in a decrease in the performance of the reporting period compared with the same period of the previous year.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(I) Business overview in the first half of the year

In the first half of 2023, the Company continued to deepen the “S&T + Internationalization” strategy, firmly implemented various measures to “stabilize operations, promote transformation, reduce risks and strengthen reform”, continued to consolidate sustainable development capabilities, and made full effort to ensure the completion of semi-annual work tasks.

- 1. Stabilize operations and make full effort to complete the goals of production and operation.** The Company resolutely implemented the strategy of steady growth, quality improvement and efficiency increase, vigorously promoted internal and external coordinated marketing, and further stabilized and improved the situation of production and operation.

Firstly, business quality improved and motivation increased. The Company focused on the non-ferrous industry and returned to its main business. The business structure continued to be optimized, and the newly signed contracts for survey and design and equipment manufacturing business increased year-on-year. The Company focused on deepening major customer marketing, signing 5 projects over RMB500 million and 3 projects over RMB1 billion.

Secondly, the momentum was increased with coordinated marketing. The Company insisted on the principle of “overall management, hierarchical responsibility, independent operation and coordinated development”, formulated a project coordination mechanism, collaboratively developed new markets in the fields of new infrastructure, new energy, and transformation of new technological achievements, won the bids for 275 projects with contract value of RMB1.818 billion. The Company obtained the bid for 5 sections of the Southwest Copper Relocation Project and 5 sections of the Inner Mongolia Huayun Phase III Project, realized the coordinated planning and orderly advancement of the Huasheng Alumina Phase II Project and the Qinghai Electrolytic Aluminum Project.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

- 2. The Company promoted transformation and continued to optimize the structural adjustment.** The Company resolutely implemented the “S&T + Internationalization” development strategy, continued to deepen the concept of high-quality development, the “One Main, One Special and One Extension” layout structure was more reasonable, and the differentiated core competitive advantage was gradually taking shape.

Firstly, the technology innovation ecology began to take effect. The innovation system was further improved, the “Optimization Plan for the Innovation System of Chalieco” has been studied and formulated, and the Company’s Science and Technology Committee and 6 professional and technical committees have been established to use a shared and coordinated public science and technology innovation resource platform. The construction of original technology source project was accelerated, the cumulative R&D investment intensity has reached 3.33%, 156 newly authorized patents have been obtained, and various national key R&D projects undertaken have passed performance evaluation and acceptance. Innovation momentum continued to burst, with the addition of 3 state-level enterprise technology centers, 3 national “scientific reform demonstration enterprises” and 1 national high-tech enterprise. 17 major scientific and technological achievements have passed the evaluation of technical achievements organized by industry associations, of which 2 have reached the leading international level.

Secondly, empowered digital intelligence business was upgraded. The Company took the “construction of three major management platforms” and the “development of three types of digital industries” as breakthrough points, promoted the upgrading of core businesses, actively promoted the digital benchmarking projects and BIM application demonstration projects, and created smart manufacturing demonstration projects. An integrated management and control platform for industrial and financial integration has been formed, and the headquarters, Sixth Metallurgical Company, Twelfth Metallurgical Company and other enterprise financial integration systems have been fully launched. In the first half of the year, the digital intelligence service business of the Company achieved revenue of RMB186 million.

Thirdly, coordinated promotion of international development strategies. The Company vigorously implemented overseas market marketing, signed a new equipment manufacturing contract with India’s BALCO for US\$40.65 million, successfully entered an engineering design contract for the lithium extraction construction project with an annual output of 25,000 tons (LCE) in Uyuni Salt Lake, Bolivia, and the 250,000-ton electrolytic aluminum project with Huaqing Aluminum in Indonesia was put into full-scale production.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

3. Prevented risk , risk management and control were comprehensively covered.**Firstly, the compliance management and control system was comprehensively formed.**

The Company continued to deepen the construction of central enterprises under the rule of law, made every effort to promote the normalization, standardization and refinement of legal audits, established the “Implementation Rules for Compliance Management”, and formulated a process list of more than 100 items. The legal foundation management was continuously consolidated. Both the headquarters and SAMI have obtained the intellectual property management system certification for the first time.

Secondly, the scale of interest-bearing financing was significantly reduced.

The Company completed the launch of all-level asset management center, strengthened the collection and concentration of funds, and reduced the phenomenon of double high deposits and loans. The Company’s overall financing scale dropped to RMB14 billion, and the financing cost decreased from 4.15% to 3.77%. Financial expenses decreased by RMB94 million as compared with the same period of the previous year, and interest expenses decreased by RMB24 million as compared with the same period of the previous year.

Thirdly, the safety and environmental protection quality work was progressed steadily.

The Company designated the responsibility for safety and environmental protection quality level by level, solidly promoted the annual action of strengthening safety management, organized and carried out a series of safety and environmental protection inspections and hidden danger investigations, and continuously improved the quality of occupational health and safety and environmental management system. In the first half of the year, there were no general and above safety production responsibility accidents, no general and above environmental emergencies, Class A quality incidents, and the health, safety, and environmental protection systems were operating well.

4. The Company strengthened reform and continued to enhance corporate competence and vitality.

The Company obtained endogenous power through a series of market-oriented changes, the modern corporate governance system and mechanism were continuously standardized and improved, and the high-quality development momentum of the enterprise was continuously released.

Firstly, the Science and Technology Reform Demonstration enhanced the driving force for reform.

Guided by “performance, effect and efficiency”, the Company formulated the “Action Plan for Comprehensively Deepening and Improving the Reform of Chalico” to improve the level of market-oriented operation. The “ Science and Technology Reform Enterprise” of the Company further played a leading demonstration role, and SAMI, GAMI and Kunming Survey and Design Institute were newly selected as the “SASAC Science and Technology Reform Enterprise “. So far, the number of the “ Science and Technology Reform Enterprise “ of the Company increased to 6.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

Secondly, Strengthen the construction of vitality. The Company fully implemented the contractual management tenure system and the professional manager system, promoted the competition of middle-level managers in member enterprises, and enabled position adjustment of managers. The Company formulate the “Reform Plan for Improving Labor Efficiency”, established the human resources exchange and training center of headquarters, activated the stock of human resources, and used performance appraisal and the personal turnover to trigger organizational vitality.

(II) Business outlook of the second half of the year

In the second half of 2023, Chalieco will consistently implement the development strategy of “Science and Technology + International”, consolidate and give full play to our core functionality to take our core competitiveness to the next level and facilitate quality development in general through the “six battles”.

(i) Strive to win the “positional battle” of improving quality and efficiency, endeavour to meet the annual targets

Endeavour to meet the annual targets. Optimize the performance evaluation system and strengthen the evaluation orientation of “effectiveness, effect and efficiency”; comprehensively strengthen the synergistic marketing, large customer marketing and regional marketing, improve the conversion and implementation rate of existing contracts, and realize the comprehensive improvement of quality and efficiency of contracts; accelerate the promotion of international businesses. We will improve the construction of the overseas marketing system, optimize and strengthen the localized regional marketing, promote the exploration of key regional markets such as the Russian-speaking region, the Spanish-speaking region and the African region.

(ii) Strive to win the “storming battle” of science and technology innovation, accelerate the high-quality development

Improve the formation of science and technology innovation system. Do a good job of top-level design, accelerate the improvement of science and technology innovation system optimization and promote its implementation and cultivate their independent innovation capability; accelerate the establishment of original technology sources. Promote the establishment and whole-process management of major scientific research projects, strive for major state-level scientific research tasks and major scientific and technological achievement prizes; enhance the industrialization and transformation of scientific and technological achievements.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(iii) Strive to win the “proactive battle” of deepening reform, fully stimulating motivation and vitality

Deepens and takes reforms to another level. Promote the market-oriented reform of science and technology-based enterprises, strengthen and expand the design and survey enterprises and promote the construction business to be more refined and superior; fully promote the reform of labor productivity of all personnel, and stimulate the endogenous power of enterprises; promote the adjustment of industrial layout, business structure, organization and personnel structure of enterprises under the leadership of the Company; strengthen the construction of competitiveness with all-out efforts. Comprehensively enhance the capacity building in various aspects such as science and technology innovation, planning and implementation, market expansion, project management, financial management, capital operation, risk control and compliance, informatization and digital intelligence, basic management, etc.

(iv) Strive to win the “offensive battle” of transformation and upgrade, accelerate the pace of structural adjustment

Deepening the promotion of business structure transformation. Focusing on our main businesses, with technology as the center of the circle and capacity as the radius, establish the Company’s product and business clusters in line with the mode of “technology + service, technology + equipment, technology + product, technology + investment and technology + N”. Survey and design enterprises shall dig deeper into the industry’s existing market, tapping the potential and increase efficiency in green environmental protection, energy saving and carbon reduction, technical reform and operation and maintenance, and marching towards new tracks such as new energy materials, soil restoration, sewage treatment, etc. Deepen the construction of a digital Chalieco, unswervingly push forward the digitization of management and digital industrialization.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(v) Strive to win the “hand to hand battle” of strengthening management, carry out in-depth promotion of refined management

Enhance the management of project performance. Strengthen project cost management and sub-contracting settlement management, continuously improve the operation quality of projects. Establish a list of key projects, track and implement project, continuously improve the capability project performance. Deepening the reform of the three systems. Realize 100 percent of application of tenure system and contractual management for members of the manager-level personnel by the end of the year, improve the institutional mechanism for the market-oriented operation of projects and distribution of income.

(vi) Strive to win the “long-lasting battle” of risk prevention and control, strengthening corporate risk management and control

Promote the construction of a closed-loop compliance control system, do a good job of forward-looking system construction, improve the operation of the mechanism in the middle of the process, and adhere to the retrospect supervision and evaluation. Strengthen the establishment of legal risk prevention and disposal capacity and the establishment of the control system for rule of law and compliance risks and continue to reinforce the basic management works of legal compliance. Strictly control safety, environmental protection and quality risks. Promote the construction and optimization of the system and promote the overall steady improvement of the level of safety and environmental protection of the Company. Continuously carry out the special action for investigation and management of major accident and hidden danger, eliminate any major safety risks.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(III) Contracts

From January to June 2023, the Company entered into 3,413 contracts in total, the total amount of which was RMB23.333 billion. Details are as follows:

Type of Contracts	From January to June 2023	
	Number (Unit)	Amount (RMB100 million)
Engineering survey, design and consultancy	2,444	20.30
Engineering construction		112.34
Industrial projects	386	
Civil construction	85	57.90
Highways and municipal projects	32	26.08
Equipment manufacturing	390	15.65
Other	76	1.06
Total	3,413	233.33

As of 30 June 2023, the amount of uncompleted contracts of the Company was RMB64.527 billion. Details are as follows:

Type of Contracts	As of 30 June 2023	
	Number (Unit)	Amount (RMB100 million)
Engineering survey, design and consultancy	5,837	45.19
Engineering construction		248.87
Industrial projects	849	
Civil construction	349	204.57
Highways and municipal projects	114	97.13
Equipment manufacturing	692	46.80
Other	171	2.71
Total	8,012	645.27

(IV) Operation results and discussion

In the first half of 2023, the Group achieved operating revenue of RMB9.622 billion, representing a decrease of 8.51% as compared with RMB10.517 billion in the same period of last year, net profit attributable to shareholders of the listed company amounted to RMB-831 million, representing a decrease of 771.80% as compared with RMB124 million in the same period of last year. The Group's results for the first half of the year are mainly analysed as follows:

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

Operating revenue

In the first half of 2023, the Group achieved operating revenue of RMB9.622 billion, representing a decrease of RMB895 million or 8.51% as compared with the same period of last year, which were mainly due to the Company's in-depth implementation of the "S&T + internationalisation" development strategy during the reporting period, resulting in a year-on-year increase in the proportion of revenue from engineering survey and design and consultancy and equipment manufacturing businesses; discontinued the conduct of PPP investment and financing construction business and gradually reducing the construction business of municipal and civil engineering works, causing a year-on-year decrease in the overall revenue.

Operating cost

The Group's operating cost for the first half of 2023 was RMB8.577 billion, representing a decrease of RMB852 million or 9.03% as compared with the same period of last year. The decrease of the operating cost was due to the decline in revenue scale and the decrease in cost input as compared with the same period of last year.

Tax and surcharge

The Group's tax and surcharge for the first half of 2023 was RMB51 million, representing a decrease of RMB8 million as compared with the same period of last year, which remained basically flat as compared with the corresponding period of last year.

Sales expense

The Group's sales expense for the first half of 2023 was RMB50 million, representing a slight increase of RMB8 million as compared with the same period of last year.

Administrative expense

The Group's administrative expense for the first half of 2023 was RMB466 million, representing an increase of RMB12 million as compared with the same period of last year, which remained basically flat as compared with the corresponding period of last year.

R&D expense

The Group's R&D expense for the first half of 2023 was RMB320 million, representing an increase of RMB55 million as compared with the same period of last year. The Company continued to increase its investment in research and development during the reporting period, resulting in the investment amount reaching 3.33%.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

Financial expense

The Group's financial expense for the first half of 2023 was RMB33 million, representing a decrease of RMB94 million as compared with the same period of last year. Such decrease was mainly because the Company continuously optimized its financing structure and reduced its financing costs. At the same time, a small amount of exchange gain was resulted from the impact of fluctuation of exchange rates between RMB and US dollars.

Credit impairment loss

The Group's credit impairment loss for the first half of 2023 was RMB140 million, representing a decrease of RMB17 million as compared with the same period of last year. Such decrease was mainly because the Company enhanced the efforts of debt collection and recovered part of the long-aged amounts, which resulted in a year-on-year increase in impairment loss reversed during the reporting period.

Asset impairment loss

The Group's asset impairment loss for the first half of 2023 was RMB1.218 billion, representing an increase of RMB1.224 billion as compared with the same period of last year. The change was due to the impact of changes in accounting estimates for impairment provisions of contractual asset.

(V) Principal business by sectors and regions

Unit: '0,000 Currency: RMB

By sector	Principal business by sector			Increase or decrease in operating revenue compared to the corresponding period last year (%)	Increase or decrease in operating cost compared to the corresponding period last year (%)	Increase or decrease in gross profit margin compared to the corresponding period last year (%)
	Operating revenue	Operating cost	Gross margin (%)			
Engineering survey and design and consultancy	114,891.50	83,586.50	27.25	3.17	2.19	Up by 0.7 percentage points
Engineering and construction contracting	738,865.46	679,393.24	8.05	-13.25	-13.34	Up by 0.1 percentage points
Equipment manufacturing	115,895.98	102,379.59	11.66	12.66	12.51	Up by 0.11 percentage points
Inter-segment elimination	-7,447.33	-7,609.75	/	/	/	/
Total	962,205.59	857,749.58	10.86	-8.51	-9.03	Up by 0.52 percentage points

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

Explanation of principal businesses by sector

- ① Engineering survey and design and consultancy segment (before elimination of inter-segment transactions)

Unit: '0,000 Currency: RMB

Item	This reporting period	The corresponding period of last year	Growth rate (%)
Operating revenue	114,891.49	111,360.39	3.17
Operating cost	83,586.50	81,794.64	2.19
Gross profit	31,305.00	29,565.75	5.88
Gross margin (%)	27.25	26.55	Up by 0.7 percentage points
Sales expense	2,525.93	2,102.90	20.12
Administrative expense	11,278.94	11,486.25	-1.80
R&D expense	12,472.58	7,762.26	60.68
Total profit	5,101.10	10,248.14	-50.22

The Group's engineering survey and design and consulting segment achieved revenue of RMB1.149 billion during this reporting period, representing a year-on-year increase of 3.17%, mainly due to the Company's significant promotion of the implementation of the "technology + international" development strategy, the new orders signed in the survey and design and consultancy business in the first half of the year increased by 11% as compared with the corresponding period of last year, and the operating income achieved a year-on-year increase. Gross margin of this segment was 27.25%, representing a year-on-year increase of 0.7 percentage points, which slightly increased flat as compared with last year.

During this reporting period, the engineering survey and design and consultancy segment realized total profit of RMB51 million, representing a year-on-year decrease of approximately 50%, mainly because although the gross profit of this business segment recorded a year-on-year increase, in order to enhance the competitiveness of the Company's core business, this segment increased R&D investment in "double carbon" governance, key process technologies in the non-ferrous industry for design and survey business, and increased R&D expenses.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

- ② Engineering and construction contracting segment (before elimination of inter-segment transactions)

Unit: '0,000 Currency: RMB

Item	This reporting period	The corresponding period of last year	Growth rate (%)
Operating revenue	738,865.46	851,703.32	-13.25
Operating cost	679,393.24	784,005.99	-13.34
Gross profit	59,472.22	67,697.33	-12.15
Gross margin (%)	8.05	7.95	Up by 0.1 percentage points
Sales expense	1,661.66	1,574.61	5.53
Administrative expense	31,708.85	30,945.04	2.47
R&D expense	15,641.48	15,816.54	-1.11
Total profit	-105,957.33	11,973.25	-984.95

The Group's engineering and construction contracting business revenue in the first half of the year was RMB7.389 billion, representing a year-on-year decrease of 13.25%, mainly because the Company continued to promote the business transformation during the reporting period, discontinued the conduct of PPP investment and financing construction business and gradually reducing the construction business of municipal and civil engineering works, causing a year-on-year decrease in the overall revenue. The gross profit margin was 8.05%, representing a year-on-year increase of 0.1 percentage point, which remained basically flat as compared with that of the last year.

During this reporting period, the engineering and construction contracting segment recorded a total profit of RMB-1.059 billion, and this business segment suffered a loss during this reporting period, mainly because the Company implemented the change of accounting estimates in the method of accruing for the impairment of contract assets during the year, and the increase in the impairment loss resulted in a year-on-year decrease in total profit.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

③ Equipment manufacturing business (before elimination of inter-segment transactions)

Unit: '0,000 Currency: RMB

Item	This reporting period	The corresponding period of last year	Growth rate (%)
Operating revenue	115,895.98	102,876.19	12.66
Operating cost	102,379.59	90,995.87	12.51
Gross profit	13,516.39	11,880.32	13.77
Gross margin (%)	11.66	11.55	Up by 0.11 percentage points
Sales expense	837.67	521.06	60.76
Administrative expense	3,576.78	3,051.79	17.20
R&D expense	3,935.09	3,238.56	21.51
Total profit	6,184.05	2,244.37	175.54

The revenue of the Group's equipment manufacturing business in the first half of the year was RMB1.159 billion, representing a year-on-year increase of 12.66%. The Company insists on the full-service of professional equipment manufacturing. Projects such as BALCO electrolytic aluminum in India are steadily advancing, and the revenue scale increased. The gross profit margin of this business segment was 11.66%, representing a year-on-year increase of 0.11 percentage points, which remained basically flat as compared with last year.

During the reporting period, the equipment manufacturing business recorded a total profit of RMB62 million, representing a year-on-year increase of 175.54%, mainly due to the significant increase in revenue scale.

Material changes in the operation of the Company during the reporting period and events that occurred during the reporting period that have had a significant impact on the operation of the Company and are expected to have a significant impact in the future

Applicable Not applicable

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

IV. OPERATING OVERVIEW FOR THE REPORTING PERIOD**(I) Analysis of principal business****1. Analysis of changes in relevant items on financial statements**

Unit: '0,000 Currency: RMB

Item	Amount for the current period	Amount for the corresponding period of last year	Change in percentage (%)
Operating revenue	962,205.59	1,051,709.11	-8.51
Operating cost	857,749.58	942,934.76	-9.03
Sales expense	5,025.26	4,189.99	19.93
Administrative expense	46,564.57	45,413.57	2.53
Financial expense	3,276.99	12,716.33	-74.23
R&D expense	32,049.15	26,526.40	20.82
Credit impairment loss	-14,038.40	-12,347.36	N/A
Asset impairment loss	121,774.75	-597.20	N/A
Net cash flow from operating activities	-86,286.93	-104,007.53	N/A
Net cash flow from investing activities	80,319.99	-156,357.75	N/A
Net cash flow from financing activities	-371,376.35	333,905.77	-211.22

Explanation of reasons for changes in operating revenue: During the reporting period, the Company implemented the “S&T + internationalization” development strategy in-depth, and both the proportion of revenue from engineering survey and design and consultancy and equipment manufacturing businesses recorded a year-on-year increase; discontinued the conduct of PPP investment and financing construction business and gradually reducing the construction business of municipal and civil engineering works, causing a year-on-year decrease in the overall revenue scale.

Explanation of reasons for changes in operating cost: During the reporting period, revenue decreased, and cost inputs decreased accordingly.

Explanation of reasons for changes in sales expense: No material change.

Explanation of reasons for changes in administrative expense: No material change.

Explanation of reasons for changes in financial expense: The Company continuously optimized its financing structure and controlled its financing scale, thus its financial expense was lowered. At the same time, a small amount of exchange gain was resulted from the impact of fluctuation of exchange rates between RMB and US dollars.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

Explanation of reasons for changes in R&D expense: Due to the increase in investment in research and development during the current period.

Explanation of reasons for changes in net cash flow from operating activities: The Company further strengthened project settlement and collection, continued to strengthen cash flow control, and the net cash outflow from operating activities recorded a year-on-year decrease.

Explanation of reasons for changes in net cash flow from investing activities: During the reporting period, all of the equity transfer payments of Miyu Company were recovered; at the same time, Miyu Company was still within the scope of the consolidated statement during the same period of the previous year, and all of its project construction investment was included in the outflow of investment activities, and there was no such business during the reporting period.

Explanation of reasons for changes in net cash flow from financing activities: During the reporting period, the Company further strengthened the centralized management of funds, improved the efficiency of capital turnover, redeemed the perpetual bonds of US\$350 million issued overseas, and the scale of financing has decreased to the lowest level since 2016.

Explanation of reasons for changes in credit impairment loss: During the reporting period, the Company continued to enhance the efforts in collecting amounts and recovered certain long-aged amounts during the first half of the year, thus the impairment loss reversed during the reporting period recorded a year-on-year increase.

Explanation of the reasons for the changes in asset impairment losses: impact of the changes in accounting estimate for the provision of contract asset impairment.

2. Detailed notes to the major changes in the Company's business types, profits structure or profits sources

Applicable Not applicable

(II) Explanation of Material Changes in Profit Caused by Non-principal Business

Applicable Not applicable

(III) Analysis of Assets and Liabilities

Applicable Not applicable

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

1. Assets and liabilities

Unit: '0,000 Currency: RMB

Item	Amount at the end of the current period	Amount at the end of the current period over total assets (%)	Amount at the end of the corresponding period of last year	Amount at the end of the corresponding period of last year over total assets (%)	Change in balance as at the end of the current period as compared with balance as at the end of the corresponding period of last year (%)	Explanation
Monetary funds	387,511.67	9.26	767,352.84	16.19	-49.50	The Company further strengthened the centralized management of funds, coordinated the use of capital positions, and reduced the scale of financing. The holdings of currency funds reduced to a relatively optimal turnover level.
Factoring of receivables	44,676.99	1.07	69,055.25	1.46	-35.30	External payments to subcontractors and suppliers paid by available notes of the beginning of the period during the period.
Other receivables	162,310.63	3.88	247,744.50	5.23	-34.48	Recovery of the equity transfer money of Miyu during the period.
Non-current asset due within one year	21,546.16	0.51	39,641.67	0.84	-45.65	Part of the long-term receivables due within one year are recovered in the period.
Taxes payable	10,899.35	0.26	21,632.10	0.46	-49.61	Payment of corporate income tax provided at the end of the previous year.
Other non-current assets	70,914.78	1.69	123,321.98	2.60	-42.50	Provision for impairment of contract assets provided in accordance with the changed accounting estimates.

Other explanations

No

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

2. Details of overseas assets

Applicable Not applicable

3. Details of significant restricted assets as at the end of the reporting period

Applicable Not applicable

Unit: '0,000 Currency: RMB

Item	Carrying value as at 30 June 2023	Reason for the restriction
Currency funds	75,420.06	Frozen, pledged
Notes receivable	7,256.29	Pledged
Accounts receivable	582.58	Pledged
Total	83,258.93	–

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

4. Other explanations

Applicable Not applicable

(1) Liquidity and capital resources

As at 30 June 2023, the Group held bank deposits and cash of RMB3,875 million, representing a decrease of RMB3,798 million as compared with those of 31 December 2022, which was mainly due to the decrease in monetary funds as a result of the payment of project works and repayment of borrowings during the period.

The Group's sources of funds are mainly operating income, bank borrowings and issuance of bonds, with diversified financing channels and good repayment performance at maturity. Cash held is mainly in Renminbi and US dollars and borrowings are mainly at fixed interest rates. The Group has formulated strict fund management measures, closely monitors the liquidity position as well as the condition of the financial market, so as to formulate appropriate financial strategies.

As at 30 June 2023, the Group's current assets other than bank deposits and cash amounted to RMB29,059 million, of which RMB15,227 million were notes and accounts receivable, RMB7,626 million were contract assets, RMB2,139 million were prepayments and other receivables and RMB2,904 million were inventories.

As at 30 June 2023, the Group's current liabilities amounted to RMB28,984 million, of which RMB15,848 million was notes payable and accounts payable. As at 30 June 2023, the Group's net current assets (i.e. the difference between total current assets and current liabilities) amounted to RMB3,950 million, representing a decrease of RMB3,259 million, or 45.21%, over the net current assets as at 31 December 2022. It was mainly because that the Company paid the wages of migrant workers and other project progress payments to ensure the implementation of the project during the reporting period; at the same time, the Company repaid some short-term loans with higher interest rates.

As at 30 June 2023, the Group's outstanding borrowings amounted to RMB11,659 million, of which: short-term borrowings and long-term borrowings due within one year amounted to RMB6,533 million, and long-term borrowings amounted to RMB5,126 million, representing a decrease of RMB919 million in total borrowings as compared with that of 31 December 2022.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(2) Cash flows

Net cash flow from operating activities. For the six months ended 30 June 2023, net cash outflow from operating activities amounted to RMB863 million, representing a year-on-year decrease in outflow of RMB177 million, which was mainly attributable to the Company's further enhancement of project settlement and fund collection, continued strengthening of cash flow control, and year-on-year decrease in net cash outflow from operating activities.

Net cash flow from investing activities. For the six months ended 30 June 2023, net cash inflow from investing activities amounted to RMB803 million, representing a year-on-year increase in inflow of RMB2,367 million, which was mainly due to the full recovery of the transfer of equity interest in Miyu Company during the current reporting period; at the same time, during the same period of the previous year, Miyu Company was still under the scope of the consolidated statement of accounts, and all of the investment in the construction of the projects incurred by it was included in the outflow of investing activities, and there was no such operation during the current reporting period.

Net cash flow from financing activities. For the six months ended 30 June 2023, net cash generated from financing activities amounted to a net outflow of RMB3,714 million, representing a year-on-year increase in outflow of RMB7,053 million, which was mainly attributable to the Company's further strengthening of centralized management of funds, improvement of the efficiency of capital turnover, continuous control of the scale of financing, and redemption of the perpetual bonds of US\$350 million issued overseas, and the scale of financing has decreased to the lowest level since 2016.

(3) Pledge of assets

The Group pledged receivables of RMB5.8258 million to obtain short-term loans of RMB5.8258 million.

(4) Capital management

The Company carries out management and control of its capital structure on the basis of the gearing ratio. Such ratio is calculated as net debt divided by total capital. Net debt is the total borrowings (including short-term loans, long-term loans due within one year and bonds payable, long-term loans and bonds payable, etc.) minus the cash balance shown in the cash flow statement. Total capital is the sum of shareholders' equity and net debt as shown in the consolidated balance sheet. Total shareholders' equity includes shareholders' equity attributable to the parent company and minority shareholders' equity.

As at 30 June 2023 and 31 December 2022, the Company's gearing ratio was 54.74% and 35.33%, respectively. The increase in the gearing ratio as at 30 June 2023 as compared to that as at 31 December 2022 was mainly due to the increase in net debt as compared to the beginning of the year as a result of a relevantly large decrease in the stock of monetary funds due to the redemption of US\$350 million of offshore perpetual bonds by the Company in the current reporting period, as well as a decrease in total equity due to the redemption of US dollar perpetual bonds. The Company's gearing ratio increased but remained within the reasonable range.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(5) Contingent liabilities

As of 30 June 2023, the Group did not have any material contingent liabilities.

(IV) Investment Analysis**1. Overall analysis of external equity investments**

Applicable Not applicable

As at 30 June 2023, the balance (original value) of the Company's long-term equity investments was RMB789.7794 million, representing a decrease of RMB9.1971 million, or 1.15%, from the beginning of the year, of which the provision for impairment of long-term equity investments of RMB48.2186 million was consistent with the beginning of the year.

(1) Major equity investments

Applicable Not applicable

(2) Significant non-equity investments

Applicable Not applicable

(3) Financial assets measured at fair value

Applicable Not applicable

Unit: '0,000 Currency: RMB

Category of Asset	Amount as at the beginning of the period	Amount as at the end of the period
Yunnan Huineng Power Sales Co., Ltd.	1,948.92	1,969.17
Guizhou Aerospace Wujiang Electromechanical Equipment Co., Ltd.	1,377.35	1,377.35
Others	2,390.46	1,769.45
Total	5,716.73	5,115.97

Investment in securities

Applicable Not applicable

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

Description of investment in securities

Applicable Not applicable

Investment in private funds

Applicable Not applicable

Investment in derivatives

Applicable Not applicable

(V) Disposal of significant assets and equities

Applicable Not applicable

(VI) Analysis of major subsidiaries, associates and joint ventures

Applicable Not applicable

During the reporting period, particulars of the major subsidiaries of the Company are set out below:

Unit: '0,000 Currency: RMB

Company name	Business scope	Total assets	Net assets	Operating revenue	Net profit
Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	Engineering survey and design	257,024.50	114,171.85	66,466.42	3,288.21
China Nonferrous Metals Processing Technology Co., Ltd.	Engineering design and equipment manufacturing	206,773.87	59,461.95	55,163.66	-411.70
Guiyang Aluminum & Magnesium Design Institute Co., Ltd.	Engineering survey and design	176,641.36	51,411.66	35,085.85	-159.75
Shenyang Aluminum & Magnesium Engineering & Research Institute Co., Ltd.	Engineering survey and design	153,217.12	65,982.12	41,787.54	2,271.01
China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	Engineering survey and design	124,744.93	39,148.23	42,877.12	1,182.58
Kunming Survey and Design Institute Co., Ltd. of China Nonferrous Metals Industry	Engineering survey and design	122,059.94	44,175.77	62,397.66	2,137.34
Kunming Non-ferrous Metallurgical Design and Research Institute Corporation	Engineering survey and design	48,820.97	-1,089.49	12,117.26	2,818.38
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	Building and construction	1,162,019.60	266,828.75	290,984.69	-49,288.88
Ninth Metallurgical Construction Co., Ltd.	Building and construction	897,421.03	204,184.27	204,074.91	-8,980.37
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	Building and construction	462,288.87	19,791.86	74,862.83	-27,596.85
CHALIECO (Tianjin) Construction Co., Ltd.	Building and construction	154,395.58	17,790.14	36,011.30	-3,186.24
Chalco Shandong Engineering Technology Co., Ltd.	Building and construction	90,672.96	8,866.34	24,242.73	-6,153.67

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

(VII) Particulars of structured entities controlled by the Company

Applicable Not applicable

V. OTHER DISCLOSURES**(I) Potential risks**

Applicable Not applicable

In 2023, the risks the Company may face include: cash flow risk, debt risk, litigation risk, operational risk and market risk.

1. Cash flow risk

The major feature of liquidity risk is high occupation of “receivables and inventory” and low turnover speed due to the characteristics of the industry, which poses certain pressure on funds.

2. Debt risk

At present, strict national supervision against financial activities has become the norm, the capital market environment is becoming more and more complex, debt default in certain industries and large-scale state-owned enterprises and private enterprises would occur from time to time, debt risk management and control and safety and security of the capital chain are facing more severe challenges, which, if not properly controlled, would have a negative impact on the Company. Challico will comprehensively strengthen the identification and control of debt risks of its subsidiaries at all levels, soberly understand the current situation of debt risk regulation and changes in the internal and external environments, and further balance the demand for financing and the ability to repay debts.

3. Litigation risk

We have a certain amount of existing legal disputes, and the pressure of mitigating existing disputes and controlling the increase of new disputes continues to exist. The Company continues to focus on the key special task of “mitigating existing cases and preventing incremental cases”, continuously enhances the ability to resist risks, consolidates the legal, compliance and risk management foundation for connotative high-quality development, and promotes the construction of the rule of law, compliance management and risk prevention.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

4. Operational risk

In recent years, the Company has accelerated the pace and intensity of transformation and upgrading, and the new fields and new markets have not yet formed economies of scale. Affected by the low barriers of entrance in the construction market, overcapacity in the traditional manufacturing industry, shrinking new investment projects, and increasingly fierce competition in the construction market, the engineering construction companies (the Company being one of them) have inaccurate cost forecasts before bidding for engineering projects, weak process cost control, and deviations between the estimated total cost of the project and the actual cost, resulting in inaccurate gross profit margins for projects.

5. Market risk

The non-ferrous industry is the traditional main business of Chalico, and each of its member units has certain technical and brand advantages and strong market competitiveness, but the contract value of the non-ferrous industry accounted for a small proportion of the Company's total contract value, and by the impact of the "dual carbon" policy, the non-ferrous market has shrunk significantly; in the civil market, although the scale of the domestic civil construction market has remained stable as a whole, the concentration of the market has increased year by year, and the space of survival for small and medium-sized construction enterprises has been squeezed significantly, the competition in the market is fierce.

(II) OTHER DISCLOSURES

Applicable Not applicable

1. Contract of significance

Save for disclosed in the section headed "Material Related-Party Transactions" in this interim report, none of the Company or any of its subsidiaries entered into any contracts of significance with the controlling Shareholder or any of its subsidiaries other than the Company, nor was there any contracts of significance between the Company and the controlling Shareholder or any of its subsidiaries other than the Company in relation to provision of services.

2. Business in connection with sanctioned countries

As at the latest practicable date, the Risk Management Committee of the Company confirmed that the proceeds raised from the global offering of the Company had been deposited with a designated bank account and no such proceeds had been used in business in connection with sanctioned countries or used as payment for the compensation under the Iran Contracts. From the beginning of the reporting period to the latest practicable date, the Company did not enter into any new business in connection with sanctioned countries, nor did it have any business planning or arrangement for transactions with sanctioned countries. The Board has no intention to enter into any new business with sanctioned countries.

SECTION 3 MANAGEMENT DISCUSSION AND ANALYSIS

3. Interim dividend

The Board has not made any recommendation on the payment of an interim dividend for the six months ended 30 June 2023.

4. Purchase, redemption or sale of listed securities

Chalieco Hong Kong Corporation Limited, a wholly-owned subsidiary of the Company, redeemed US\$350,000,000 senior guaranteed perpetual capital securities (the “2019 Securities”) it issued at The Stock Exchange of Hong Kong Limited and guaranteed by the Company on 21 May 2023. After the redemption, there are no 2019 Securities in issuance. For details, please refer to the relevant announcements disclosed by the Company on the Stock Exchange on 17 April 2023 and 22 May 2023, respectively.

5. Financial reporting responsibility of Directors in relation to the financial statements

The Board shall fulfill its duty to prepare the Company’s financial statements as of 30 June 2023 so as to give a true and fair view of production and operational condition of the Company and of the business performance and cash flow of the Company. The management of the Company has provided the Board with the necessary explanation and data to facilitate the review of the Company’s financial statements by the Board. The Directors are not aware of any significant uncertainties, that is, events or incidents that may cast significant doubt on the Company’s ability to continue as a going concern.

6. Accounting policies**(1) Changes in significant accounting policies**

There were no changes in the Company’s significant accounting policies during the period.

(2) Changes in significant accounting estimates

The accounting estimates for expected credit losses arising from contract assets were changed after the consideration and approval at the 13th meeting of the fourth session of the Board of the Company on 28 June 2023. After the changes, if expected credit loss can be evaluated for contract assets individually significant (a contract asset is individually significant if it reaches RMB5 million) and some contract assets not individually significant without unnecessary extra costs or efforts, the Company tests them for impairment and recognizes loss allowance on an individual basis. Expected credit loss of the remaining contract assets is estimated as a group based on the aging analysis (calculated from the date on which such contract assets are recognized) on a pro rata basis (in line with accounts receivables) and loss allowance is recognized.

7. Events After the Balance Sheet Date

There were no other material post-period events after 30 June 2023.

SECTION 4 CORPORATE GOVERNANCE

I. SHAREHOLDERS' MEETING

Session of meeting	Convening date	Websites designated for disclosure of resolutions	Resolutions disclosing date	Resolutions
The 2023 first extraordinary general meeting of China Aluminum International Engineering Corporation Limited	8 February 2023	www.sse.com.cn, www.hkexnews.hk	9 February 2023 (A Share), 8 February 2023 (H Share)	Considered and approved a total of 5 resolutions, including the Resolution on the Amendments to the Articles of Association of China Aluminum International Engineering Corporation Limited, the Resolution on the Amendments to the Administrative Measures of Guarantees of China Aluminum International Engineering Corporation Limited, the Resolution on the Renewal of Commodities Sales and Purchases Master Agreement and the Adjustment of the Caps of Relevant Related (Connected) Transactions, the Resolution on the Renewal of General Services Master Agreement and the Adjustment of the Caps of Relevant Related (Connected) Transactions, and the Resolution on the Renewal of Engineering Services Master Agreement and the Adjustment of the Caps of Relevant Related (Connected) Transactions, details of which can be found in the Company's announcements.
The annual general meeting of China Aluminum International Engineering Corporation Limited in 2022	28 June 2023	www.sse.com.cn, www.hkexnews.hk	29 June 2023 (A Share), 28 June 2023 (H Share)	Considered and approved a total of 11 resolutions, including the Resolution of the Company on the Board of Directors' Work Report for 2022, the Resolution of the Company on the Board of Supervisors' Work Report for 2022, the Resolution of the Company on the Financial Report for 2022, the Resolution of the Company on the Provision for Impairment of Assets for 2022, the Resolution of the Company on the Profits Distribution Plan for 2022, the Resolution on the Provision of Guarantees Among Controlled Subsidiaries, the Resolution of the Company on the Capital Expenditure Plan for 2023, the Resolution of the Company on the Purchase of Liability Insurance for Directors, Supervisors and Senior Management, the Resolution of the Company on the Remuneration Standards of Directors and Supervisors for 2023, the Resolution of the Company on the Change of the Accounting Firm, the Resolution of the Company on the Issuance of the Onshore and Offshore Debt Financing Instruments, details of which can be found in the Company's announcements.

SECTION 4 CORPORATE GOVERNANCE

Request for convening of extraordinary general meetings by preference shareholders with recovered voting rights

Applicable Not applicable

Particulars of the general meeting

Applicable Not applicable

The 2023 first extraordinary general meeting and 2022 annual general meeting of the Company were convened by the Board and presided over by Mr. LI Yihua, the chairman of the Company. The convening, holding and voting of the meetings were in compliance with the laws and regulations such as the Company Law of the People's Republic of China, and the Articles of Association of China Aluminum International Engineering Corporation Limited. For details of the meeting, please refer to the announcements on resolutions of the general meeting disclosed by the Company.

II. CHANGES IN DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT OF THE COMPANY

Applicable Not applicable

Name	Position	Change
ZHANG Jian	Chief Financial Officer, Secretary to the Board	Departed
ZHAO Hongmei	Chief Financial Officer, Secretary to the Board	Engaged
ZHANG Wenjun	Non-executive Director	Departed
WANG Yonghong	Vice President	Departed
MA Ning	Vice President	Departed
ZHOU Dongfang	Vice President	Engaged

SECTION 4 CORPORATE GOVERNANCE

Descriptions of changes in directors, supervisors and senior management of the Company

Applicable Not applicable

1. On 3 April 2023, Mr. ZHANG Jian submitted his resignation to the Board due to job changes, and resigned as the chief financial officer and secretary to the Board . On 27 April 2023, Mr. ZHANG Jian submitted his resignation to the Board of Directors of the Company, and resigned as the secretary and authorised representative of the Company.
2. On 3 April 2023, the Company convened the tenth meeting of the fourth session of the Board and agreed to engage Ms. ZHAO Hongmei as the chief financial officer and Secretary of the Board, with a tenure from the date of election at the tenth meeting of the fourth session of the Board to the expiry date of the tenure of the fourth session of the Board.
3. On 11 April 2023, Mr. ZHANG Wenjun submitted his resignation as a non-executive director of the Company to the Board due to job changes.
4. On 28 June 2023, Mr. WANG Yonghong and Mr. MA Ning submitted their resignations to the Board due to job changes and both of them ceased to hold the position of Vice President of the Company.
5. On 28 June 2023, the Company convened the thirteenth meeting of the fourth session of the Board and agreed to engage Mr. ZHOU Dongfang as the Vice President of the Company, with a tenure from the date of election at the thirteenth meeting of the fourth session of the Board to the expiry date of the tenure of the fourth session of the Board.
6. Changes in the resumes of Directors, Supervisors and senior management of the Company.

Details of the resumes of the above Directors, Supervisors and senior management are set out in the relevant announcements of the Company disclosed on the website of SSE on 4 April, 28 April and 29 June 2023 and on the website of the Stock Exchange on 3 April, 27 April and 28 June 2023, respectively.

SECTION 4 CORPORATE GOVERNANCE

III. PROPOSAL FOR PROFIT DISTRIBUTION OR FOR CONVERTING CAPITAL RESERVE INTO SHARE CAPITAL**The proposed profit distribution plan or converting capital reserve into share capital plan for the half year**

Whether to distribute profit or transfer reserves	No
Number of bonus shares for every 10 shares (share)	0
Amount of dividend for every 10 shares (RMB) (tax inclusive)	0
Number of shares converted for every 10 shares (share)	0

Particulars of proposal for profit distribution or for converting capital reserve into share capital

No

IV. SHARE OPTION INCENTIVE PLAN, EMPLOYEE STOCK OPTION PLAN OR OTHER EMPLOYEE INCENTIVE MEASURES AND THEIR IMPACT**(I) Incentives disclosed in provisional announcements and with no subsequent development or change**

Applicable Not applicable

(II) Incentives not disclosed in provisional announcements or with subsequent development**Particulars of share option incentives**

Applicable Not applicable

Other explanations

Applicable Not applicable

Particulars of employee stock option plan

Applicable Not applicable

Other incentive measures

Applicable Not applicable

SECTION 4 CORPORATE GOVERNANCE

V. CORPORATE GOVERNANCE

(I) Compliance with Corporate Governance Code

The Company has always been committed to improving the level of corporate governance and regards corporate governance as an indispensable part of creating value for shareholders. With reference to the code provisions set out in the Corporate Governance Code and Corporate Governance Report in Appendix 14 to the Listing Rules of the Stock Exchange, the Company has established a modern corporate governance structure composed of general meetings, the Board, the Board of Supervisors and the senior management that can effectively balance each other's powers and operate independently. The Company has also adopted the Corporate Governance Code as its corporate governance practices.

As a company listed on the Stock Exchange, the Company has been committed to maintaining a high standard of corporate governance practices. For the six months ended 30 June 2023, the Company complied with all the code provisions and, where appropriate, adopted the recommended best practices set out in the Corporate Governance Code contained in Appendix 14 to the Listing Rules of the Stock Exchange.

(II) Compliance with the model code for securities transactions by directors, supervisors and relevant employees

The Company has adopted the Model Code set out in Appendix 10 to the Listing Rules of the Stock Exchange as the code of conduct and rules governing dealings by all of our directors and supervisors in the securities of the Company. Having made specific enquiries to the directors and supervisors of the Company, all directors and supervisors have confirmed that they had strictly complied with the required standard set out in the Model Code during the reporting period. The Company has also set up guidelines in respect of the dealings by its relevant employees (as defined in the Listing Rules of the Stock Exchange) in the Company's securities, which are on no less exacting terms than the Model Code. The Company is not aware of any breach of the guidelines by its relevant employees.

The Board will examine the corporate governance practices and operations of the Company from time to time so as to ensure the compliance with relevant requirements under the Listing Rules of the Stock Exchange and to protect Shareholders' interests.

(III) Independent Non-Executive Directors

The Company has appointed a sufficient number of independent non-executive directors with appropriate professional qualifications or appropriate accounting or related financial management expertise in accordance with the requirements of the Listing Rules of the Stock Exchange. The Company has appointed a total of three independent non-executive directors, being Mr. GUI Weihua, Mr. SIU Chi Hung and Mr. TONG Pengfang.

SECTION 4 CORPORATE GOVERNANCE

(IV) Audit Committee

The Company has established an Audit Committee in accordance with the requirements of the Listing Rules of the Stock Exchange, whose main duties are the communication with and supervision and verification of the external audit, the regulation of internal audit, the evaluation and improvement of the Company's internal control system, as well as the risk analysis of the Company's major investments in operation, including proposing the appointment or replacement of the external auditor, monitoring the independence and objectivity of the external auditors and the effectiveness of the audit process in accordance with applicable standards; overseeing the Company's internal audit system and its implementation, ensuring that the internal audit function is adequately resourced to operate within the Company and monitoring the effectiveness of the internal audit function; being responsible for the communication between internal and external audit; reviewing the Company's financial information and the disclosure thereof and reviewing the Company's accounting practices and policies; reviewing the Company's internal control system and making recommendations on the integration and improvement of the Company's internal control system; overseeing the Company's internal control and risk management systems, and carry out research on major investigations findings on internal control matters as well as the management's response; commenting on and making recommendations on the appraisal of and changes to the head of the Company's internal audit department; reviewing the external auditor's letters to the management, including any material queries raised by the auditor to management about accounting records, financial statements or systems of internal control as well as the management's response; reviewing the adequacy of the Company's arrangements for its employees to report or lodge complaints, by way of whistleblowing allegations regarding irregularities in financial reporting, internal control or other areas of the Company's business and ensuring that proper arrangements are in place for fair and independent investigation of these matters and for follow-up action; establishing procedures for handling complaints within its terms of reference and for making fair and independent investigations take appropriate actions; maintaining regular communications with the Board of Directors, senior management and the external auditor.

The Audit Committee consists of three directors, namely Mr. SIU Chi Hung (independent non-executive director), Mr. ZHOU Xinzhe (non-executive director) and Mr. TONG Pengfang (independent non-executive director). Mr. SIU Chi Hung serves as the chairman of the Audit Committee.

(V) Review of interim results

On 18 August 2023, the Audit Committee reviewed and confirmed the Company's unaudited interim results for the six months ended 30 June 2023, and was of the view that the unaudited interim results for the six months ended 30 June 2023 are in compliance with applicable accounting standards and legal requirements, and that appropriate disclosure was made.

SECTION 5 ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

I. ENVIRONMENTAL INFORMATION

(I) Environmental protection information of companies and their important subsidiaries on the watch list of key pollutant discharging units published by the environmental protection authority

Applicable Not applicable

(II) Explanation of environmental protection information of companies not on the watch list of key pollutant discharging units

Applicable Not applicable

1. Administrative penalties imposed due to environmental issues

Applicable Not applicable

In October 2022, an administrative penalty was imposed on the Metal Structure Branch of Tianjin Construction. by Tianjin Baodi District Bureau of Ecology and Environment for engaging in open-air paint spraying operations. In May 2023, the Baodi District Bureau of Ecology and Environment attended the incident site to organise rectification and acceptance, and recognised that the rectification was qualified and had passed the acceptance and the case was closed.

2. Disclosure of other environmental information by reference to key pollutant discharging units

Applicable Not applicable

The Company pays high attention to environmental protection as well as pollution prevention and control efforts. During the reporting period, no major environmental incidents, environmental pollution or ecological damage incidents was discovered. The principal businesses of the Company mainly focus on surveying, design and construction. The Company promotes the concept of green development and integrates this concept into the design, strengthens essential environmental protection, strictly abides by national laws and regulations on environmental protection and conducts environmental impact assessments for projects in accordance with the law. According to the national and local requirements for environmental protection as well as pollution prevention and control on the construction site, the construction site should identify environmental factors before a project commences, formulate environmental protection and green construction plans and strictly abide by "Six 100%" during the construction process. Aspects such as dust pollution, noise control and emission of industrial wastes are strictly controlled. The Company prioritizes to select new energy-saving and environmentally friendly techniques, technologies, materials and devices, so as to minimize the impact of construction on the environment and pollutant emissions.

SECTION 5 ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

3. Reason for not disclosing other environmental informationApplicable Not applicable**(III) Explanation of subsequent development or changes of environmental information disclosed in the reporting period**Applicable Not applicable**(IV) Information on efforts conducive to ecological protection, pollution prevention and control, and fulfillment of environmental responsibility**Applicable Not applicable

The Company resolutely implements the spirit of the 20th National Congress of the Communist Party of China, adheres to the guidance of Xi Jinping's ecological civilization thoughts, thoroughly implements the new development concept, strictly abides by national and local laws and regulations, continuously promotes the Company's environmental protection work, discharges various pollutants in accordance with laws and regulations, strengthens the ecological environment protection work at the first line of production, and earnestly fulfills the subject responsibility of corporate environmental protection. During the first half of 2023, the Company continued to require all employees to sign the responsibility list under the principle of "one position with two responsibilities" for safety and environmental protection and signed the safety and environmental protection target responsibility letter with each enterprise and each department, so as to enhance the environmental friendly concepts of all employees and promote the fulfillment of their responsibility for carrying out environmental protection work. The Company actively organized the "5 June" Environment Day activities, so as to deeply integrate the spirit of the 20th National Congress of the Communist Party of China and Xi Jinping's ecological civilization thoughts with the Company's businesses, continued to promote the research and development and popularized application of environmental protection and energy-saving technologies, so as to promote orderly and healthy development of the environment protection and pollution prevention.

(V) Measures adopted for reducing carbon emissions during the reporting period and their effectsApplicable Not applicable

SECTION 5 ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

II. DETAILED INFORMATION ON CONSOLIDATION AND EXPANSION OF THE RESULTS IN POVERTY ALLEVIATION, RURAL REVITALIZATION AND OTHER WORK

Applicable Not applicable

In the first half of 2023, CHALIECO continued to study the important instructions of General Secretary Xi Jinping on rural revitalisation, strictly implemented the requirement of “shaking off poverty rather than responsibility, policies, support and oversight”, and did a good job in rural revitalisation. GAMI was awarded as an advanced unit in Guizhou Province’s rural revitalisation village assistance work in 2023. Through setting up public welfare posts, skills training, introduction of labour, photovoltaic power generation and other measures, CNPT has realised transfer employment for 161 villagers who are willing to be employed and have the ability to be employed in the village under its assistance and liaison. We actively assisted qualified villagers to apply for or renew microloans for the development of aquaculture, with a total amount of RMB1.02 million. CINF dispatched a rural revitalization team to Tianmashan Village, Hexiangqiao Town, Longhui County, Shaoyang City, Hunan Province to carry out on-site assistance works.

SECTION 6 KEY MATTERS

I. PERFORMANCE OF COMMITMENTS

Commitments of the Company and its effective controller, shareholders, related parties, acquirers that were made in or continued into the reporting period

Applicable Not applicable

Background of commitment	Type of commitment	Party of commitment	Content of commitment	Date and term of commitment	Whether there is time limit for performance	Whether commitment is performed strictly in a timely manner	Specific reasons for any delay in performance	Subsequent plan in case of any delay in performance
IPO related commitments	Restriction on sales of shares	Chinalco	Commitment on share lockup and intention of reducing shareholding	Three years from the date of A share listing, and two years from expiration of the lockup period	Yes	Yes	N/A	N/A
	Restriction on sales of shares	Luoyang Institute	Commitment on share lockup and intention of reducing shareholding	Three years from the date of A share listing, and two years from expiration of the lockup period	Yes	Yes	N/A	N/A
	Others	Our directors and senior management	Making up for diluted return for the current period	Long term	Yes	Yes	N/A	N/A
	Resolving competition among peers	Chinalco	Peer competition	Long term	Yes	Yes	N/A	N/A
	Resolving related transactions	Chinalco	Related transaction	Long term	Yes	Yes	N/A	N/A
	Resolving related transactions	Chinalco Finance	Credit facility service provided by related party	Long term	Yes	Yes	N/A	N/A
	Others	Our directors, supervisors and senior management	Qualifications	Long term	Yes	Yes	N/A	N/A
	Others	Chinalco	Defect in title of land	Long term	Yes	Yes	N/A	N/A
	Others	The Company	Real estate related business	Long term	Yes	Yes	N/A	N/A
	Others	Chinalco, the Company, our directors, supervisors and senior management, sponsors, accountants, lawyers	Undertakings that the prospectus do not carry any false statement, misleading representation or material omission	Long term	Yes	Yes	N/A	N/A

SECTION 6 KEY MATTERS

II. FUNDS MISAPPROPRIATED BY CONTROLLING SHAREHOLDERS AND OTHER RELATED PARTIES DURING THE REPORTING PERIOD FOR NON-OPERATING CAUSES

Applicable Not applicable

III. ILLEGAL GUARANTEE

Applicable Not applicable

IV. AUDIT OF INTERIM REPORT

Applicable Not applicable

V. CHANGES AND TREATMENT OF MATTERS RELATED TO NON-STANDARD AUDIT OPINIONS IN THE FINANCIAL REPORT OF THE PREVIOUS YEAR

Applicable Not applicable

VI. BANKRUPTCY AND REORGANIZATION RELATED ISSUES

Applicable Not applicable

SECTION 6 KEY MATTERS

VII. MATERIAL LITIGATION AND ARBITRATION

- The Company was involved in any material litigation or arbitration during the reporting period
The Company was not involved in any material litigation or arbitration during the reporting period

(I) Litigation and arbitration disclosed in provisional announcements and without subsequent development

- Applicable Not applicable

Summary and type of the issue	Reference
Domestic arbitration case of GAMI, a wholly-owned subsidiary of the Company versus Guizhou Huada Real Estate Development Co., Ltd.	For details, please refer to the Company's Announcement No.Temp 2023-039 issued on 26 July 2023 on the designated media for information disclosure
Dispute over engineering construction contract initiated by Ninth Metallurgical Company, a controlled subsidiary of the Company, against Hanzhong Aviation Intelligent New Town Investment Group Co., Ltd. and Hanzhong Aviation Intelligent New Town Sewage Processing Plant	For details, please refer to the Announcement No. Temp 2023-036 issued by the Company on the designated media for information disclosure on 14 July 2023
Dispute over engineering construction contract initiated by Jia Fu Cheng Property Co., Ltd. against Sixth Metallurgical Company, a wholly-owned subsidiary of the Company	For details, please refer to the Announcement No. Temp 2023-035 issued by the Company on the designated media for information disclosure on 14 July 2023
Dispute over engineering construction contract initiated by Ninth Metallurgical Company, a controlled subsidiary of the Company, against Shaanxi Wei Da Real Estate Development Co., Ltd. and LI Hengsheng	For details, please refer to the Announcement No. Temp 2023-033 issued by the Company on the designated media for information disclosure on 6 July 2023
International arbitration case of Chalieco versus Vietnam National Coal and Mineral Industries Group	For details, please refer to the Announcement No. Temp 2022-002 and Announcement No. Temp 2023-026 issued by the Company on the designated media for information disclosure on 14 January 2022 and 3 June 2023 respectively

SECTION 6 KEY MATTERS

Summary and type of the issue	Reference
Dispute over engineering construction contract initiated by Sixth Metallurgical Company, a wholly-owned subsidiary of the Company, against Inner Mongolia Xin Wang Renewable Resources Co., Ltd.	For details, please refer to the Announcement No. Temp 2023-022 issued by the Company on the designated media for information disclosure on 10 May 2023
Dispute over engineering construction contract initiated by Baoji Hui Feng Construction and Engineering Co., Ltd. against Ninth Metallurgical Company and Fifth Branch of Ninth Metallurgical Company, controlled subsidiaries of the Company, and Baoji Municipal Disabled Peoples' Federation	For details, please refer to the Announcement No. Temp 2023-020 issued by the Company on the designated media for information disclosure on 28 April 2023
Dispute over engineering construction contract initiated by XU Lin against Twelfth Metallurgical Company, a wholly-owned subsidiary of the Company, Guizhou Gui'an New District Administrative Committee, Gui'an New District Higher Education Mega Center Investment Project Development Co., Ltd. and Fujian Heng Li Construction Group Co., Ltd.	For details, please refer to the Announcement No. Temp 2023-018 issued by the Company on the designated media for information disclosure on 18 April 2023
Dispute over engineering construction contract initiated by Duyun Development Zone Tong Da Construction Co., Ltd., a wholly-owned subsidiary of the Company, against Duyun Industrial Cluster Capital Operation Co., Ltd., Duyun Economic Development Zone Management Committee, Qiannan Prefecture Investment Co., Ltd., People's Government of Qiannan Buyi and Miao Autonomous Prefecture, Qiannan Buyi and Miao Autonomous Prefecture Finance Bureau and Finance Bureau of Duyun Economic Development Zone	For details, please refer to the Announcement No. Temp 2023-016 and the Announcement No. Temp 2023-040 issued by the Company on the designated media for information disclosure on 12 April 2023 and 26 July 2023 respectively

SECTION 6 KEY MATTERS

Summary and type of the issue	Reference
<p>Dispute over engineering construction contract initiated by Sixth Metallurgical Company, a wholly-owned subsidiary of the Company, against Hohhot Economic and Technological Development Zone Ruyi District Management Committee, Hohhot Economic and Technological Development Zone Bo Yuan Real Estate Development Co., Ltd., Inner Mongolia Jin Hang Real Estate Development Co., Ltd. and Hohhot Economic and Technological Development Zone Investment and Development Group Co., Ltd.</p>	<p>For details, please refer to the Announcement No. Temp 2023-013 issued by the Company on the designated media for information disclosure on 31 March 2023</p>
<p>Dispute over engineering construction contract initiated by Great Wall Construction, a wholly-owned subsidiary of the Company, against Hainan Captain Real Estate Development Co., Ltd.</p>	<p>For details, please refer to the Announcement No. Temp 2022-071 and Announcement No. Temp 2023-007 issued by the Company on the designated media for information disclosure on 17 November 2022 and 1 March 2023 respectively</p>
<p>Dispute over engineering construction contract between DING Jie and Tianjin Construction, a wholly-owned subsidiary of the Company</p>	<p>For details, please refer to the Announcement No. Temp 2022-037 and Announcement No. Temp 2023-034 issued by the Company on the designated media for information disclosure on 19 May 2022 and 6 July 2023 respectively</p>

SECTION 6 KEY MATTERS

(II) Particulars of litigations and arbitrations not disclosed in provisional announcements or with subsequent development

Applicable Not applicable

Unit: '0,000 Currency: RMB

Within the reporting period:

Plaintiff (Applicant)	Defendant (Respondent)	Party with several and joint liability	Litigation or Arbitration	Basic information of litigation (arbitration)	Amount concerned in the litigation (arbitration)	Whether estimated liability arose from the litigation (arbitration) and amount	Current status of the litigation (arbitration)	Judgment/award and impact	Enforcement of the judgment (award)
Tianjin Construction	Tianjin Jinghai County Tianzi Yangguang Environmental Protection Co., Ltd., Tianzi Environmental Protection Investment Holdings Co., Ltd., Tianzi Environmental Protection Equipment Manufacturing (Tianjin) Co., Ltd., Gao Weihua	Tianjin Zijinshan Environmental Protection Industry Investment Co., Ltd., Tianjin Wuqing District Tianzi Environmental Protection Co., Ltd., Huazhiyuan International Trade (Tianjin) Co., Ltd., Tianzi Environmental Protection Industry Development Co., Ltd.	Litigation	Engineering construction contract dispute	17,669.55	No	Decided	Tianzi Environmental Protection Investment Holdings Co., Ltd. shall assume the payment responsibility to Chinalco International (Tianjin) Construction Co., Ltd., and Hua Zhi Yuan International Trading (Tianjin) Co., Ltd. and GAO Weihua shall assume the joint and several payment responsibility	Ruled to terminate the current enforcement
The No. 4 Metallurgical Construction Company of China Limited	CINF	No	Litigation	Building construction contract dispute	8,400.00	No	Decided	CINF shall assume part of the payment responsibility to No. 4 Metallurgical Company.	Enforcement in progress
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	Henan Hong Xuan Real Estate Co., Ltd.	No	Litigation	Building engineering construction contract dispute	7,953.70	No	Decided	Henan Hong Xuan shall assume payment responsibility to Sixth Metallurgical Company.	Enforcement completed, case closed
Seventh Metallurgical Civil Engineering Co., Ltd.	Guiyang Aluminum and Magnesium Design and Research Institute Engineering Contracting Co., Ltd., Guiyang Aluminum-Magnesium Design and Research Institute Co., Ltd	No	Arbitration	Construction project contract dispute	6,734.50	No	Decided	Guiyang Aluminum and Magnesium Design and Research Institute Engineering Contracting Co., Ltd., Guiyang Aluminum-Magnesium Design and Research Institute Co., Ltd shall assume payment responsibility to Seventh Metallurgical Company.	Enforcement completed, case closed

SECTION 6 KEY MATTERS

(III) Other descriptions

Applicable Not applicable

VIII. PUNISHMENTS UPON THE LISTED COMPANY AND ITS DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, CONTROLLING SHAREHOLDER, EFFECTIVE CONTROLLER, ACQUIRER AND RECTIFICATIONS

Applicable Not applicable

IX. CREDIBILITY OF THE COMPANY AND ITS CONTROLLING SHAREHOLDER AND EFFECTIVE CONTROLLER DURING THE REPORTING PERIOD

Applicable Not applicable

X. MATERIAL RELATED-PARTY TRANSACTIONS**(I) Related-party transactions related to daily operations****1. Events disclosed in provisional announcements and without subsequent development or change in implementation**

Applicable Not applicable

2. Events disclosed in provisional announcements but with subsequent development or change in implementation

Applicable Not applicable

Events of connected transactions	Connected persons	Annual cap for 2023 (RMB'0,000)	Actual transaction amount from
			January to June 2023 (RMB'0,000)
1. Provision of engineering services by the Group	Chinalco	600,000.00	74,235.49
2. Provision of commodities by the Group	Chinalco	100,000.00	13,392.55
3. Provision of general services by the Group	Chinalco	5,000.00	513.10
4. Provision of general services to the Group	Chinalco	16,000.00	1,041.91
5. Provision of commodities to the Group	Chinalco	200,000.00	365.07
6. Provision of financial services to the Group – deposit service	Chinalco Finance	600,000.00	145,166.00
7. Provision of financial services to the Group – credit service	Chinalco Finance	800,000.00	396,090.00

SECTION 6 KEY MATTERS

Events of connected transactions	Connected persons	Annual cap for 2023 (RMB'0,000)	Actual transaction amount from January to June 2023 (RMB'0,000)
8. Provision of financial services to the Group – factoring service	Chinalco Finance	200,000.00	Nil
9. Provision of financial services to the Group – other financial service	Chinalco Finance	330.00	Nil
10. Provision of factoring facility services to the Group	China Aluminum Business	100,000.00	3,500.00

3. Events not disclosed in provisional announcements

Applicable Not applicable

(II) Related-party transactions from acquisition and disposal of assets, equity interests**1. Events disclosed in provisional announcements and without subsequent development or change in implementation**

Applicable Not applicable

2. Events disclosed in provisional announcements but with subsequent development or change in implementation

Applicable Not applicable

3. Events not disclosed in provisional announcements

Applicable Not applicable

4. In case of any guaranteed performance, whether the performance is achieved for the reporting period shall be disclosed

Applicable Not applicable

SECTION 6 KEY MATTERS

(III) Material connected transactions in joint external investments

1. Events disclosed in provisional announcements and without subsequent development or change in implementation

Applicable Not applicable

2. Events disclosed in provisional announcements but with subsequent development or change in implementation

Applicable Not applicable

3. Events not disclosed in provisional announcements

Applicable Not applicable

SECTION 6 KEY MATTERS

(IV) Amounts due to or from related parties**1. Events disclosed in provisional announcements and without subsequent development or change in implementation**

Applicable Not applicable

2. Events disclosed in provisional announcements but with subsequent development or change in implementation

Applicable Not applicable

3. Events not disclosed in provisional announcements

Applicable Not applicable

Unit:'0,000 Currency: RMB

Related party	Related relationship	Provision of funds to related party			Provision of funds to the listed company by related party		
		Opening balance	Accrual	Closing balance	Opening balance	Accrual	Closing balance
Chinalco Finance Company Limited	Wholly owned subsidiary of the parent				347,920.00	48,170.00	396,090.00
China Aluminum Commercial Factoring Co., Ltd.	Controlled subsidiary of the parent				0.00	3,500.00	3,500.00
Total					347,920.00	51,670.00	399,590.00

Cause to claims and liabilities between related parties

Funds provided by related parties to the Company are finance company's borrowings and factoring borrowings.

Impact of such claims and liabilities between related parties on the Company's operating result and financial position

No impact

SECTION 6 KEY MATTERS

(V) Financial business between the Company and its related financial companies, financial companies under its control and related parties✓Applicable Not applicable**1. Deposit business**✓Applicable Not applicable

Unit:'0,000 Currency: RMB

Related party	Related relationship	Maximum daily deposit	Range of deposit interest rate	Opening balance	Incurred during the period		Closing balance
					Total amount deposited during the period	Total amount withdrawn during the period	
Chinalco Finance	Controlled subsidiary of the parent	600,000.00	0.525%-1.755%	424,382.00		279,216.00	145,166.00
Total	/	/	/	424,382.00		279,216.00	145,166.00

2. Loan business✓Applicable Not applicable

Unit:'0,000 Currency: RMB

Related party	Related relationship	Loan facility	Range of loan interest rate	Opening balance	Incurred during the period		Closing balance
					Total amount lent during the period	Total amount repaid during the period	
Chinalco Finance	Controlled subsidiary of the parent	800,000.00	2.60%-4.35%	347,920.00	48,170.00		396,090.00
Total	/	/	/	347,920.00	48,170.00		396,090.00

SECTION 6 KEY MATTERS

3. Credit business or other financial business

Applicable Not applicable

Unit:'0,000 Currency: RMB

Related party	Related relationship	Business type	Total amount	Actual amount incurred
Chinalco Finance	Controlled subsidiaries of the parent company	Factoring business	200,000.00	0
Chinalco Finance	Controlled subsidiaries of the parent company	Other financial services	330.00	0
Chinalco Commercial	Controlled subsidiaries of the parent company	Factoring financing services	100,000.00	3,500.00

4. Other explanations

Applicable Not applicable

(VI) Other significant related-party transactions

Applicable Not applicable

(VII) Other

Applicable Not applicable

XI. MATERIAL CONTRACTS AND THEIR PERFORMANCE**1. Custody, contracting and lease**

Applicable Not applicable

SECTION 6 KEY MATTERS

2. Performed and outstanding material guarantees during the reporting period

Applicable Not applicable

Unit: '0,000 Currency: RMB

Guarantees provided for external parties (except those for subsidiaries)															
The guarantor	Relation of the guarantor to the listed company	The guaranteed	Guaranteed amount	Date of guarantee (agreement)			Type of guarantee	Main debt	Collateral (if any)	Guarantee			Related party		
				signing date	Commencement date	Ending date				performed or not	Overdue or not	Overdue amount	Counter guaranteed or not	Related relationship	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	98,578.00	2021/9/17	2019/10/31	2047/10/31	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	144,523.92	2022/3/31	2022/3/31	2047/3/31	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	21,430.00	2021/3/18	2021/3/18	2046/3/18	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	25,716.00	2021/12/28	2021/12/28	2046/12/28	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	38,574.00	2022/5/25	2022/5/28	2047/5/28	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	21,430.00	2021/3/18	2021/4/20	2049/4/20	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Ningyong Expressway Company	19,158.42	2021/12/28	2022/1/6	2049/1/6	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	60,004.00	2021/9/17	2019/10/31	2047/10/31	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	4,286.00	2020/9/28	2020/9/28	2048/9/28	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	25,716.00	2020/11/26	2021/1/4	2048/1/4	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	21,430.00	2022/1/18	2022/1/25	2048/1/25	General guarantee	Nil	Nil	No	No	0	Nil	No	

SECTION 6 KEY MATTERS

Guarantees provided for external parties (except those for subsidiaries)

The guarantor	Relation of the guarantor to the listed company		Guaranteed amount	Date of guarantee (agreement)			Type of guarantee	Main debt	Collateral (if any)	Guarantee			Counterparty	Related party guarantee	Related relationship
	The guaranteed	Headquarters		signing date	Commencement date	Ending date				performed or not	Overdue or not	Overdue amount			
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	8,572.00	2020/9/28	2020/10/20	2048/10/20	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	21,430.00	2021/12/20	2021/12/20	2048/12/20	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	4,286.00	2020/9/28	2020/9/28	2043/9/28	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	2,143.00	2022/5/12	2022/5/12	2045/5/12	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	17,144.00	2020/12/21	2020/12/21	2043/12/21	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	42,860.00	2020/12/29	2021/5/28	2046/5/28	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linyun Expressway Company	42,860.00	2021/12/1	2021/12/17	2046/12/17	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	71,576.20	2021/12/24	2021/12/24	2046/12/24	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	4,286.00	2020/10/12	2020/11/4	2043/1/4	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	21,430.00	2020/12/22	2021/7/24	2022/10/24	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	2,143.00	2022/1/25	2021/3/11	2044/3/11	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	42,860.00	2020/12/30	2021/4/15	2046/4/15	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	20,915.68	2021/12/1	2021/12/30	2046/12/30	General guarantee	Nil	Nil	No	No	0	Nil	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Linshuang Expressway Company	21,944.32	2021/12/24	2021/12/30	2046/12/30	General guarantee	Nil	Nil	No	No	0	Nil	No	

SECTION 6 KEY MATTERS

Guarantees provided for external parties (except those for subsidiaries)															
The guarantor	Relation of the guarantor to the listed company	The guaranteed	Guaranteed amount	Date of guarantee (agreement)			Type of guarantee	Main debt	Collateral (if any)	Guarantee			Counter	Related party	Related relationship
				signing date	Commencement date	Ending date				performed or not	Overdue or not	Overdue amount			
Harzhong Ninth Metallurgical Construction Co., Ltd.	Controlling subsidiary	Mian County Urban and Rural Infrastructure Construction Co., Ltd.	4,085.00	2015/10/20	2015/10/20	2027/10/19	General guarantee	Nil	Nil	No	No	0	Nil	No	
Cumulative amount of guarantees provided during the reporting period (excluding those for subsidiaries)															-455.00
Total balance of guarantees at the end of the reporting period (A) (excluding those for subsidiaries)															809,381.54
Guarantees provided by the Company to subsidiaries															
Cumulative amount of guarantees provided for subsidiaries during the reporting period															-253,129.00
Total balance of guarantees provided for subsidiaries at the end of the reporting period (B)															49,371.00
Total amount of guarantees provided by the Company (including those provided for subsidiaries)															
Total amount of guarantees (A+B)															858,752.54
Ratio of total amount of guarantees to net assets of the Company (%)															129.49
Including:															
Amount of guarantees provided for shareholders, effective controller and their related parties (C)															0
Amount of guarantees provided directly or indirectly to secure debts of the guaranteed with a assets-liabilities ratio over 70% (D)															49,371.00
Total amount of guarantees in excess of 50% of net assets (E)															527,165.79
Total of the above three types of guarantees (C+D+E)															576,536.79
Explanation on the potential joint liability arising from the immature guarantees															Nil
Explanation on the guarantees															Nil

3. Other material contracts

Applicable Not applicable

XII. EXPLANATIONS OF OTHER MATERIAL MATTERS

Applicable Not applicable

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

I. EQUITY INTERESTS

As at 30 June 2023, the total share capital of the Company was RMB2,959,066,667, divided into 2,959,066,667 Shares of RMB1.00 each (including 399,476,000 H Shares and 2,559,590,667 A Shares).

II. CHANGES IN SHARE CAPITAL

(I) Table of changes in shares

1. Table of changes in shares

There was no change in the total number of shares and the structure of share capital of the Company during the reporting period.

2. Explanation of changes in shares

Applicable Not applicable

3. Effect of changes in shares on financial indicators such as earnings per share and net assets per share within the period from the end of the Reporting Period to the disclosure date of the interim report (if any)

Applicable Not applicable

4. Other information disclosure which the Company deems necessary or is required by the securities regulatory authority

Applicable Not applicable

(II) Particulars of changes of restricted shares

Applicable Not applicable

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

III. PARTICULARS OF SHAREHOLDERS**(I) The issuance and listing of the shares**

The Company is a subsidiary of Chinalco and listed on the Main Board of the Stock Exchange (Stock Code: 2068) on 6 July 2012 with an offering price of HK\$3.93 per H Share. The Company listed on the SSE (Stock Code: 601068) on 31 August 2018 with an offering price of RMB3.45 per A Share and 295,906,667 A Shares were issued. As at 30 June 2023, the total number of Shares in issuance of the Company is 2,959,066,667 shares, which is comprised of 399,476,000 H Shares, representing 13.5% of the issued share capital, and 2,559,590,667 A Shares, representing 86.5% of the issued share capital.

(II) Total number of shareholders:

Total number of ordinary shareholders at the end of reporting period (unit)	49,164
Total number of shareholders of preferred shares with voting right reinstated at the end of reporting period (unit)	Not applicable

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

(III) Table of Shareholding by top 10 shareholders and top 10 unrestricted shareholders as at the end of the reporting period

Unit: Share

Name of shareholder (full name)	Increase or decrease in reporting period	Shareholding of top 10 shareholders		Number of restricted shares held	Pledged, marked or frozen shares		Nature of shareholder
		Number of shares held at the end of reporting period	Percentage (%)		Status of shares	Number	
Aluminum Corporation of China Limited	0	2,176,758,534	73.56	0	Nil	0	State-owned legal person
HKSCC Nominees Limited	0	399,476,000	13.50	0	Unknown	/	Others
Luoyang Engineering & Research Institute for Nonferrous Metals Processing	0	86,925,466	2.94	0	Nil	0	State-owned legal person
Hong Kong Securities Clearing Company Limited	132,883	7,411,345	0.25	0	Nil	0	Others
TANG Yinglan	6,454,300	6,454,300	0.22	0	Nil	0	Domestic natural person
Industrial and Commercial Bank of China Limited – Yinhua Xinsheng Flexible Allocation Mixed Securities Investment Fund (LOF) (中國工商銀行股份有限公司— 銀華鑫盛靈活配置混合型證券 投資基金 (LOF))	5,793,955	5,793,955	0.20	0	Nil	0	Others
Aladdin Environmental Protection Group Co., Ltd.	–	5,600,000	0.19	0	Nil	0	Others
Bank of Communications Co., Ltd. – GF CSI Engineering Trading Open Index Securities Investment Fund (交通銀行股份有限公司— 廣發中證基建工程交易型 開放式指數證券投資基金)	202,600	3,181,300	0.11	0	Nil	0	Others
China Construction Bank Corporation – Yinhua Xinrui Flexible Allocation Mixed Securities Investment Fund (LOF) (中國建設銀行股份有限 公司—銀華鑫銳靈活配置混合型 證券投資基金 (LOF))	2,896,516	2,896,516	0.10	0	Nil	0	Others
LING Zifeng	2,849,900	2,849,900	0.10	0	Nil	0	Domestic natural person

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

Shareholding of top 10 unrestricted shareholders

Name of shareholder	Number of unrestricted shares held	Class and number of shares	
		Class	Number
Aluminum Corporation of China	2,176,758,534	Renminbi ordinary shares	2,176,758,534
HKSCC Nominees Limited	399,476,000	Overseas listed foreign shares	399,476,000
Luoyang Engineering & Research Institute for Nonferrous Metals Processing	86,925,466	Renminbi ordinary shares	86,925,466
Hong Kong Securities Clearing Company Limited	7,411,345	Renminbi ordinary shares	7,411,345
TANG Yinglian	6,454,300	Renminbi ordinary shares	6,454,300
Industrial and Commercial Bank of China Limited – Yinhua Xinsheng Flexible Allocation Mixed Securities Investment Fund (LOF) (中國工商銀行股份有限公司—銀華鑫盛靈活配置混合型證券投資基金 (LOF))	5,793,955	Renminbi ordinary shares	5,793,955
Aladdin Environmental Protection Group Co., Ltd.	5,600,000	Renminbi ordinary shares	5,600,000
Bank of Communications Co., Ltd. – GF CSI Engineering Trading Open Index Securities Investment Fund (交通銀行股份有限公司—廣發中證基建工程交易型開放式指數證券投資基金)	3,181,300	Renminbi ordinary shares	3,181,300
China Construction Bank Corporation – Yinhua Xinrui Flexible Allocation Mixed Securities Investment Fund (LOF) (中國建設銀行股份有限公司—銀華鑫銳靈活配置混合型證券投資基金 (LOF))	2,896,516	Renminbi ordinary shares	2,896,516
LING Zifeng	2,849,900	Renminbi ordinary shares	2,849,900
Description of special account for repurchase of the top ten shareholders	Not applicable		
Explanations on the entrusting voting right, entrusted voting right and waive of voting right of the above shareholders	Not applicable		

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

Explanation of related relationship or acting in concert in respect of the above shareholders	<p>Note 1: The number of shares held by Chinalco did not include A shares of the Company indirectly held through its subsidiary Luoyang Institute and H shares of the Company indirectly held through its subsidiary YAIC. Chinalco and its subsidiaries held a total of 2,283,179,000 shares of the Company, including 2,263,684,000 A shares and 19,495,000 H shares, accounting for 77.16% of the total share capital of the Company.</p> <p>Note 2: The 399,476,000 H shares of the Company held by Hong Kong Securities Clearing Company Nominees Limited included the 19,495,000 H shares held by Chinalco through its subsidiary YAIC.</p> <p>Note 3: Except the above, the Company is not aware that the above shareholders have any related relationship or are acting in concert among each other</p>
Explanation of shareholders of preferred shares with reinstated voting rights and the number of shares held	Not applicable

Number of shares held by top ten restricted shareholders and restriction conditions

Applicable Not applicable

(IV) Strategic investors or general legal persons who become top 10 shareholders due to rights issue

Applicable Not applicable

(V) Interests and short positions of substantial shareholders in shares and underlying shares

As at 30 June 2023, so far as known to the directors of the Company, the following persons (other than the directors, supervisors or chief executives of the Company) had interests or short positions in the Shares and underlying Shares of the Company which would fall to be disclosed pursuant to Divisions 2 and 3 of Part XV of the SFO, or recorded in the register required to be kept pursuant to Section 336 of the SFO, or who were directly and/or indirectly deemed to be interested in 5% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of the Company:

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

Name of Shareholder	Class of Shares	Capacity/ Nature of interest	Number of Shares Held (Share)	Approximate percentage of shareholding in relevant class of Shares (%) <i>(Note 1)</i>	Approximate percentage of shareholding in total share capital (%) <i>(Note 1)</i>
Chinalco <i>(note 2)</i>	A Share	Beneficial owner/ Interest of controlled corporation	2,263,684,000 (Long position)	88.44	76.50
The Seventh Metallurgical Construction Group Co., Ltd.	H Share	Beneficial owner	69,096,000 (Long position)	17.30	2.34
CNMC Trade Company Limited	H Share	Beneficial owner	59,225,000 (Long position)	14.83	2.00
Peaktrade Investments Ltd.	H Share	Beneficial owner	59,210,000 (Long position)	14.82	2.00
Leading Gain Investments Limited <i>(note 3)</i>	H Share	Nominee of another person (other than passive trustee)	29,612,000 (Long position)	7.41	1.00
China XD Group	H Share	Beneficial owner	29,612,000 (Long position)	7.41	1.00
Yunnan Tin (Hong Kong) Yuan Xing Company Limited	H Share	Beneficial owner	29,612,000 (Long position)	7.41	1.00

Note 1: The percentage is calculated by dividing number of relevant class of Shares in issue of the Company as at 30 June 2023 by total number of Shares.

Note 2: Chinalco is beneficially interested in 2,263,684,000 A Shares, representing approximately 76.50% of the total share capital of the Company. Luoyang Institute is a wholly-owned subsidiary of Chinalco and is interested in 86,925,466 A Shares, representing approximately 2.94% of the total share capital of the Company. Chinalco is therefore also deemed to be interested in the A Shares held by Luoyang Institute under the SFO.

Note 3: Leading Gain Investments Limited is the nominee holder of Beijing Jundao Technology Development Co., Ltd.

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

IV. PARTICULARS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT**(I) Particulars of changes in shareholding of existing and resigned directors, supervisors and senior management during the reporting period**

Applicable Not applicable

Descriptions of other information

Applicable Not applicable

(II) Share incentives granted to directors, supervisors and senior management during the reporting period

Applicable Not applicable

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

(III) Employees and remuneration policy

As of 30 June 2023, the Company had a total of 12,594 registered employees, including 11,728 employees in service, among which male employees accounted for 9,030 and female employees accounted for 2,698, representing 77% and 23% respectively. Moreover, the Company has off-post reserved labor force of 866.

The following table shows a breakdown of the employees in service by business segment as of 30 June 2023:

	Number of employees in service	Percentage in the total number
Operation and management personnel	4,086	35%
Engineering technicians	5,913	50%
Production and operation personnel	1,309	11%
Service and other personnel	420	4%
Total	11,728	100%

The following table shows a breakdown of the employees in service by level of education as of 30 June 2023:

	Number of employees in service	Percentage in the total number
Postgraduate degree and above	1,226	10%
Undergraduate degree	6,218	53%
Diploma degree	2,107	18%
TAFE (Technical And Further Education) and below	2,177	19%
Total	11,728	100%

In accordance with regulations applicable to enterprises and the relevant requirements of all levels of local governments in areas in which the Company operates, the Company established the pension insurance, medical insurance, unemployment insurance, maternity insurance and workers' injury compensation insurance for employees. In addition, the Company and some of its subsidiaries also set up a corporate annuity system for providing retired employees with further pension protection. In accordance with applicable laws and regulations, the aforesaid social insurance premiums are contributed as strictly required by the state, provincial, autonomous region and municipal requirements. The Company also established an employee housing fund in accordance with applicable regulations.

SECTION 7 CHANGES IN SHARES AND SHAREHOLDERS

For the first half of 2023, the Company's employee expenses amounted to RMB642 million. The Company does not have employee's share option scheme currently.

Pursuant to the Labor Contract Law, the Company signs written employment contracts with employees, which stipulate terms on the probation period and violation penalties, dissolution of labor contracts, payment of remuneration and economical compensation as well as social insurance premium. The Company has taken a variety of measures to improve employment relationship management and fulfill its statutory obligations in a practical manner. The Company provides training for employees according to corporate business development strategies, operation objectives and job responsibilities and keeps exploring innovative training models.

The Company has established a labor union to protect employees' rights and encouraged employees to participate in the management of the Company. The Company has not experienced any strikes or other labor disputes which have interfered with its management and operations during the reporting period.

The Company endeavors to provide training for its staff. The scope of its induction and ongoing training programs covers management skills and techniques training, overseas exchange programs and other courses.

(IV) Other Descriptions

Applicable Not applicable

Interests held by Directors, supervisors and chief executives

As of 30 June 2023, none of the directors, supervisors and chief executives of the Company had any interest or short position in the Shares, underlying Shares and debentures of the Company or any associated corporation (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have under such provisions of the SFO) or which were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or which were required, pursuant to the Model Code, to be notified to the Company and the Stock Exchange.

V. CHANGES IN CONTROLLING SHAREHOLDER AND EFFECTIVE CONTROLLER

Applicable Not applicable

SECTION 8 PARTICULARS OF PREFERRED STOCK

Applicable Not applicable

SECTION 9 INFORMATION ON BONDS

I. ENTERPRISE BONDS, CORPORATE BONDS AND NON-FINANCIAL ENTERPRISE DEBT FINANCING INSTRUMENTS

Applicable Not applicable

II. CONVERTIBLE CORPORATE BONDS

Applicable Not applicable

SECTION 10 FINANCIAL REPORT



Grant Thornton
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Certified Public Accountants LLP

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Review Report

GTCNSZ (2023) NO. 110A027000

To the Shareholders of China Aluminum International Engineering Corporation Limited:

We have reviewed the accompanying financial statements of China Aluminum International Engineering Corporation Limited (hereinafter “the Company”), which comprise the consolidated and company statement of financial position as at 30 June 2023, consolidated and company income statements for the six-month period ended 30 June 2023, consolidated and company cash flow statements for the six-month period ended 30 June 2023, consolidated and company statements of changes in equity for the six-month period ended 30 June 2023 and notes to the financial statements. Management of the Company is responsible for the preparation of these financial statements. Our responsibility is to issue a review report on these financial statements based on our review.

We conducted our review in accordance with China Certified Public Accountant Review Standard No. 2101 – Review of Financial Statements. This Standard requires us to plan and perform the review to obtain limited assurance about whether the financial statements are free from material misstatements. A review is limited primarily to procedures as enquiry of the Company’s personnel and analytical review procedures applied to the financial information and thus provides less assurance than an audit. We have not performed an audit and therefore, we do not express an audit opinion.

Based on our review, we are not aware of any matter to cause us believe that the consolidated and company financial statements are not prepared in accordance with the requirements of Accounting Standards for Business Enterprises and do not present fairly, in all material respects, the consolidated and company financial position as at 30 June 2023, and operating performance and cash flows for the period ended 30 June 2023.

Grant Thornton Zhitong
Certified Public Accountants LLP

PRC Certified Public Accountant
(engagement partner)

Huang Zhibin (黃志斌)

PRC Certified Public Accountant
(engagement partner)

Li Yang (李楊)

Beijing, China
22 August 2023

SECTION 10 FINANCIAL REPORT

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	Notes	As at 30 June 2023 (Unaudited)	As at 31 December 2022
Current assets:			
Cash and cash equivalents	5.1	3,875,116,708.44	7,673,528,418.08
Bills receivable	5.2	1,727,786.80	6,450,051.85
Accounts receivable	5.3	15,225,351,886.28	15,265,038,841.17
Financing receivables	5.4	446,769,913.34	690,552,523.80
Prepayments	5.5	515,853,057.12	474,058,301.33
Other receivables	5.6	1,623,106,340.55	2,477,444,998.48
Including: Interests receivable		4,849,581.53	2,685,407.11
Dividends receivable		8,125,422.21	8,125,422.21
Inventories	5.7	2,903,671,817.82	2,854,954,239.10
Contract assets	5.8	7,626,053,421.06	7,861,558,185.85
Non-current assets due within one year	5.9	215,461,580.84	396,416,681.30
Other current assets	5.10	500,942,510.35	482,277,380.99
Total current assets		32,934,055,022.60	38,182,279,621.95
Non-current assets:			
Long-term receivables	5.11	1,776,859,971.41	1,743,974,050.77
Long-term equity investments	5.12	741,560,871.57	750,757,956.51
Other equity instrument investments	5.13	51,159,750.62	57,167,316.12
Investment properties	5.14	568,883,759.19	574,943,129.95
Fixed assets	5.15	2,275,319,372.40	2,313,140,998.19
Construction in progress	5.16	245,161,466.63	195,714,635.58
Right-of-use assets	5.17	9,010,648.19	11,551,936.28
Intangible assets	5.18	1,288,433,829.48	1,263,638,376.97
Development costs	5.19	4,290,294.46	3,823,008.84
Goodwill	5.20	875,128.92	875,128.92
Long-term deferred expenses	5.21	44,083,886.65	43,225,634.12
Deferred tax assets	5.22	1,201,914,225.89	1,016,977,021.41
Other non-current assets	5.23	709,147,751.38	1,233,219,776.26
Total non-current assets		8,916,700,956.79	9,209,008,969.92
Total assets		41,850,755,979.39	47,391,288,591.87

SECTION 10 FINANCIAL REPORT

Item	Notes	As at 30 June 2023 (Unaudited)	As at 31 December 2022
Current liabilities:			
Short-term loans	5.24	3,622,608,331.35	4,184,225,133.38
Bills payable	5.25	3,498,498,901.22	3,396,337,223.41
Accounts payable	5.26	12,349,874,738.13	12,668,377,946.71
Contract liabilities	5.27	3,186,332,199.46	3,558,737,947.31
Employee compensation payables	5.28	236,183,912.33	210,506,008.36
Taxes payable	5.29	108,993,547.60	216,321,008.98
Other payables	5.30	1,505,031,455.06	1,878,302,295.81
Including: Interests payable			
Dividends payable		2,408,891.77	2,408,891.77
Non-current liabilities due within one year	5.31	2,910,305,948.03	3,137,364,751.02
Other current liabilities	5.32	1,565,924,934.28	1,723,137,407.53
Total current liabilities		28,983,753,967.46	30,973,309,722.51
Non-current liabilities:			
Long-term loans	5.33	5,125,623,648.62	5,257,000,000.00
Lease liabilities	5.34	6,371,274.09	8,533,686.59
Long-term payables	5.35	1,419,611.80	1,479,611.80
Long-term employee compensation payables	5.36	538,721,000.00	562,411,000.00
Deferred income	5.37	67,458,974.64	61,250,000.00
Deferred tax liabilities	5.22	71,851,804.07	72,247,308.20
Total non-current liabilities		5,811,446,313.22	5,962,921,606.59
Total liabilities		34,795,200,280.68	36,936,231,329.10

SECTION 10 FINANCIAL REPORT

Item	Notes	As at 30 June 2023 (Unaudited)	As at 31 December 2022
Share capital	5.38	2,959,066,667.00	2,959,066,667.00
Other equity instruments	5.39	2,433,684,905.65	2,433,684,905.65
Including: Perpetual bonds		2,433,684,905.65	2,433,684,905.65
Capital reserves	5.40	911,474,611.35	919,256,699.11
Other comprehensive income	5.41	143,819,752.78	170,070,702.57
Special reserve	5.42	235,126,663.86	219,378,446.60
Surplus reserve	5.43	229,735,034.17	229,735,034.17
Undistributed profit/ (loss)	5.44	-281,172,629.05	598,623,010.70
Equity attributable to owners of the parent		6,631,735,005.76	7,529,815,465.80
Non-controlling interests		423,820,692.95	2,925,241,796.97
Total shareholders' equity		7,055,555,698.71	10,455,057,262.77
Total liabilities and shareholders' equity		41,850,755,979.39	47,391,288,591.87

Legal Representative:
Li Yihua

Chief Financial Officer:
Zhao Hongmei

Head of Accounting Department:
Wei Xin

SECTION 10 FINANCIAL REPORT

STATEMENT OF FINANCIAL POSITION OF THE PARENT

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	Notes	As at 30 June 2023 (Unaudited)	As at 31 December 2022
Current assets:			
Cash and cash equivalents		1,974,382,066.73	3,093,788,236.93
Bills receivable			
Accounts receivable	14.1	871,312,366.33	910,785,572.82
Financing receivables		26,141,959.93	26,490,087.12
Prepayments		196,920,673.47	147,161,887.02
Other receivables	14.2	6,098,135,787.74	6,707,653,693.23
Including: Interests receivable		352,123,602.78	346,630,755.55
Dividends receivable		642,077,598.75	660,029,198.75
Inventories		2,303,309.27	2,401,849.08
Contract assets		336,918,994.96	659,764,712.01
Non-current assets due within one year		453,722,252.07	395,000,212.11
Other current assets		84,299,306.68	73,763,221.85
Total current assets		10,044,136,717.18	12,016,809,472.17
Non-current assets:			
Long-term receivables		2,411,855,453.09	567,491,560.72
Long-term equity investments	14.3	7,703,486,164.50	7,578,994,749.11
Other equity instrument investments			
Investment properties			
Fixed assets		66,892,803.08	68,528,228.13
Construction in progress			
Right-of-use assets			
Intangible assets		126,470,621.07	128,660,058.74
Development costs		3,823,008.84	3,823,008.84
Goodwill			
Long-term deferred expenses		267,394.33	373,444.68
Deferred tax assets		122,117,419.81	135,805,408.84
Other non-current assets			
Total non-current assets		10,434,912,864.72	8,483,676,459.06
Total assets		20,479,049,581.90	20,500,485,931.23

SECTION 10 FINANCIAL REPORT

Item	Notes	As at 30 June 2023 (Unaudited)	As at 31 December 2022
Current liabilities:			
Short-term loans		2,380,000,000.00	1,901,743,333.34
Bills payable		514,644,692.71	367,391,752.71
Accounts payable		1,443,219,822.38	1,508,926,167.78
Contract liabilities		851,415,902.79	1,165,704,533.58
Employee compensation payables		2,723,533.24	3,992,294.76
Taxes payable		7,980,590.86	26,320,606.44
Other payables		3,029,381,479.33	2,013,186,390.77
Including: Interests payable			
Dividends payable			
Non-current liabilities due within one year		2,480,485,050.00	3,081,948,064.30
Other current liabilities		7,183,316.86	3,317,686.07
Total current liabilities		10,717,034,388.17	10,072,530,829.75
Non-current liabilities:			
Long-term loans		3,049,100,000.00	3,770,100,000.00
Lease liabilities			
Long-term payables			
Long-term employee compensation payables		3,585,000.00	3,533,000.00
Deferred income		8,730.64	
Deferred tax liabilities			
Total non-current liabilities		3,052,693,730.64	3,773,633,000.00
Total liabilities		13,769,728,118.81	13,846,163,829.75

SECTION 10 FINANCIAL REPORT

Item	Notes	As at 30 June 2023 (Unaudited)	As at 31 December 2022
Share capital		2,959,066,667.00	2,959,066,667.00
Other equity instruments		2,433,684,905.65	2,433,684,905.65
Including: Perpetual bonds		2,433,684,905.65	2,433,684,905.65
Capital reserves		1,146,631,158.59	1,146,631,158.59
Other comprehensive income		12,209,420.00	12,210,270.00
Special reserve		-	32,593.58
Surplus reserve		229,735,034.17	229,735,034.17
Undistributed profit/(loss)		-72,005,722.32	-127,038,527.51
Total shareholders' equity		6,709,321,463.09	6,654,322,101.48
Total liabilities and shareholders' equity		20,479,049,581.90	20,500,485,931.23

Legal Representative:
Li Yihua

Chief Financial Officer:
Zhao Hongmei

Head of Accounting Department:
Wei Xin

SECTION 10 FINANCIAL REPORT

CONSOLIDATED INCOME STATEMENT

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	Notes	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
I. Operating revenue	5.45	9,622,055,918.67	10,517,091,128.51
Less: Operating costs	5.45	8,577,495,802.16	9,429,347,621.77
Taxes and surcharges	5.46	51,345,000.51	58,888,729.06
Selling and distribution expenses	5.47	50,252,594.53	41,899,865.12
General and administrative expenses	5.48	465,645,723.55	454,135,701.84
Research and development expenses	5.49	320,491,543.83	265,263,986.35
Finance expenses	5.50	32,769,925.45	127,163,320.23
Including: Interest expenses		209,030,160.49	233,567,947.21
Interest income		87,521,999.07	67,178,264.81
Add: Other income	5.51	2,902,686.35	1,995,785.33
Investment income	5.52	5,637,362.49	5,308,988.24
Including: Income from investment in associates and joint ventures		6,243,227.83	2,762,154.43
Impairment of credit losses	5.53	140,384,033.66	123,473,621.06
Impairment losses/(reversals) on assets	5.54	-1,217,747,453.87	5,971,988.04
Gains from assets disposal	5.55	2,558,475.76	161,768.39
II. Operating profit/(losses)		-942,209,566.97	277,304,055.20
Add: Non-operating income	5.56	3,912,836.29	6,091,921.95
Less: Non-operating expenses	5.57	8,425,053.98	38,738,373.43
III. Profit/(losses) before income tax		-946,721,784.66	244,657,603.72
Less: Income tax expenses	5.58	-131,543,753.42	61,025,200.02
IV. Net profit/(losses) for the year		-815,178,031.24	183,632,403.70
(1) Classification according to operation continuity			
Including: Net profit/(losses) from continuing operations		-815,178,031.24	183,632,403.70
Net profit/(losses) from discontinued operations			
(2) Classification according to ownership			
Including: Shareholders of the company		-830,642,028.64	123,644,711.64
Non-controlling interests		15,463,997.40	59,987,692.06

SECTION 10 FINANCIAL REPORT

Item	Notes	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
V. Other comprehensive income, net of tax		-25,849,869.68	38,020,326.00
Other comprehensive income (net of tax) attributable to shareholders of the company	5.41	-26,250,949.79	37,761,323.06
(1) Other comprehensive income that will not be reclassified to profit or loss		-5,313,950.99	229,132.34
a. Remeasurement gains or losses of a defined benefit plan		10,169.62	626,574.10
b. Changes in fair value of other equity instrument investments		-5,324,120.61	-397,441.76
(2) Other comprehensive income to be reclassified to profit or loss		-20,936,998.80	37,532,190.72
a. Translation differences arising from translation of foreign currency financial statements		-20,936,998.80	37,532,190.72
Other comprehensive income (net of tax) attributable to non-controlling interests		401,080.11	259,002.94
VI. Total comprehensive income		-841,027,900.92	221,652,729.70
Attributable to:			
Total comprehensive income attributable to owners of the parent		-856,892,978.43	161,406,034.70
Total comprehensive income attributable to non-controlling interests		15,865,077.51	60,246,695.00
VII. Earnings per share			
(1) Basic earnings per share		-0.30	0.04
(2) Diluted earnings per share			

Legal Representative:
Li Yihua

Chief Financial Officer:
Zhao Hongmei

Head of Accounting Department:
Wei Xin

SECTION 10 FINANCIAL REPORT

INCOME STATEMENT OF THE PARENT

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	Notes	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022
I. Operating revenue	14.4	486,784,797.95	274,175,126.32
Less: Operating costs	14.4	488,535,289.80	256,484,204.88
Taxes and surcharges		4,828,601.79	4,750,571.82
Selling and distribution expenses		14,817,315.85	13,480,422.16
General and administrative expenses		62,315,626.98	63,016,015.00
Research and development expenses		34,555,554.87	3,373,943.57
Finance expenses		39,695,613.53	34,716,468.50
Including: Interest expenses		151,912,097.91	141,413,837.45
Interest income		26,445,952.41	88,286,709.30
Add: Other income		541,675.44	508,711.23
Investment income	14.5	184,941,381.44	9,462,839.83
Including: Income from investment in associates and joint ventures		4,491,415.39	1,273,432.46
Impairment of credit losses		124,045,328.66	82,813,783.08
Impairment losses/(reversals) on assets		-33,500,993.44	3,442,706.52
Gains from assets disposal		-41,438.47	
II. Operating profit/(losses)		118,022,748.76	-5,418,458.95
Add: Non-operating income		45,895.40	723,757.79
Less: Non-operating expenses		18,003.95	444.48
III. Profit/(losses) before income tax		118,050,640.21	-4,695,145.64
Less: Income tax expenses		13,864,223.91	12,987,599.79
IV. Net profit/(losses) for the year		104,186,416.30	-17,682,745.43
(1) Net profit/ (losses) from continuing operations		104,186,416.30	-17,682,745.43
(2) Net profit/ (losses) from discontinued operations			

SECTION 10 FINANCIAL REPORT

Item	Notes	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022
V. Other comprehensive income, net of tax		-850.00	-850.00
(1) Other comprehensive income that will not be reclassified to profit or loss		-850.00	-850.00
a. Remeasurement gains or losses of a defined benefit plan		-850.00	-850.00
b. Changes in fair value of other equity instrument investments			
(2) Other comprehensive income to be reclassified to profit or loss			
a. Translation differences arising from translation of foreign currency financial statements			
VI. Total comprehensive income		104,185,566.30	-17,683,595.43
VII. Earnings per share			
(1) Basic earnings per share			
(2) Diluted earnings per share			

Legal Representative:
Li Yihua

Chief Financial Officer:
Zhao Hongmei

Head of Accounting Department:
Wei Xin

SECTION 10 FINANCIAL REPORT

CONSOLIDATED STATEMENT OF CASH FLOW

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	Notes	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
I. Cash flows from operating activities			
Proceeds from sales of goods or rendering of services		9,731,114,587.06	9,864,256,151.70
Refund of taxes		26,617,320.49	41,016,033.66
Proceeds from other operating activities	5.59	101,746,971.94	146,303,419.26
Sub-total of cash inflows		9,859,478,879.49	10,051,575,604.62
<hr style="border-top: 1px dashed #000;"/>			
Payment for goods and services		9,004,927,040.72	9,154,437,141.24
Payment to and for employees		1,062,638,868.01	1,096,693,569.19
Payments of various taxes		373,370,402.92	465,468,393.87
Payment for other operating activities	5.59	281,411,820.72	375,051,819.00
Sub-total of cash outflows		10,722,348,132.37	11,091,650,923.30
<hr style="border-top: 1px dashed #000;"/>			
Net cash flows from operating activities	5.60	-862,869,252.88	-1,040,075,318.68
<hr style="border-top: 1px dashed #000;"/>			
II. Cash flows from investing activities			
Proceeds from disposal of investments			18,385,144.45
Investment income received			567,208.12
Net proceeds from disposal of fixed assets, intangible assets and other long-term assets		3,499,556.62	86,971.00
Net proceeds from disposal of subsidiaries and other business units		849,354,960.00	
Proceeds from other investing activities			
Sub-total of cash inflows		852,854,516.62	19,039,323.57
<hr style="border-top: 1px dashed #000;"/>			
Payment for acquisition of fixed assets, intangible assets and other long-term assets		49,654,573.85	1,582,616,828.81
Payment for acquisition of investments			
Net payment for acquisition of subsidiaries and other business units			
Payment for other investing activities			
Sub-total of cash outflows		49,654,573.85	1,582,616,828.81
<hr style="border-top: 1px dashed #000;"/>			
Net cash flows from investing activities		803,199,942.77	-1,563,577,505.24

SECTION 10 FINANCIAL REPORT

Item	Notes	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
III. Cash flows from financing activities			
Proceeds from investors			2,588,000,000.00
Including: Proceeds from non-controlling shareholders of subsidiaries			2,588,000,000.00
Proceeds from borrowings		3,228,980,694.31	6,539,963,991.16
Proceeds from other financing activities	5.59		1,603,471,967.50
Sub-total of cash inflows		3,228,980,694.31	10,731,435,958.66
<hr style="border-top: 1px dashed #000;"/>			
Repayments of borrowings		4,133,109,458.85	5,964,617,216.67
Payment for dividends, profit distributions or interest		322,193,126.17	406,699,495.73
Including: Dividends and profits paid to non-controlling shareholders of subsidiaries		134,771,947.07	58,245,249.99
Payment for other financing activities	5.59	2,487,441,624.79	1,021,061,500.00
Sub-total of cash outflows		6,942,744,209.81	7,392,378,212.40
<hr style="border-top: 1px dashed #000;"/>			
Net cash flows from financing activities		-3,713,763,515.50	3,339,057,746.26
<hr style="border-top: 1px dashed #000;"/>			
IV. Effect of foreign exchange rate changes on cash and cash equivalents		36,984,918.32	26,905,277.30
<hr style="border-top: 1px dashed #000;"/>			
V. Net increase/(decrease) in cash and cash equivalents	5.60	-3,736,447,907.29	762,310,199.64
Add: Cash and cash equivalents at the beginning of the year	5.60	6,857,364,048.62	6,746,419,077.70
<hr style="border-top: 1px dashed #000;"/>			
VI. Cash and cash equivalent at the end of the period	5.60	3,120,916,141.33	7,508,729,277.34

Legal Representative:
Li Yihua

Chief Financial Officer:
Zhao Hongmei

Head of Accounting Department:
Wei Xin

SECTION 10 FINANCIAL REPORT

STATEMENT OF CASH FLOW OF THE PARENT

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022
I. Cash flows from operating activities		
Proceeds from sales of goods or rendering of services	628,184,982.58	1,008,500,676.22
Refund of taxes	11,640,587.92	1,027,451.20
Proceeds from other operating activities	136,929,872.95	172,556,498.48
Sub-total of cash inflows	776,755,443.45	1,182,084,625.90
Payment for goods and services	489,548,185.62	1,159,279,190.76
Payment to and for employees	130,015,767.73	115,099,908.64
Payments of various taxes	24,051,310.14	40,994,628.78
Payment for other operating activities	132,604,050.94	125,977,254.79
Sub-total of cash outflows	776,219,314.43	1,441,350,982.97
Net cash flows from operating activities	536,129.02	-259,266,357.07
II. Cash flows from investing activities		
Proceeds from disposal of investments	1,752,410,238.34	1,296,413,901.12
Investment income received	55,631,672.39	61,199,804.46
Net proceeds from disposal of fixed assets, intangible assets and other long-term assets		
Net proceeds from disposal of subsidiaries and other business units		
Proceeds from other investing activities	58,220,140.54	18,207,638.89
Sub-total of cash inflows	1,866,262,051.27	1,375,821,344.47
Payment for acquisition of fixed assets, intangible assets and other long-term assets	1,581,537.00	829,611.87
Payment for acquisition of investments	3,005,324,500.00	1,292,283,200.00
Net payment for acquisition of subsidiaries and other business units		
Payment for other investing activities		
Sub-total of cash outflows	3,006,906,037.00	1,293,112,811.87
Net cash flows from investing activities	-1,140,643,985.73	82,708,532.60

SECTION 10 FINANCIAL REPORT

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022
III. Cash flows from financing activities		
Proceeds from investors		
Proceeds from borrowings	1,080,000,000.00	3,299,980,000.00
Proceeds from other financing activities	14,534,202,411.25	1,466,100,000.00
Sub-total of cash inflows	15,614,202,411.25	4,766,080,000.00
<hr style="border-top: 1px dashed #000;"/>		
Repayments of borrowings	1,915,731,791.67	4,329,717,216.67
Payment for dividends, profit distributions or interest	187,421,179.10	140,293,803.50
Payment for other financing activities	13,500,062,542.20	1,023,861,606.67
Sub-total of cash outflows	15,603,215,512.97	5,493,872,626.84
<hr style="border-top: 1px dashed #000;"/>		
Net cash flows from financing activities	10,986,898.28	-727,792,626.84
<hr style="border-top: 1px dashed #000;"/>		
IV. Effect of foreign exchange rate changes on cash and cash equivalents	10,809,942.02	23,481,605.39
<hr style="border-top: 1px dashed #000;"/>		
V. Net increase/(decrease) in cash and cash equivalents	-1,118,311,016.41	-880,868,845.92
Add: Cash and cash equivalents at the beginning of the year	3,079,758,266.37	2,379,403,341.85
<hr style="border-top: 1px dashed #000;"/>		
VI. Cash and cash equivalent at the end of the period	1,961,447,249.96	1,498,534,495.93

Legal Representative:
Li Yihua

Chief Financial Officer:
Zhao Hongmei

Head of Accounting Department:
Wei Xin

SECTION 10 FINANCIAL REPORT

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

Prepared by: China Aluminum International Engineering Corporation Limited

Expressed in RMB

Item	Equity attributable to owners of the parent										Total shareholders' equity		
	Share capital	Preference shares	Perpetual bonds	Others	Capital reserve	Other comprehensive income	Special reserve	Surplus reserve	General reserve	Undistributed profit		Sub-total	Non-controlling interests
I. Balance at the end of previous year	2,559,066,667.00		2,433,684,905.65		919,256,699.11	170,070,702.57	219,378,446.60	229,735,034.17		598,623,010.70	7,529,815,465.80	2,925,241,796.97	10,455,057,262.77
Add: Changes in accounting policies													
Correction of prior period errors													
Business combination under common control													
Others													
II. Balance at the beginning of the year	2,559,066,667.00		2,433,684,905.65		919,256,699.11	170,070,702.57	219,378,446.60	229,735,034.17		598,623,010.70	7,529,815,465.80	2,925,241,796.97	10,455,057,262.77
III. Changes in equity during the period ("+" for decrease)													
(I) Total comprehensive income													
(II) Shareholders' contributions and decrease of capital													
1. Contribution by ordinary shareholders													
2. Contribution by other equity instrument investors													
3. Amounts of share-based payments recognized in equity													
4. Others (Note 5.6)													
(III) Profit distribution													
1. Appropriation to surplus reserves													
2. Appropriation to general reserve													
3. Distribution to shareholders													
4. Others													
(IV) Transfer within equity													
1. Capital reserves converted to share capital													
2. Surplus reserves converted to share capital													
3. Loss made up by surplus reserves													
4. Changes in the defined benefit plan transferred to related earnings													
5. Other comprehensive income transferred to retained earnings													
6. Others													
(V) Special Reserve													
1. Appropriation during the period													
2. Utilisation during the period													
(VI) Others (Note 5.6)													
IV. Balance at the end of the period	2,559,066,667.00		2,433,684,905.65		911,474,611.35	143,819,732.78	235,126,663.86	229,735,034.17		-281,172,829.05	6,837,735,005.76	423,820,692.95	7,055,555,698.71

Legal Representative: Li Yihua

Chief Financial Officer: Zhao Hongmei

Head of Accounting Department: Wei Xin

SECTION 10 FINANCIAL REPORT

For the six months ended 30 June 2022 (Restated)

Item	Equity attributable to owners of the parent							Sub-total	Non-controlling interests	Total shareholders' equity			
	Share capital	Preference shares	Perpetual debts	Others	Capital reserve	Other comprehensive income	Special reserve				Surplus reserve	General reserve	Undistributed profit
I. Balance at the end of previous year	2,559,066,667.00		2,495,584,905.65		875,797,338.63	124,407,809.47	159,810,487.28	224,473,908.75		794,976,623.67	7,637,117,760.35	8,878,064,256.75	16,515,182,019.10
Adj.: Changes in accounting policies													
Correction of prior period errors													
Business combination under common control													
Others					100,500,000.00	-22,568,259.90				-180,333,282.88	-102,401,522.58	-48,057,824.40	-150,459,346.98
II. Balance at the beginning of the year	2,559,066,667.00		2,495,584,905.65		976,297,338.63	101,839,549.57	159,810,487.28	224,473,908.75		614,643,360.99	7,534,716,237.77	8,830,006,434.35	16,384,722,672.12
III. Changes in equity during the period ("+" for increase)			466,100,000.00		-9,534,893.95	37,761,323.06	21,027,712.98			103,789,600.41	624,292,746.50	2,603,019,170.19	3,227,311,916.69
(I) Total comprehensive income			466,100,000.00			37,761,323.06				123,644,711.64	161,406,034.70	60,246,695.00	221,652,729.70
(II) Shareholders' contributions and decrease of capital										466,100,000.00		2,598,177,694.89	3,064,277,694.89
1. Contribution by ordinary shareholders												2,598,000,000.00	2,598,000,000.00
2. Contribution by other equity instrument investors													466,100,000.00
3. Amounts of share-based payments recognized in equity													
4. Others (Note 5.6.1)													
(III) Profit distribution					-9,534,893.95					-14,861,111.23	-24,396,001.18	-58,245,249.99	-82,641,251.17
1. Appropriation to surplus reserves													
2. Appropriation to general reserve													
3. Distribution to shareholders													
4. Others													
(IV) Transfer within equity					-9,534,893.95					-14,861,111.23	-24,396,001.18	-58,245,249.99	-82,641,251.17
1. Capital reserves converted to share capital													
2. Surplus reserves converted to share capital													
3. Loss made up by surplus reserves													
4. Changes in the defined benefit plan transferred to related earnings													
5. Other comprehensive income transferred to retained earnings													
6. Others													
(V) Special Reserve								21,182,712.98			21,182,712.98	2,840,030.29	24,022,743.27
1. Appropriation during the period								130,180,805.49			130,180,808.49	12,173,843.12	142,354,451.61
2. Utilisation during the period								-108,948,095.51			-108,948,095.51	-9,333,812.83	-118,281,708.34
(VI) Others (Note 5.6.1)													
IV. Balance at the end of the period	2,559,066,667.00		2,961,684,905.65		966,762,448.58	139,600,872.63	180,838,200.26	224,473,908.75		723,426,961.40	8,159,009,994.27	11,433,025,604.54	19,562,034,588.81

Legal Representative: Li Yihua

Chief Financial Officer: Zhao Hongmei

Head of Accounting Department: Wei Xin

SECTION 10 FINANCIAL REPORT

NOTES TO THE FINANCIAL STATEMENTS

For the six months ended 30 June 2023 (All amounts in RMB unless otherwise stated)

1. GENERAL INFORMATION**1.1 Company's profile**

China Aluminum International Engineering Corporation Limited (hereinafter referred to as 'Chalieco' or 'the Company'), formerly known as China Aluminum International Engineering Co., Ltd., was established on 16 December 2003 with a capital contribution of RMB200,000,000.00 from Aluminum Corporation of China (hereinafter referred to as 'China Aluminum Group') and China Aluminum International Trade Co., Ltd. (hereinafter referred to as "China Aluminum International Trade"), with China Aluminum Group and China Aluminum International Trade holding 95% and 5% equity in Chalieco respectively.

In December 2010, China Aluminum International Trade transferred its 5% equity in the Company to China Aluminum Group, whereupon Chalieco became a wholly-owned subsidiary of China Aluminum Group.

Chalieco was reorganized in 2011 and was incorporated as a joint stock company in Beijing in June 2011 with a registered capital of RMB2,300,000,000.00.

In July 2012, Chalieco offered 363,160,000 shares (H shares) to overseas investors on the main board of the Stock Exchange. The stock abbreviation is 'Chalieco' and the stock code is '2068'. In H share offering, under relevant approval, China Aluminum Group and Luoyang Institute converted their 36,316,000 state-owned domestic shares, equivalent to 10% of the number of H shares under public offering, into H shares on a 1:1 basis and transferred them to the National Council of Social Security Funds on the day of listing. Upon consummation of the above offering, the total share capital increased to RMB2,663,160,000.00.

As approved by the Approval in Relation to the Initial Public Offering of Shares by China Aluminum International Engineering Corporation Limited (Zheng Jian Xu Ke [2018] No. 934) issued by the China Securities Regulatory Commission, the stock abbreviation is 'Chalieco' and the stock code is '601068'. On 27 August 2018, the Company issued 295,906,667 ordinary shares in Renminbi to the public (at a face value of RMB1 per share), increasing its registered capital by RMB295,906,667.00. The enlarged registered capital is RMB2,959,066,667.00.

SECTION 10 FINANCIAL REPORT

1. GENERAL INFORMATION (Continued)

1.1 Company's profile (Continued)

Chalieco's registered address is Building C, No. 99 Xingshikou Road, Haidian District, Beijing, PRC, with a unified social credit code of 911100007109323200.

The Company and its subsidiaries are principally engaged in construction business.

Chalieco's business scope includes engineering technology and design consulting, engineering construction and installation, equipment manufacturing, and trade business.

The ultimate controller of Chalieco is Aluminum Corporation of China.

The Company's and consolidated financial statements and the notes to financial statements have been approved by the 4th Board of Directors in the 14th board meeting on 22 August 2023.

1.2 Scope of consolidated financial statements

The scope of the consolidated financial statements for this period includes China Aluminum International Engineering Corporation Limited and its subsidiaries. Please refer to Note 7.1 for details.

2. BASIS OF PREPARATION

The financial statements are prepared in accordance with the Accounting Standards for Business Enterprises and corresponding application guidance, interpretations and other related provisions issued by the Ministry of Finance (collectively, "ASBEs"). In addition, the Company discloses relevant financial information in accordance with 'Compilation Rules for Information Disclosure of Companies that Offer Securities to the Public No. 15 – General Provisions on Financial Reporting' (revised in 2014) issued by CSRC.

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

The Company adopts the accrual basis of accounting. Except for certain financial instruments, the financial statements are prepared under the historical cost convention. In the event that impairment of assets occurs, a provision of impairment is made accordingly in accordance with the relevant regulations.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES**3.1 Statement of compliance with the Accounting Standards for Business Enterprises**

The financial statements have been prepared in compliance with the Accounting Standards for Business Enterprises to truly and completely present the Company's and consolidated financial position as at 30 June 2023 and the Company's (and consolidated) operating results and cash flows for the period from January to June 2023.

3.2 Accounting Period

The accounting period of the Company is from 1 January to 31 December of each calendar year.

3.3 Operating cycle

The Company takes a 12-month year as a usual operating cycle.

3.4 Functional currency

The Company and domestic subsidiaries use Renminbi ("RMB") as their functional currency. Offshore subsidiaries determine their functional currency according to the primary economic environment where they operate. The financial statements of the Company have been prepared in RMB.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.5 Accounting treatments for business combinations involving enterprises under common control and business combinations not involving enterprises under common control

3.5.1 Business combinations involving enterprises under common control

For a business combination involving enterprises under common control, the assets acquired and liabilities assumed are measured based on their carrying amounts in the consolidated financial statements of the ultimate controlling party at the combination date. The difference between the carrying amount of the net assets acquired and the consideration paid for the combination is adjusted against share premium in the capital reserve, with any excess adjusted against retained earnings.

Business combinations under the same control are achieved through multiple transactions

In separate financial statements, the share of the carrying amount of the acquiree's net assets in the ultimately controlling party's consolidated financial statements, calculated based on the shareholding ratio on the acquisition date, shall be recognized as the initial investment cost of the investment. The difference between the initial investment cost and the sum of the carrying amount of the investment held before the combination plus the carrying amount of the newly paid consideration on the acquisition date will adjust the capital reserve. If the capital reserve is insufficient to offset, retained earnings shall be adjusted.

In the consolidated financial statements, the assets and liabilities of the acquiree obtained by the acquirer during the combination are measured at their carrying amounts in the ultimately controlling party's consolidated financial statements on the acquisition date. The difference between the sum of the carrying amount of the investment held before the combination and the carrying amount of the newly paid consideration on the acquisition date and the carrying amount of the net assets obtained in the combination shall be adjusted to the capital reserve. If the capital reserve is insufficient to offset, retained earnings shall be adjusted. For the long-term equity investment held by the acquirer before obtaining the control right of the acquiree, the relevant profits and losses, other comprehensive income and other changes in owner's equity that have been recognized from the later date between the date of obtaining the original equity and the date when the acquirer and the acquiree are under the same party's ultimately control to the acquisition date, shall be offset against the opening retained earnings or current profits and losses during the comparative statement period.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.5 Accounting treatments for business combinations involving enterprises under common control and business combinations not involving enterprises under common control (Continued)

3.5.2 Business combinations involving enterprises not under common control

For business combinations involving enterprises not under common control, the consideration costs include acquisition-date fair value of assets transferred, liabilities incurred or assumed and equity securities issued by the acquirer in exchange for control of the acquiree. At the acquisition date, the acquired assets, liabilities and contingent liabilities of the acquiree are measured at their fair value. The acquiree's identifiable assets, liabilities and contingent liabilities, are recognised at their acquisition-date fair value.

Where the combination cost exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised as goodwill, and subsequently measured on the basis of its cost less accumulated impairment provisions. Where the combination cost is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is recognised in profit or loss for the current period after reassessment.

Business combinations not under the same control are achieved through multiple transactions

In separate financial statements, the sum of the carrying amount of the equity investment held by the acquiree before the acquisition date and the newly added investment cost on the acquisition date shall be recognized as the initial investment cost. Other comprehensive income recognized for equity investments held before the acquisition date using the equity method is not treated on the acquisition date. When disposing of the investment, the accounting treatment is carried out on the same basis as the direct disposal of relevant assets or liabilities by the acquiree. The owner's equity recognized due to changes in owner's equity of the acquiree other than net profit and loss, other comprehensive income, and profit distribution shall be transferred to the current profit and loss during the disposal period when the investment is disposed of. If the equity investment held before the acquisition date is measured at fair value, the accumulated changes in fair value originally included in other comprehensive income will be transferred to retained earnings when the cost method is changed.

In the consolidated financial statements, the sum of the consideration paid on the acquisition date and the fair value of the acquiree's equity held before the acquisition date on the acquisition date shall be recognized as the acquisition cost. For the equity of the acquiree already held, it shall be remeasured at its fair value on the acquisition date, and the difference between the fair value and its carrying amount shall be included in the current investment income. The equity of the acquiree already held before the acquisition date involves other comprehensive income and changes in other owner's equity, which are converted into current income on the acquisition date, except for other comprehensive income generated by changes in net liabilities or net assets caused by the acquiree's remeasurement of the defined benefit plan.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.5 Accounting treatments for business combinations involving enterprises under common control and business combinations not involving enterprises under common control (Continued)

3.5.3 Transaction costs for business combination

The overhead for the business combination, including the expenses for audit, legal services, valuation advisory, and other administrative expenses, are recorded in profit or loss for the current period when incurred. The transaction costs of equity or debt securities issued as the considerations of business combination are included in the initial recognition amount of the equity or debt securities.

3.6 Consolidated financial statements

3.6.1 Scope of consolidated financial statements

The scope of consolidated financial statements is based on control. Control exists when the Company has power over the investee; exposure, or rights to variable returns from its involvement with the investee and has the ability to affect its returns through its power over the investee. A subsidiary is an entity that is controlled by the Company (including enterprise, a portion of an investee as a deemed separate component, and structured entity controlled by the enterprise).

3.6.2 Basis of preparation of consolidated financial statements

The consolidated financial statements are prepared by the Company based on the financial statements of the Company and its subsidiaries and other relevant information. When preparing consolidated financial statements, the accounting policies and accounting periods of the subsidiaries should be consistent with those established by the Company, and all significant intra-company balances and transactions are eliminated.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.6 Consolidated financial statements (Continued)

3.6.2 Basis of preparation of consolidated financial statements (Continued)

Where a subsidiary or business was acquired during the reporting period, through a business combination involving enterprises under common control, the financial statements of the subsidiary or business are included in the consolidated financial statements as if the combination had occurred at the date that the ultimate controlling party first obtained control.

Where a subsidiary or business was acquired during the reporting period, through a business combination involving enterprises not under common control, the identifiable assets and liabilities of the acquired subsidiaries or business are included in the scope of consolidation from the date that control commences.

The portion of a subsidiary's equity that is not attributable to the parent is treated as non-controlling interests and presented separately in the consolidated balance sheet within shareholders' equity. The portion of net profit or loss of subsidiaries for the period attributable to non-controlling interests is presented separately in the consolidated income statement below the "net profit" line item. When the amount of loss for the current period attributable to the non-controlling shareholders of a subsidiary exceeds the non-controlling shareholders' share of the opening owners' equity of the subsidiary, the excess is still allocated against the non-controlling interests.

3.6.3 Purchase of subsidiaries' non-controlling interests

The difference between the cost of long-term equity investment newly acquired due to the purchase of non-controlling interest and the share of net assets of the subsidiary continuously calculated from the purchase date or merger date according to the newly increased shareholding ratio, and the difference between the disposal price obtained as a result of partial disposal of the equity investment in the subsidiary without loss of control and the share of net assets continuously calculated since the purchase date or the merger date corresponding to the disposal of the long-term equity investment of the subsidiary, should be adjusted to the capital reserve in the consolidated balance sheet, with any excess adjusted to retained earnings.

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.6 Consolidated financial statements (Continued)

3.6.4 Disposal of subsidiaries

When the Company loses control over a subsidiary because of disposing part of equity investment or other reasons, the remaining part of the equity investment is re-measured at fair value at the date when the control is lost. A gain or loss is recognised in the current period and is calculated by the aggregate of consideration received in disposal and the fair value of remaining part of the equity investment deducting the share of net assets in proportion to previous shareholding percentage in the former subsidiary since acquisition date and the goodwill.

Other comprehensive income related to the former subsidiary is transferred to profit or loss when the control is lost, except for the comprehensive income arising from the movement of net liabilities or assets in the former subsidiary's re-measurement of defined benefit plan.

3.7 Joint arrangement classification and accounting treatment for joint operation

A joint arrangement is an arrangement of which two or more parties have joint control. The Company classifies joint arrangements into joint operations and joint ventures.

3.7.1 Joint operations

A joint operation is a joint arrangement whereby the joint operators have rights to the assets, and obligations for the liabilities, relating to the arrangement.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.7 Joint arrangement classification and accounting treatment for joint operation (Continued)

3.7.1 Joint operations (Continued)

The Company recognizes the following items relating to its interest in a joint operation, and account for them in accordance with relevant accounting standards:

- A. Its solely-held assets, and its share of any assets held jointly;
- B. Its solely-assumed liabilities, and its share of any liabilities assumed jointly;
- C. Its revenue from the sale of its share of the output arising from the joint operation;
- D. Its share of the revenue from the sale of the output by the joint operation;
- E. Its solely-incurred expenses, and its share of any expenses incurred jointly.

3.7.2 Joint ventures

A joint venture is a joint arrangement whereby the joint venturers have rights to the net assets of the arrangement.

The Company adopts equity method under long-term equity investment in accounting for its investment in joint venture.

3.8 Cash and cash equivalents

Cash comprises cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents include short-term, highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of change in value.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.9 Foreign currency transactions and translation financial statements in foreign currency

3.9.1 Foreign currency transactions

Foreign currency transactions are translated to the functional currency of the Company at the spot exchange rates on the dates of the transactions.

On the balance sheet date, foreign currency monetary items shall be translated at the spot exchange rate on the balance sheet date. The exchange difference arising from the difference between the spot exchange rate on the balance sheet date and the spot exchange rate upon initial recognition or the last balance sheet date will be recognised in profit or loss for the period. The foreign currency non-monetary items measured at historical cost shall still be measured by the functional currency translated at the spot exchange rate on the date of the transaction. Foreign currency non-monetary items measured at fair value are translated at the spot exchange rate on the date of determination of the fair value. The difference between the amounts of the functional currency before and after the translation will be recognised in profit or loss or other comprehensive income for the period based on the nature of the non-monetary items.

3.9.2 Translation of financial statements denominated in foreign currency

When translating the financial statements denominated in foreign currency of overseas subsidiaries, assets and liabilities on the balance sheet are translated at the spot exchange rate prevailing at the balance sheet date; equity items except for “retained profit” are translated at the spot exchange rates at the dates on which such items arose.

Income and expenses items in the income statement are translated at the prevailing spot exchange rate on the transaction date.

All items in the cash flow statements shall be translated at the prevailing spot exchange rate on the date that the cash flow transaction occurred. Effects arising from changes of exchange rate on cash shall be presented separately as the “effect of foreign exchange rate changes on cash and cash equivalents” item in the cash flow statements.

The differences arising from translation of financial statements shall be included in the “other comprehensive income in shareholders’ equity in the balance sheet.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one enterprise and a financial liability or an equity instrument of another enterprise.

3.10.1 Recognition and derecognition of financial instruments

A financial asset or a financial liability is recognized when the Company becomes one of the parties under a financial instrument contract.

Financial asset that satisfied any of the following criteria shall be derecognised:

- ① The contractual rights to receive the cash flows from the financial asset has terminated; or
- ② The financial asset has been transferred and meets the derecognition criteria for the transfer of financial asset as described below in “Transfer of financial assets”.

A financial liability (or a part thereof) is derecognised only when the present obligation is discharged in full or in part. If an agreement is entered between the Company (debtor) and a creditor to replace the existing financial liabilities with new financial liabilities, and the contractual terms of the new financial liabilities are substantially different from those of the existing financial liabilities, the existing financial liabilities shall be derecognised and the new financial liabilities shall be recognised.

Conventionally traded financial assets shall be recognised and derecognised at the trading date.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.2 Classification and measurement of financial assets

The Company classifies financial assets according to the business model for managing the financial assets and characteristics of the contractual cash flows as follows: financial assets measured at amortised cost, financial assets measured at fair value through other comprehensive income, and financial assets measured at fair value through profit or loss.

Financial assets measured at amortized cost

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated at fair value through profit or loss:

- The Company's business model of managing the financial assets aims at collecting contractual cash flows;
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to the initial recognition, the effective interest rate method is adopted to measure the amortized cost of such financial assets. Gains or losses arising from financial assets that are measured at amortized cost and are not part of any hedging relationship shall be recorded in the current profit or loss when the financial assets are derecognized, amortized according to the effective interest method or impaired.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.2 Classification and measurement of financial assets (Continued)

Financial assets measured at fair value through other comprehensive income

A financial asset is classified as measured at fair value through other comprehensive income if it meets both of the following conditions and is not designated at fair value through profit or loss:

- The Company's business model of managing the financial asset aims at both collecting contractual cash flows and selling the financial assets.
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to the initial recognition, such financial assets are subsequently measured at fair value. The interest, impairment of credit losses or gain and exchange loss or gain calculated using the effective interest rate method are included in the current profit or loss, while other gains or losses are included in other comprehensive income. When derecognized, the accumulated gains or losses previously recorded in other comprehensive income shall be transferred out from other comprehensive income and recorded in the current profit or loss.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.2 Classification and measurement of financial assets (Continued)

Financial assets measured at fair value through profit or loss

The Company classifies the financial assets other than those measured at amortised cost and measured at fair value through other comprehensive income as financial assets measured at fair value through profit or loss. Upon initial recognition, the Company irrevocably designates certain financial assets that are required to be measured at amortised cost or at fair value through other comprehensive income as financial assets measured at fair value through profit or loss in order to eliminate or significantly reduce accounting mismatch.

Upon initial recognition, such financial assets are measured at fair value. Except for those held for hedging purposes, gains or losses (including interests and dividend income) arising from such financial assets are recognised in the profit or loss for the current period.

The business model of managing financial assets refers to how the Company manages financial assets to generate cash flows. That is, the Company's business model determines whether cash flows will result from collecting contractual cash flows, selling financial assets or both. The Company determines the business model for managing financial assets on the basis of objective facts and specific business objectives for managing financial assets determined by key management personnel.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.2 Classification and measurement of financial assets (Continued)

Financial assets measured at fair value through profit or loss (Continued)

The Company assesses the characteristics of contractual cash flow characteristics of financial assets to determine whether the contractual cash flows generated by the relevant financial assets on specified dates are solely payments of principal and interest on the principal amount outstanding. The principal refers to the fair value of the financial assets at the initial recognition. Interest includes consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks, costs and profits. In addition, the Company evaluates the contractual terms that may result in a change in the time distribution or amount of contractual cash flows from a financial asset to determine whether it meets the requirements of the above contractual cash flow characteristics.

All affected financial assets are reclassified on the first day of the first reporting period following the change in the business model where the Company changes its business model for managing financial assets; otherwise, financial assets shall not be reclassified after initial recognition.

Financial assets are measured at fair value at the time of initial recognition. For financial assets measured at fair value through profit or loss, relevant transaction costs are directly recorded into current profit or loss; for other classes of financial assets, the relevant transaction costs are included in the initial recognition amount. For accounts receivable arising from the sale of products or provision of services, which do not contain or do not take into account the material financing component, the Company is entitled to collect the consideration amount as expected as the initial recognition amount.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.3 Classification and measurement of financial liabilities

At initial recognition, financial liabilities of the Company are classified as: financial liabilities measured at fair value through profit or loss, and financial liabilities measured at amortized cost. For financial liabilities not classified as measured at fair value through profit or loss, relevant transaction costs are included in the amount initially recognised.

Financial liabilities measured at fair value through profit or loss

Financial liabilities measured at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated at fair value through profit or loss upon initial recognition. Such financial liabilities are subsequently measured at fair value, and the gains or losses from the change in fair value and the dividend or interest expenses related to the financial liabilities are included in the profit or loss of the current period.

Financial liabilities measured at amortized cost

Other financial liabilities are subsequently measured at amortised cost using the effective interest rate method, and the gains or losses arising from derecognition or amortisation are recognised in profit or loss for the current period.

Financial guarantee contract

Financial guarantee contracts do not belong to financial liabilities measured at fair value through profit or loss. They are measured at fair value at initial recognition and are subsequently measured at the higher of the amount of the impairment of credit losses determined in accordance with the expected credit loss model and the amount initially recognized less the cumulative amortisation.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.3 Classification and measurement of financial liabilities (Continued)

The distinction between financial liabilities and equity instruments

Financial liabilities refer to liabilities that meet one of the following conditions:

- ① A contractual obligation to pay in cash or other financial assets to other parties.
- ② A contractual obligation to exchange financial assets or financial liabilities with another party under potentially adverse conditions.
- ③ A non-derivative contract that has to be settled with or can be settled with the entity's own equity instruments in the future, under which the entity will deliver a variable number of its own equity instruments.
- ④ A derivative contract that has to be settled with or can be settled with the entity's own equity instruments in the future, except for a derivative contract in which a fixed number of its own equity instruments are to be exchanged for a fixed amount of cash or other financial assets.

An equity instrument is a contract that certifies ownership of the remaining interest in an entity's assets after all liabilities have been deducted.

If the Company cannot unconditionally avoid fulfilling a contractual obligation by paying cash or delivering other financial assets, such contractual obligation meets the definition of financial liabilities.

Where a financial instrument must or may be settled with the Company's own equity instruments, the Company's own equity instruments used to settle such instrument should be considered as to whether it is as a substitute for cash or other financial assets or for the purpose of enabling the holder of the instrument to be entitled to the remaining interest in the assets of the issuer after deducting all of its liabilities. For the former, it is a financial liability of the Company; for the latter, it is the Company's own equity instruments.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.4 Derivative financial instruments and embedded derivative instruments

The initial measurement of the Company's derivative financial instruments is based on the fair value of the date of signing the derivative transaction contract, and the subsequent measurement is based on its fair value. A derivative with a positive fair value is recognised as an asset; a negative fair value is recognized as a liability. Any gains or losses resulting from changes in fair value that do not conform to the provisions of hedge accounting shall be directly recorded into the current profit or loss.

For a hybrid instrument containing an embedded derivative instrument, if the host is a financial asset, the hybrid instrument as a whole shall be subject to the relevant provisions on the classification of financial assets. If the host is not a financial asset, the embedded derivative instrument shall be separated from the hybrid instrument and accounted for as a separate derivative instrument if all of the following conditions are met: the hybrid instrument is not measured at fair value through profit or loss; the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative. If it is not possible to measure the embedded derivative separately at the time of acquisition or on the subsequent balance sheet date, the hybrid instrument as a whole is designated as a financial asset or financial liability measured at fair value through profit or loss.

3.10.5 Fair value of financial instruments

For the determination of fair value of financial assets and financial liabilities, see Note 3.11.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets

On the basis of expected credit losses, the Company conducts impairment accounting treatment for the following items and recognises the allowance:

- Financial assets measured at amortized cost;
- Receivables and debt investments measured at fair value and accounted for in other comprehensive income;
- Contract assets as defined in the Accounting Standards for Business Enterprises No. 14 – Revenue;
- Lease receivables;
- Financial guarantee contracts (except for financial assets measured at fair value through profit or loss, transfer of financial assets that do not meet the conditions for derecognition or those caused by continuing involvement in transferred financial assets).

Measurement of expected credit losses

The term “expected credit losses” (ECLs) refers to the weighted average of the credit loss of a financial instrument weighted by the risk of default. Credit loss refers to the difference between all contractual cash flows in accordance with the contract and all the cash flows expected to receive, discounted at the original effective interest rate, that is, the present value of all cash shortfalls.

The Company takes into account reasonable and well-founded information such as past events, current conditions and forecasts of future economic conditions, and calculates the probability-weighted amount of the present value of the difference between the cash flows receivable from the contract and the cash flows expected to be received weighted by the risk of default.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

Measurement of expected credit losses (Continued)

The Company measures ECLs of financial instruments at different stages. If the credit risk of the financial instrument did not increase significantly upon initial recognition, it is at the first stage, and the Company makes provision for impairment based on the ECLs within the next 12 months; if the credit risk of a financial instrument increased significantly upon initial recognition but has not yet incurred credit impairment, it is at the second stage, and the Company makes provision for impairment based on the lifetime ECLs of the instrument; if the financial instrument incurred credit impairment upon initial recognition, it is at the third stage, and the Company makes provision for impairment based on the lifetime ECLs of the instrument.

For financial instruments with low credit risk at the balance sheet date, the Company assumes that the credit risk has not increased significantly upon initial recognition, and makes provision for impairment based on the ECLs within the next 12 months.

Lifetime ECLs represent the ECLs resulting from all possible default events over the expected life of a financial instrument. The 12-month ECLs are the ECLs resulting from possible default events on a financial instrument within 12 months (or a shorter period if the expected life of the financial instrument is less than 12 months) after the balance sheet date, and is a portion of lifetime ECLs.

The maximum period to be considered when estimating ECLs is the maximum contractual period over which the Company is exposed to credit risk, including renewal options.

The Company calculates interest income on the basis of the Gross carrying amount before impairment provisions and the effective interest rate for financial instruments at the first and second stages and with low credit risk. For financial instruments at the third stage, the interest income is calculated on the basis of the amortized cost of the Gross carrying amount less the impairment provision and the effective interest rate.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

Accounts receivable and contract assets

When the credit risk characteristics are significantly different and the information of ECLs can be assessed at a reasonable cost, it would be estimated whether the credit risk of the relevant financial instrument has increased significantly since the initial recognition and measured the ECLs on an individual basis.

A. Accounts receivable

On the balance sheet date, if ECLs can be evaluated for receivables individually significant (a receivable is individually significant if it reaches RMB5 million) and some receivables not individually significant without unnecessary extra costs or efforts, the Company tests them for impairment and recognizes impairment of credit losses on an individual basis. For the remaining receivables (excluding those among member companies covered under the consolidated financial statements), ELCs are estimated and impairment of credit losses is recognized by aging on a collective basis at the following percentages, taking into consideration past experience, current conditions and future forecast. The details are as follows:

Aging	Proportion (%)
Within 1 year (inclusive)	0.50
1 to 2 years	10.00
2 to 3 years	20.00
3 to 4 years	30.00
4 to 5 years	50.00
More than 5 years	100.00

SECTION 10 FINANCIAL REPORT

**3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES
(Continued)****3.10 Financial instruments (Continued)****3.10.6 Impairment of financial assets (Continued)**

Accounts receivable and contract assets (Continued)

B. Contract assets

On the balance sheet date, if ECLs can be evaluated for contract assets individually significant (a contract asset is individually significant if it reaches RMB5 million) and some contract assets not individually significant without unnecessary extra costs or efforts, the Company tests them for impairment and recognizes provision of impairment on an individual basis (“the specific identification method”). For the remaining contract assets, ECLs are estimated and provision of impairment is recognized by aging on a collective basis at the following percentages, taking into consideration past experience, current conditions and future forecast. The details are as follows:

Aging	Proportion (%)
Within 1 year (inclusive)	0.50
1 to 2 years	10.00
2 to 3 years	20.00
3 to 4 years	30.00
4 to 5 years	50.00
More than 5 years	100.00

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

Long-term receivables

On the balance sheet date, if ECLs can be evaluated for receivables individually significant (a receivable is individually significant if it reaches RMB5 million) and some receivables not individually significant without unnecessary extra costs or efforts, the Company tests them for impairment and recognizes impairment of credit losses on an individual basis. For the remaining receivables (excluding those among member companies covered under the consolidated financial statements), ECLs are estimated and impairment of credit losses is recognized by aging on a collective basis at the following percentages, taking into consideration past experience, current conditions and future forecast. The details are as follows:

Aging	Proportion (%)
Before the due date	0.50
Within 1 year overdue	10.00
Overdue for 1 to 2 years	20.00
Overdue for 2 to 3 years	30.00
Overdue for 3 to 4 years	50.00
Over 4 years overdue	100.00

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

Debt investment and other debt investment

For debt investment and other debt investment, the Company calculates the ECLs based on the default risk exposure and the ECLs rate within the next 12 months or the entire duration according to the nature of the investment and the various types of counterparties and risk exposures.

In addition to the above, for financial assets purchased or generated without credit impairment, such as other accounts receivable, bills receivable, etc., the Company assesses whether the credit risk of the relevant financial instruments has significantly increased since initial recognition on each balance sheet date, and measures their impairment of credit losses and recognizes expected credit losses and their changes based on the following two situations:

- A. If the credit risk of the financial asset has significantly increased subsequent to initial recognition, the Company measures its impairment of credit losses at an amount equivalent to the ECLs for the entire lifetime of the financial asset.
- B. If the credit risk of the financial asset has not significantly increased since initial recognition, the Company measures its impairment of credit losses at an amount equivalent to the ECLs of the financial asset within the next 12 months.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

An assessment of a significant increase in credit risk

By comparing the risk of default of financial instruments on the balance sheet date with the risk of default on the initial recognition date, the Company determines the relative change of default risk within the expected duration of financial instruments, so as to evaluate whether the credit risk of financial instruments has significantly increased since the initial recognition.

In determining whether credit risk has increased significantly since the initial recognition, the Company considers reasonable and supportable information, including forward-looking information that can be obtained without unnecessary additional cost or effort. Information considered by the Company includes:

- The debtor fails to pay the principal and interest as due under the contract;
- A material deterioration, if any, of the external or internal credit rating of the financial instrument that has occurred or is expected to occur;
- A serious deterioration of the debtor's business results occurred or is expected to occur;
- A change in the existing or anticipated technological, market, economic or legal environment which will have a material adverse effect on the debtor's ability to repay the Company.

According to the nature of financial instruments, the Company evaluates whether credit risk increases significantly on the basis of individual financial instruments or a group of financial instruments. When assessing on the basis of a group of financial instruments, the Company may classify financial instruments based on common credit risk characteristics, such as overdue information and credit risk rating.

If overdue for more than 30 days, the Company determines that the credit risk of the financial instrument has increased significantly.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

Credit-impaired financial assets

On the balance sheet date, the Company evaluates whether credit impairment has occurred in financial assets measured at amortized cost and debt investments measured at fair value through other comprehensive income. When one or more events which have an adverse effect on the expected future cash flows of a financial asset occur, the financial asset becomes a credit-impaired financial asset. Evidence of credit impairment of financial assets includes the following observable information:

- Major financial difficulties occur to the issuer or the debtor;
- A breach of contract by the debtor, such as a default or late payment of interest or principal;
- The Company, for economic or contractual considerations relating to the debtor's financial difficulties, gives concessions that the debtor would not have made under any other circumstances;
- The debtor is likely to go bankrupt or undergo other financial restructuring;
- The financial difficulties of the issuer or debtor result in the disappearance of an active market for the financial asset.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.6 Impairment of financial assets (Continued)

Presentation of ECLs

ECLs are remeasured at each balance sheet date to reflect changes in the financial instrument's credit risk upon initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss for the current period. For financial assets measured at amortised cost, the provisions of impairment are deducted from the carrying amount of the financial assets presented in the balance sheet; for debt investments at fair value through other comprehensive income, the Company makes provisions of impairment in other comprehensive income without reducing the carrying amount of the financial asset.

Write-off

The Gross carrying amount of a financial asset is directly written off to the extent that there is no realistic prospect of recovery of the contractual cash flows of the financial asset (either partially or in full). Such write-off constitutes derecognition of such financial asset. This is generally the case when the Company determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery of amounts due.

If a write-off of financial assets is subsequently recovered, the recovery is credited to profit or loss in the period in which the recovery occurs.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.10 Financial instruments (Continued)

3.10.7 Transfer of financial assets

Transfer of financial assets refers to the transfer or delivery of financial assets to another party other than the issuer of such financial assets (the transferee).

If the Company transfers substantially all the risks and rewards of ownership of the financial asset to the transferee, the financial asset shall be derecognised. If the Company retains substantially all the risks and rewards of ownership of a financial asset, the financial asset shall not be derecognised.

If the Company neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, it accounts for the transaction as follows: if the Company does not retain control, it derecognises the financial asset and recognises any resulting assets or liabilities; if the control over the financial asset is not waived, the relevant financial asset is recognised according to the extent of its continuing involvement in the transferred financial asset and the relevant liability is recognised accordingly.

3.10.8 Offset of financial assets and financial liabilities

If the Company owns the legitimate rights of offsetting the recognised financial assets and financial liabilities, which are enforceable currently, and the Company plans to realise the financial assets or to clear off the financial liabilities on a net amount basis or simultaneously, the net amount of financial assets and financial liabilities shall be presented in the balance sheet upon offsetting. Otherwise, financial assets and financial liabilities are presented separately in the balance sheet without offsetting.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.11 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The Company measures the relevant asset and liability at fair value, based on the presumption that the orderly transaction to sell the asset or transfer the liability takes place either in the principal market for the relevant asset or liability, or in the absence of a principal market, in the most advantageous market for relevant the asset or liability. The principal or the most advantageous market must be a trading market accessible by the Company at the measurement date. The Company adopts the presumption that market participants would use when pricing the asset or liability in their best economic interest.

If there exists an active market for a financial asset or financial liability, the Company uses the quotation on the active market as its fair value. If the market for a financial instrument is inactive, the Company uses valuation technique to recognise its fair value.

Fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its best use or by selling it to another market participant that would use the asset in its best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs, and using unobservable inputs only if the observable inputs aren't available or impractical.

Assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement as a whole. Level 1: based on quoted prices (unadjusted) in active markets for identical assets or liabilities obtainable at the measurement date. Level 2: observable inputs for the relevant asset or liability, either directly or indirectly, except for Level 1 input. Level 3: unobservable inputs for the relevant assets or liability.

At each balance sheet date, the Company reassesses assets and liabilities measured at fair value that are recognized in the financial statements on a recurring basis to determine whether transfers have occurred between fair value measurement hierarchy levels.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.12 Inventories

3.12.1 Classification of inventories

Inventories include raw materials, work in progress, stock goods, revolving materials, spare parts and property development costs, which are measured at the lower of cost and net realizable value. Revolving materials include low-value consumables and packaging materials.

3.12.2 Measurement method of cost of inventories

Inventories are initially measured at cost. Raw materials and finished goods are calculated using weighted average method.

3.12.3 Recognition of net realisable value of inventories and provision for inventory impairment

Net realisable value of inventories refers to the amount of the estimated price of inventories less the estimated cost incurred upon completion, estimated sales expenses and taxes and levies. The realisable value of inventories shall be determined on the basis of definite evidence, purpose of holding the inventories and effect of after-balance-sheet-date events.

At the balance sheet date, provision for inventory impairment is made when the cost is higher than the net realisable value. The Company usually make provision for inventory impairment based on categories of inventories. At the balance sheet date, in case the factors causing inventory impairment no longer exists, the original provision for inventory impairment shall be reversed.

3.12.4 Inventory stock taking system

The Company maintains a perpetual inventory system as its inventory stock taking system.

3.12.5 Amortization methods of low-value consumables and packaging materials

Low-value consumables are charged to profit or loss when they are used.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.13 Long-term equity investments

Long-term equity investments include equity investments in subsidiaries and equity investments in joint ventures and associates. Associates of the Company are those investees that the Company imposes significant influence over.

3.13.1 Determination of initial investment cost

Long-term equity investments acquired through business combinations: for a long-term equity investment acquired through a business combination involving enterprises under common control, the investment cost shall be the absorbing party's share of the carrying amount of the owners' equity under the consolidated financial statements of the ultimate controlling party on the date of combination. For a long-term equity investment acquired through a business combination involving enterprises not under common control, the investment cost of the long-term equity investment shall be the cost of combination.

Long-term equity investments acquired through other means: for a long-term equity investment acquired by cash payment, the initial investment cost shall be the purchase cost actually paid; for a long-term equity investment acquired by issuing equity securities, the initial investment cost shall be the fair value of equity securities issued.

3.13.2 Subsequent measurement and recognition of profit or loss

Investments in subsidiaries shall be accounted for using the cost method. Except for the investments which meet the conditions of holding for sale, investments in associates and joint ventures shall be accounted for using the equity method.

For a long-term equity investment accounted for using the cost method, the cash dividends or profits declared by the investees for distribution shall be recognised as investment gains and included in profit or loss for the current period, except the case of receiving the actual consideration paid for the investment or the declared but not yet distributed cash dividends or profits which is included in the consideration.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.13 Long-term equity investments (Continued)

3.13.2 Subsequent measurement and recognition of profit or loss (Continued)

For a long-term equity investment accounted for using the equity method, where the initial investment cost exceeds the investor's interest in the fair value of the investee's identifiable net assets at the acquisition date, no adjustment shall be made to the investment cost of the long-term equity investment. Where the initial investment cost is less than the investor's interest in the fair value of the investee's identifiable net assets at the acquisition date, adjustment shall be made to the carrying amount of the long-term equity investment, and the difference shall be charged to profit or loss for the current period.

Under the equity method, investment gain and other comprehensive income shall be recognised based on the Company's share of the net profits or losses and other comprehensive income made by the investee, respectively. Meanwhile, the carrying amount of long-term equity investment shall be adjusted. The carrying amount of long-term equity investment shall be reduced based on the Group's share of profit or cash dividend distributed by the investee. In respect of the other movement of net profit or loss, other comprehensive income and profit distribution of investee, the carrying amount of long-term equity investment shall be adjusted and included in the capital reserves (other capital reserves). The Group shall recognise its share of the investee's net profits or losses based on the fair values of the investee's individual separately identifiable assets at the time of acquisition, after making appropriate adjustments thereto according to the accounting policies and accounting periods of the Company.

For additional equity investment made in order to obtain significant influence or common control over investee without resulted in control, the initial investment cost under the equity method shall be the aggregate of fair value of previously held equity investment and additional investment cost on the date of transfer. For investments in non-trading equity instruments that were previously classified as at fair value through other comprehensive income, the cumulative fair value changes associated with them that were previously included in other comprehensive income are transferred to retained earnings upon the change to the equity method of accounting.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.13 Long-term equity investments (Continued)

3.13.2 Subsequent measurement and recognition of profit or loss (Continued)

In the event of loss of common control or significant influence over investee due to partial disposal of equity investment, the remaining equity interest after disposal shall be accounted for according to the Accounting Standard for Business Enterprises No. 22 – Recognition and measurement of Financial Instruments. The difference between its fair value and carrying amount shall be included in profit or loss for the current period. In respect of other comprehensive income recognised under previous equity investment using equity method, it shall be accounted for in accordance with the same accounting treatment for direct disposal of relevant asset or liability by investee at the time when equity method was ceased to be used. Movement of other owners' equity related to the previous equity investment shall be transferred to profit or loss for the current period.

In the event of loss of control over investee due to partial disposal of equity investment, the remaining equity interest which can apply common control or impose significant influence over the investee after disposal shall be accounted for using equity method. Such remaining equity interest shall be treated as accounting for using equity method since it is obtained and adjustment was made accordingly. For the remaining equity interest which cannot apply common control or impose significant influence over the investee after disposal, it shall be accounted for using the Accounting Standard for Business Enterprises No. 22 – Recognition and measurement of Financial Instruments. The difference between its fair value and carrying amount as at the date of losing control shall be included in profit or loss for the current period.

If the shareholding ratio of the Company is reduced due to the capital increase of other investors, and as a result, the Company loses the control of but still can apply common control or impose significant influence over the investee, the net asset increase due to the capital increase of the investee attributable to the Company shall be recognised according to the new shareholding ratio, and the difference with the original carrying amount of the long-term equity investment corresponding to the shareholding ratio reduction part that should be carried forward shall be recorded in the profit or loss for the current period; and then it shall be adjusted according to the new shareholding ratio as if equity method is used for accounting when acquiring the investment.

In respect of the transactions between the Company and its associates and joint ventures, the share of unrealised gain or loss arising from internal transactions shall be eliminated by the portion attributable to the Company. Investment gain or loss shall be recognised accordingly. However, any unrealised loss arising from internal transactions between the Company and an investee is not eliminated to the extent that the loss is impairment loss of the transferred assets.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.13 Long-term equity investments (Continued)

3.13.3 Basis for determining the common control and significant influence on the investee

Common control is the contractually agreed sharing of control over an arrangement, which relevant activities of such arrangement must be decided by unanimously agreement from parties who share control. When determining if there is any common control, it should first be identified if the arrangement is controlled by all the participants or the group consisting of the participants, and then determined if the decision on the arranged activity can be made only with the unanimous consent of the participants sharing the control. If all the participants or a group of participants can only decide the relevant activities of certain arrangement through concerted action, it can be considered that all the participants or a group of participants share common control on the arrangement. If there are two or more participant groups that can collectively control certain arrangement, it does not constitute common control. When determining if there is any common control, the relevant protection rights will not be taken into account.

Significant influence is the power of the investor to participate in the financial and operating policy decisions of an investee, but to fail to control or joint control the formulation of such policies together with other parties. When determining if there is any significant influence on the investee, the influence of the voting shares of the investee held by the investor directly and indirectly and the potential voting rights held by the investor and other parties which are exercisable in the current period and converted to the equity of the investee, including the warrants, stock options and convertible bonds that are issued by the investee and can be converted in the current period, shall be taken into account.

When the Company holds directly or indirectly through the subsidiary 20% (inclusive) to 50% of the voting shares of the investee, it is generally considered to have significant influence on the investee, unless there is concrete evidence to prove that it cannot participate in the production and operation decision-making of the investee and cannot pose significant influence in this situation. When the Company owns less than 20% of the voting shares of the investee, it is generally considered that it has not significantly influenced on the investee, unless there is concrete evidence to prove that it can participate in the production and operation decision making of the investee and can impose significant influence in this situation.

3.13.4 Method of impairment testing and impairment provision

For the method for making impairment provision for the investment in subsidiaries, associates and joint ventures, please refer to Note 3. 20.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.14 Investment property

Investment property refers to real estate held to earn rentals or for capital appreciation, or both. The investment property of the Company includes leased land use rights, land use rights held for sale after appreciation, and leased buildings and construction.

Investment properties are initially measured at acquisition cost, and depreciated or amortized using the same policy as that for fixed assets or intangible assets.

For the impairment of the investment properties accounted for using the cost model, refer to Note 3.20.

Gains or losses arising from the sale, transfer, retirement or disposal of an item of investment property are determined as the difference among the net disposal proceeds, the carrying amount of the item, related taxes and surcharges, and are recognised in profit or loss for current period.

3.15 Fixed assets

3.15.1 Recognition of fixed assets

Fixed assets represent the tangible assets held by the Company for use in production of goods, use in supply of services, rental or for administrative purposes with useful lives over one accounting year.

Fixed assets are recognised only when its related economic benefits are likely to flow to the Company and its cost can be reliably measured.

The Company's fixed assets are initially measured at the actual cost at the time of acquisition.

Subsequent expenditures incurred for a fixed asset are included in the cost of the fixed asset when it is probable that the associated economic benefits will flow to the Company and the related cost can be reliably measured. The cost of routine repairs of fixed assets that do not qualify as capitalised subsequent expenditure is charged to current profit or loss or included in the cost of the related assets in accordance with the beneficiary object when incurred. The carrying amount of the replaced part is derecognised.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.15 Fixed assets (Continued)

3.15.2 Depreciation of fixed assets

The Company adopts the straight-line method for depreciation. Provision for depreciation will be started when the fixed asset reaches its expected usable state, and stopped when the fixed asset is derecognized or classified as a non-current asset held for sale. Without regard to the depreciation provision, the Company determines the annual depreciation rate by category, estimated useful lives and estimated residual value of the fixed assets as below:

Type	Estimated useful life of depreciation (years)	Estimated residual value rate %	Annual depreciation rate %
Office equipment and others	4-10	3.00, 5.00	9.50-24.25
Motor vehicles	5-14	3.00, 5.00	6.79-19.40
Machinery and equipment	8-20	3.00, 5.00	4.75-12.13
Plant and buildings	8-45	3.00, 5.00	2.11-12.13

Where, for the fixed assets for which impairment provision is made, to determine the depreciation rate, the accumulated amount of the fixed asset impairment provision that has been made shall be deducted.

3.15.3 The impairment test method and impairment provision method of the fixed assets are set out in Note 3. 20.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.15 Fixed assets (Continued)

3.15.4 The Company will review the useful lives, estimated net residual value and depreciation method of the fixed assets at the end of each year.

When there is any difference between the useful lives estimate and the originally estimated value, the useful lives of the fixed asset shall be adjusted. When there is any difference between the estimated net residual value estimate and the originally estimated value, the estimated net residual value shall be adjusted.

3.15.5 Disposal of fixed assets

A fixed asset is derecognised on disposal or when it is expected that there shall be no economic benefit arising from using or after disposal. Where the fixed assets are sold, transferred, retired or damaged, the income received after disposal after deducting the carrying amount and related taxes are recognised in profit or loss for the current period.

3.16 Construction in progress

Construction in progress of the Company is recognised based on the actual construction cost, including all necessary expenditures incurred for construction projects, capitalised borrowing costs for the construction in progress before it has reached the working condition for its intended use, and other related expenses during the construction period.

A construction in progress is reclassified to fixed assets when it has reached the working condition for its intended use.

The method for impairment provision of construction in progress is set out in Note 3. 20.

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.17 Borrowing costs

3.17.1 Recognition principle for the capitalisation of the borrowing costs

The borrowing costs incurred by the Company directly attributable to the acquisition, construction or production of a qualifying asset will be capitalised and included in the cost of relevant asset. Other borrowing costs will be recognised as expenses when incurred according to the incurred amount, and included in the profit or loss for the current period. When the borrowing costs meet all the following conditions, capitalisation shall be started:

- ① The capital expenditure has been incurred, which includes the expenditure incurred by paying cash, transferring non-cash assets or undertaking interest-bearing liabilities for acquiring, constructing or producing the qualifying assets;
- ② Borrowing costs have been incurred;
- ③ The acquisition, construction or production activity necessary for the asset to be ready for its intended use or sale has been started.

3.17.2 Capitalisation period of borrowing costs

When a qualifying asset acquired, constructed or produced by the Company is ready for its intended use or sale, the capitalisation of the borrowing costs shall discontinue. The borrowing costs incurred after a qualifying asset is ready for its intended use or sale shall be recognised as expenses when incurred according to the incurred amount, and included in the profit or loss for the current period.

Capitalisation of borrowing costs shall be suspended during periods in which the acquisition, construction or production of a qualifying asset is interrupted abnormally, when the interruption is for a continuous period of more than 3 months. The capitalisation of the borrowing costs shall be continued in the normal interruption period.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.17 Borrowing costs (Continued)

3.17.3 Calculation methods for capitalisation rate and capitalised amount of the borrowing costs

Where funds are borrowed for a specific purpose, the amount of interest to be capitalised shall be the actual interest expense incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used into banks or any investment income on the temporary investment of those funds. Where funds are borrowed for general purpose, the Company shall determine the amount of interest to be capitalised on such borrowings by applying a capitalisation rate to the weighted average of the excess amounts of cumulative expenditures on the asset over and above the amounts of specific-purpose borrowings. The capitalisation rate shall be the weighted average of the interest rates applicable to the general-purpose borrowings.

During the capitalisation period, exchange differences on a specific purpose borrowing denominated in foreign currency shall be capitalised. Exchange differences related to general-purpose borrowings denominated in foreign currency shall be included in profit or loss for the current period.

3.18 Intangible assets

3.18.1 Measure of intangible assets

Intangible assets of the Company include software, land use rights, patent rights, non patented technologies, trademark rights, copyrights, franchise rights, etc.

The intangible asset is initially measured at cost, and its useful life is determined upon acquisition. If the useful life is finite, the intangible asset will be amortised over the estimated useful life using the amortisation method that can reflect the estimated realisation of the economic benefits related to the asset, starting from the time when it is available for use. If it is unable to reliably determine the estimated realisation, straight-line method shall be adopted for amortisation. The intangible assets with uncertain useful life will not be amortised.

The Company reviews the useful life and amortisation method of the intangible assets with finite useful life at the end of each year. If it is different from the previous estimates, the original estimates will be adjusted, and will be treated as a change in accounting estimate.

If it is estimated on the balance sheet date that certain intangible asset can no longer bring future economic benefit to the company, the carrying amount of the intangible asset will be entirely transferred into the profit or loss for the current period.

The impairment method for the intangible assets is set out in Note 3. 20.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.18 Intangible assets (Continued)

3.18.2 Basis for determining an indefinite service life

If the period over which an intangible asset will bring economic benefits to the Company is not foreseeable, or the service life is indefinite for an intangible asset, the Company determines that the intangible asset has an indefinite service life. Basis for determining an indefinite service life: the intangible asset comes from contractual rights or other legitimate rights, but there is no definite service life stipulated in the contract or the law; It is still impossible to determine the time period over which the intangible assets can bring economic benefits to the Company based on peer conditions or relevant expert opinions.

At the end of each year, the service life of intangible assets with an indefinite service life is reviewed mainly on a bottom-up basis, with the department using the intangible asset to perform basic review for any change in the basis for determining its indefinite service life.

3.19 Research and development expenditure

Expenditure on an internal research and development project is classified into expenditure incurred during the research phase and expenditure incurred during the development phase.

Expenditure during the research phase is expensed when incurred.

Expenditure during the development phase is capitalised if the product or process is technically and commercially feasible; the Company intends to complete the development; the intangible asset can generate economic benefits, including there is evidence that the products produced using the intangible asset has a market or the intangible asset itself has a market; if the intangible asset is for internal use, there is evidence that there is usage for the intangible asset; there is sufficient support in terms of technology, financial resources and other resources in order to complete the development and use or sell the intangible asset; and development costs can be measured reliably. Other development expenditure is recognised as an expense in the period in which it is incurred.

SECTION 10 FINANCIAL REPORT

**3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES
(Continued)****3.19 Research and development expenditure (Continued)**

Research and development projects of the Company will enter into the development phase when they meet the above conditions, technical and economic feasibility research is finished and necessary approval of the project is obtained.

Capitalised expenditure on the development phase is presented as “development costs” in the balance sheet, and is transferred to intangible assets when the project is completed to its intended use.

Capitalisation conditions of specific R&D projects are:

- (1) It is feasible technically to prepare the intangible asset for use or sale;
- (2) Management has the intention to finish the intangible asset for use or sale;
- (3) The intangible asset can bring economic benefits into the flow;
- (4) The Company has sufficient technical, financial and other resources to complete development of the intangible asset and has the ability to use or sell the intangible asset;
- (5) Development stage costs attributable to the intangible asset can be reliably measured.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.20 Impairment of assets

Impairment of long-term equity investments in subsidiaries, associates and joint ventures, investment properties measured using a cost model, fixed assets, construction in progress, right-of-use assets, intangible assets, goodwill and others (Excluding inventories, deferred tax assets and financial assets) subsequently measured at cost is determined as follows:

The Company determines if there is any indication of asset impairment as at the balance sheet date. If there is any evidence indicating that an asset may be impaired, recoverable amount shall be estimated for impairment test. Goodwill arising from business combinations, intangible assets with an indefinite useful life and intangible assets not ready for use will be tested for impairment annually, regardless of whether there is any indication of impairment.

The recoverable amount of an asset is the higher of its fair value less costs of disposal and the present value of the future cash flows expected to be derived from the asset. The Company estimates the recoverable amount of an individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the Company shall determine the recoverable amount of the asset group to which the asset belongs. The determination of an asset group is based on whether major cash inflows generated by the asset group are independent of the cash inflows from other assets or asset groups.

When the recoverable amount of an asset or an asset group is less than its carrying amount, the carrying amount is reduced to its recoverable amount. The reduction amount is charged to profit or loss and an impairment provision is made accordingly.

For the purpose of impairment test of goodwill, the carrying amount of goodwill acquired in a business combination is allocated to the relevant asset groups on a reasonable basis from the acquisition date; where it is difficult to allocate to the related asset groups, it is allocated to the combination of related asset groups. The related asset groups or combination of asset groups are those which can benefit from the synergies of the business combination and are not larger than the reportable segments identified by the Company.

In the impairment test, if there is any indication that an asset group or a combination of asset groups related to goodwill may be impaired, the Company first tests the asset group or set of asset groups excluding goodwill for impairment, calculates the recoverable amount and recognises the corresponding impairment loss. An impairment test is then carried out on the asset group or combination of asset groups containing goodwill by comparing its carrying amount with its recoverable amount. If the recoverable amount is lower than the carrying amount, an impairment loss is recognised for goodwill.

An impairment loss recognised shall not be reversed in a subsequent period.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.21 Long-term deferred expenses

The long-term prepaid expenses incurred by the Company shall be recognised based on the actual cost, and evenly amortised over the estimated benefit period. For the long-term prepaid expense that cannot benefit the subsequent accounting periods, its value after amortisation shall be entirely included in the profit or loss for the current period.

3.22 Employee benefits

3.22.1 Scope of employee benefits

Employee benefits refer to all forms of consideration or compensation given by the Company in exchange for service rendered by employees or for the termination of employment relationship. Employee benefits include short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. Benefits provided to the Company's spouse, children, dependents, family members of deceased employees or other beneficiaries are also part of the employee benefits.

Employee benefits are presented as "employee benefits payable" and "long-term employee benefits payable" in the balance sheet, respectively, according to liquidity.

3.22.2 Short-term staff remuneration

Employee wages or salaries actually incurred, bonuses, and social insurance contributions such as medical insurance, work injury insurance, maternity insurance, and housing fund, contributed at the applicable benchmarks and rates, are recognised as a liability as the employees provide services, with a corresponding charge to profit or loss or included in the cost of assets where appropriate.

3.22.3 Post-employment benefits

Post-employment benefit plans include defined contribution plans and defined benefit plans. Defined contribution plans are post-employment benefit plans under which the Company pays fixed contributions into a separate fund and the Company has no future obligations for payment. Defined benefit plans are post-employment benefit plans other than defined contribution plans.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.22 Employee benefits (Continued)

3.22.3 Post-employment benefits (Continued)

Defined contribution plans

Defined contribution plans include basic pension insurance, and unemployment insurance, etc.

During the accounting period in which an employee provides service, the amount payable calculated according to the defined contribution plan is recognised as a liability and included in the profit or loss for the current period or the cost of relevant assets.

Defined benefit plans

For defined benefit plans, the actuarial valuation is conducted by an independent actuary on the annual balance sheet date, and the cost of providing benefits is determined using the expected cumulative benefit unit method. The employee benefits cost arising from the Company's defined benefit plan includes the following components:

- ① Service cost, including current service cost, past service cost, and any gain or loss on settlement. In particular, the current service cost refers to the increase in the present value of obligations of defined benefit plans arising from the service provided by staff in the current period; the past service cost refers to the increase or decrease in the present value of obligations of defined benefit plans related to the service of the staff in the previous period arising from the revision of defined benefit plans.
- ② Net interest on net liabilities or net assets of defined benefit plans, including interest income from the assets under the plans, interest expense arising from the obligations of defined benefit plans, and interest affected by asset caps.
- ③ Change in remeasurements of the net liabilities or net assets of defined benefit plans.

Unless other accounting standards require or allow employee benefit costs to be included in asset costs, the above item ① and ② will be recognized in the current profit and loss. Item ③ will be recognized in other comprehensive income and will not be transferred back to profit or loss in the subsequent accounting period. When the original defined benefit plan is terminated, all the part originally recognized in other comprehensive income will be transferred to retained profit within the scope of equity.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.22 Employee benefits (Continued)

3.22.4 Termination benefits

When the Company provides termination benefits to employees, employee benefits liabilities arising from termination benefits are recognised in profit or loss for the current period at the earlier of the following dates: when the Company cannot revoke unilaterally compensation for dismissal due to the cancellation of labour relationship plans and employee redundant proposals; the Company recognises cost and expenses related to payment of compensation for dismissal and restructuring.

For the early retirement plans, economic compensations before the actual retirement date were classified as termination benefits. During the period from the date of cease of render of services to the actual retirement date, relevant wages and contribution to social insurance for the employees proposed to be paid are recognized in profit or loss on a one-off basis. Economic compensation after the official retirement date, such as normal pension, is accounted for as post-employment benefits.

3.22.5 Other long-term employee benefits

Other long-term employee benefits provided by the Company to employees that meet the conditions for defined contribution plans are accounted for in accordance with the relevant provisions relating to defined contribution plans as stated above. If the conditions for defined benefit plans are met, the benefits shall be accounted for in accordance with the relevant provisions relating to defined benefit plans, but the “changes arising from the remeasurement of net liabilities or net assets of defined benefit plans” in the relevant employee benefits shall be included in the current profit and loss or the relevant costs of assets.

3.23 Provisions

Obligations pertinent to the contingencies which satisfy the following conditions are recognised by the Company as provisions:

- (1) the obligation is a current obligation borne by the Company;
- (2) It is likely that an outflow of economic benefits from the Company will be resulted from the performance of the obligation; and
- (3) the amount of the obligation can be reliably measured.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.23 Provisions (Continued)

The provisions shall be initially measured based on the best estimate for the expenditure required for the performance of the current obligation, after taking into account relevant risks, uncertainties, time value of money and other factors pertinent to the contingencies. If the time value of money has significant influence, the best estimates shall be determined after discounting the relevant future cash outflow. The Company reviews the carrying amount of the provisions on the balance sheet date and adjust the carrying amount to reflect the current best estimates.

If all or some expenses incurred for settlement of recognised provisions are expected to be borne by the third party, the compensation amount shall, on a recoverable basis, be recognised as asset separately, and compensation amount recognised shall not be more than the carrying amount of provisions.

3.24 Perpetual bonds and other financial instruments

3.24.1 Classification of financial liabilities and equity instruments

Financial instruments issued by the Company are classified as financial assets, financial liabilities or equity instruments on the basis of the substance of the contractual arrangements and the economic nature not only its legal form, together with the definition of financial asset, financial liability and equity instruments on initial recognition.

3.24.2 Accounting treatment of perpetual bonds

Financial instruments issued by the Company are initially recognised and measured in accordance with the financial instrument standards; thereafter, interest or dividends are accrued on each balance sheet date and accounted for in accordance with relevant specific ASBES, i.e. to determine the accounting treatment for interest expenditure or dividend distribution of the instrument based on the classification of the financial instrument issued. For financial instruments classified as equity instruments, their interest expenses or dividend distributions are treated as profit distribution of the Company, and their repurchases and cancellations are treated as changes in equity; for financial instruments classified as financial liabilities, their interest expenses or dividend distribution are in principle accounted for with reference to borrowing costs, and the gains or losses arising from their repurchases or redemption are included in the profit or loss for the current period.

For the transaction costs such as fees and commissions incurred by the Company for issuing financial instruments, if such financial instruments are classified as debt instruments and measured at amortised cost, they are included in the initial measured amount of the instruments issued; if such financial instruments are classified as equity instruments, they are deducted from equity.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.25 Revenue

3.25.1 General principles

The Company recognizes revenue when it satisfies a performance obligation in the contract, i.e. when the customer obtains control of the relevant goods or services.

Where a contract has two or more performance obligations, the Company allocates the transaction price to each performance obligation based on the percentage of respective unit price of goods or services guaranteed by each performance obligation, and recognises as revenue based on the transaction price that is allocated to each performance obligation.

If one of the following conditions is fulfilled, the Company performs its performance obligation within a certain period; otherwise, it performs its performance obligation at a point in time:

- ① when the customer simultaneously receives and consumes the benefits provided by the Company when the Company performs its obligations under the contract;
- ② when the customer is able to control the goods in progress in the course of performance by the Company under the contract;
- ③ when the goods produced by the Company under the contract are irreplaceable and the Company has the right to payment for performance completed to date during the whole contract term.

For performance obligations performed within a certain period, the Company recognises revenue by measuring the progress towards complete of that performance obligation within that certain period. When the progress of performance cannot be reasonably determined, if the costs incurred by the Company are expected to be compensated, the revenue shall be recognised at the amount of costs incurred until the progress of performance can be reasonably determined.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.25 Revenue (Continued)

3.25.1 General principles (Continued)

For performance obligations performed at a point in time, the Company recognizes revenue at the point of time at which the customer obtains control of relevant goods or services. To determine whether a customer has obtained control of goods or services, the Company considers the following indications:

- ① The Company has the present right to receive payment for the goods or service, which is when the customer has the present payment obligations for the goods or service.
- ② The Company has transferred the legal title of the good to the customer, which is when the client possesses the legal title of the goods.
- ③ The Company has transferred physical possession of the goods to the customer, which is when the customer has physical possession of the goods.
- ④ The Company has transferred all of the substantial risks and rewards of ownership of the goods to the customer, which is when the customer obtains all of the substantial risks and rewards of ownership of the goods to the customer.
- ⑤ The customer has accepted the good or service.
- ⑥ Other information indicates that the customer has obtained control of the goods.

The Company's right to consideration in exchange for goods or services that the Company has transferred to customers (and such right depends on factors other than passage of time) is accounted for as contract assets, and contract assets are subject to impairment based on ECLs (see Note 3.10.6). The Company's unconditional right to receive consideration from customers (only depends on passage of time) is accounted for as accounts receivable. The Company's obligation to transfer goods or services to customers for which the Company has received or should receive consideration from customers is accounted for as contract liabilities.

Contract assets and contract liabilities under the same contract are presented on a net basis. Where the net amount has a debit balance, it is presented in "contract assets" or "other non-current assets" according to its liquidity. Where the net amount has a credit balance, it is presented in "contract liabilities" or "other non-current liabilities" according to its liquidity.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.25 Revenue (Continued)

3.25.2 Specific methods

The specific methods for Revenue recognition of the Company's main business are as follows:

Construction contract

The construction contract between the Company and the client usually includes the obligation to perform engineering construction. Due to the client's control over the assets under construction during the company's performance process, the company recognizes them as performance obligations to be fulfilled within a certain period of time, and recognizes revenue based on the progress of performance, except for those where the progress of performance cannot be reasonably determined. The Company determines the performance progress of the services provided based on the cost incurred using the Input Method. When the progress of performance cannot be reasonably determined, if the company is expected to be compensated for the costs incurred, revenue shall be recognized based on the amount of costs incurred until the progress of performance can be reasonably determined.

Service providing contract

The service providing contracts between the Company and clients mainly involve performance obligations such as engineering design consulting. Due to the non-substitutability of the services provided by the company during the performance process, and the Company has the right to collect payment for the accumulated performance portion completed to date throughout the entire contract period, it shall be regarded as a performance obligation to be performed within a certain period of time, and recognizes revenue based on the Output Method, except for those where the progress of performance cannot be reasonably determined. When the progress of performance cannot be reasonably determined, if the company is expected to be compensated for the costs incurred, revenue shall be recognized based on the amount of costs incurred until the progress of performance can be reasonably determined.

Equipment manufacturing business

For the equipment manufacturing business of the company, the construction contract was regarded as a performance obligation to be performed within a certain period of time after evaluation and the revenue was recognized according to the performance progress within that period. On the balance sheet date, the contract performance progress shall be determined according to the proportion of the accumulative contract cost incurred to the total estimated contract cost, and the accumulative revenue to be recognized shall be calculated according to the estimated total contract revenue multiplied by the corresponding performance progress. The amount after deducting the accumulative recognized revenue in previous periods shall be recognized as the contract income of the current period. At the same time, the accumulative contract cost incurred after deducting the accumulative recognized cost in previous accounting periods shall be recognized as the contract cost of the current period. Other equipment manufacturing contracts that do not regarded as a performance obligation to be performed within a certain period of time after evaluation by the company shall be recognized as revenue when the completion is delivered to the customer.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.26 Contract costs

Contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer.

Incremental costs of obtaining a contract are those costs that the Company incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained, e.g. sales commission. The Company recognises the incremental costs of obtaining a contract with a customer as an asset if it expects to recover those costs. Other costs of obtaining a contract are expensed when incurred.

If the costs incurred in fulfilling a contract are not within the scope of inventories or other ASBEs, the Company recognises an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria:

- ① the costs relate directly to an existing contract or to a specifically identifiable anticipated contract, including direct labour, direct materials, allocations of overheads (or similar costs), costs that are explicitly chargeable to the customer and other costs that are incurred only because the Company entered into the contract;
- ② the costs generate or enhance resources of the Company that will be used in satisfying (or in continuing to satisfy) performance obligations in the future;
- ③ the costs are expected to be recovered.

Assets recognised for the incremental costs of obtaining a contract and assets recognised for the costs to fulfil a contract (the “assets related to contract costs”) are amortised on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the assets relate and recognised in profit or loss for the current period.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.26 Contract costs (Continued)

The Company recognises an impairment loss in profit or loss to the extent that the carrying amount of an asset related to contract costs exceeds:

- ① remaining amount of consideration that the Company expects to receive in exchange for the goods or services to which the asset relates;
- ② the cost estimated to be happened for the transfer of related goods or services.

The costs of contract performance recognised as assets, if the amortisation period is less than one year or a normal operating cycle upon the initial recognition, are presented as “Inventories” item, and if the amortisation period is more than one year or a normal operating cycle upon the initial recognition, are presented as “other non-current assets” item.

The contract obtaining costs recognised as assets, if the amortisation period is less than one year or a normal operating cycle upon the initial recognition, are presented as “other current assets” item, and if the amortization period is more than one year or a normal operating cycle upon the initial recognition, are presented as “other non-current assets” item.

3.27 Government grants

A government grant is recognised when the grant will be received and that the Company will comply with the conditions attaching to the grant.

If a government grant is in the form of a monetary asset, it is measured at the amount received or receivable. If a government grant is in the form of non-monetary asset, it is measured at fair value; if the fair value cannot be obtained in a reliable way, it is measured at the nominal amount of RMB1.

Government grants obtained for acquisition or construction of long-term assets or other forms of long-term asset formation are classified as government grants related to assets, while the remaining government grants are classified as government grants related to revenue.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.27 Government grants (Continued)

Regarding the government grant not clearly defined in the official documents and can form long-term assets, the part of government grant which can be referred to the value of the assets is classified as government grant related to assets and the remaining part is government grant related to revenue. For the government grant that is difficult to distinguish, the entire government grant is classified as government grant related to revenue.

A government grant related to an asset is offset against the carrying amount of the related asset. A government grant that compensates the Company for expenses or losses already incurred is recognised as deferred income and offset against related expenses during the period of recognition of related expenses. If the grant is a compensation for related costs, expenses or losses to be incurred in subsequent periods, the grant shall be recognised as deferred income, and recognized in profit or loss over the periods in which the related costs, expenses or losses are recognised. A government grant measured at nominal amount is directly included in profit or loss for the current period. The Company adopts a consistent approach to the same or similar government grants.

A government grant related to daily activities is recognised in other gains or used to offset related costs relying on the essence of economic business; otherwise, recognised in non-operating income.

For the repayment of a government grant already recognised, if the carrying amount of relevant assets was written off at initial recognition, the carrying amount of the assets shall be adjusted; if there is any related deferred income, the repayment shall be offset against the carrying amount of the deferred income, and any excess shall be recognised in profit or loss for the current period; otherwise, the repayment shall be recognised immediately in profit or loss for the current period.

3.28 Deferred tax assets and deferred tax liabilities

Income tax comprises current income tax expense and deferred income tax expense, which are included in profit or loss for the current period as income tax expenses, except for deferred tax related to transactions or events that are directly recognised in owners' equity which are recognised in owners' equity, and deferred tax arising from a business combination, which is adjusted against the carrying amount of goodwill.

Temporary differences arising from the difference between the carrying amount of an asset or liability and its tax base at the balance sheet date of the Company shall be recognised as deferred income tax using the balance sheet liability method.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.28 Deferred tax assets and deferred tax liabilities (Continued)

All the taxable temporary differences are recognised as deferred income tax liabilities except for those incurred in the following transactions:

- (1) The initial recognition of goodwill, and the initial recognition of an asset or liability in a transaction which is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;
- (2) The taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, and the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The Company recognises a deferred income tax asset for the carry forward of deductible temporary differences, deductible losses and tax credits to subsequent periods, to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences, deductible losses and tax credits can be utilised, except for those incurred in the following transactions:

- (1) The transaction is neither a business combination nor affects accounting profit or taxable profit (or deductible loss) when the transaction occurs;
- (2) The deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, the corresponding deferred income tax asset is recognised when both of the following conditions are satisfied: it is probable that the temporary difference will reverse in the foreseeable future, and it is probable that taxable profits will be available in the future, against which the temporary difference can be utilised.

At the balance sheet date, deferred income tax assets and deferred income tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, and their tax effect is reflected accordingly.

At the balance sheet date, the Company reviews the carrying amount of a deferred income tax asset. If it is probable that sufficient taxable profits will not be available in future periods to allow the benefit of the deferred tax asset to be utilised, the carrying amount of the deferred tax asset is reduced. Any such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.29 Leases

3.29.1 Identification of leases

On the beginning date of the contract, the Company (as a lessee or lessor) assesses whether the customer in the contract has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use and has the right to direct the use of the identified asset throughout the period of use. If a contract conveys the right to control the use of an identified asset and multiple identified assets for a period of time in exchange for consideration, the Company identifies such contract is, or contains, a lease.

3.29.2 The Company as lessee

On the beginning date of the lease, the Company recognises right-of-use assets and lease liabilities for all leases, except for short-term lease and low-value asset lease with simplified approach.

The accounting policy for right-of-use assets is set out in Note 3.30.

The lease liability is initially measured at the present value of the lease payments that are not paid at the beginning date of the lease using the interest rate implicit in the lease. Where the interest rate implicit in the lease cannot be determined, the incremental borrowing rate is used as the discount rate. Lease payments include fixed payments and in-substance fixed payments, less any lease incentives receivable; variable lease payments that are based on an index or a rate; the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; payments for terminating the lease, if the lease term reflects the lessee exercising that option of terminating; and amounts expected to be payable by the lessee under residual value guarantees. Subsequently, the interest expense on the lease liability for each period during the lease term is calculated using a constant periodic rate of interest and is recognised in profit or loss for the current period. Variable lease payments not included in the measurement of lease liabilities are recognised in profit or loss for the period in which they actually arise.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.29 Leases (Continued)

3.29.2 The Company acts as the lessee (Continued)

Short-term lease

A short-term lease is a lease that, at the commencement date, has a lease term of 12 months or less, except for a lease that contains a purchase option.

The Company will record the lease payment amount of short-term lease into the cost of relevant assets or current profit or loss in each period of the lease term according to the straight-line method.

Leases of low value assets

A low-value asset lease is a lease that the value of a single leased asset is below RMB40,000.00 when it is a new asset.

Lease payments on low-value asset leases are recognised on a straight-line basis over the lease term, and either included in the cost of the related asset or charged to profit or loss for the current period.

For a low-value asset lease, the Company chooses the above simplified approach based on the specific circumstances of each lease.

3.29.3 The Company as lessor

When the Company is a lessor, a lease is classified as a finance lease whenever the terms of the lease transfer substantially all the risks and rewards of asset ownership to the lessee. All leases other than financial leases are classified as operating leases.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.29 Leases (Continued)

3.29.3 The Company acts as the lessor (Continued)

Finance leases

Under finance leases, the Company accounts for finance lease receivables at the beginning of the lease term at the net lease investment, which is the sum of the unsecured residual value and the present value of the lease receipts outstanding at the commencement date of the lease, discounted at the interest rate implicit in the lease. The Company as lessor calculates and recognises interest income for each period of the lease term based on a fixed periodic interest rate. Variable lease payments acquired by the Company as lessor that are not included in the net measurement of lease investments are included in profit or loss for the period when they are actually incurred.

Derecognition and impairment of finance lease receivables are accounted for in accordance with the requirements under the Accounting Standard for Business Enterprises No. 22 – Recognition and Measurement of Financial Instruments and the Accounting Standards for Business Enterprises No. 23 – Transfer of Financial Assets.

Operating lease

Lease payments under operating leases are recognised in profit or loss on a straight-line basis over the lease term. Initial direct costs incurred in relation to operating leases are capitalised and amortised over the lease term on the same basis as rental income and recognised in profit or loss for the current period. The variable lease payments obtained in relation to operating leases that are not included in the lease payments are recognised in profit or loss in the period in which they actually incurred.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.30 Right-of-use assets

3.30.1 Recognition conditions of right-of-use assets

The right-of-use assets are defined as the right to use the underlying assets in the lease term for the Company as a lessee.

On the commencement date of the lease term, right-of-use assets are initially measured at cost. The cost includes: the amount of the initial measurement of the lease liability; the lease payment made on or before the commencement date of the lease term, less any lease incentive received if any; the initial direct costs incurred by the lessee; whenever the Company incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease. The Company as a lessee recognises and measures the costs of demolition and restoration according to “Accounting Standards for Business Enterprises No.13 – Contingencies”, and subsequently adjusts for any remeasurement of lease liability.

3.30.2 Depreciation method of the right-of-use assets

The Company calculates depreciation on a straight-line basis. Right-of-use assets in which the Company as a lessee is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated over the remaining useful life. Otherwise, right-of-use assets are depreciated over the shorter of the lease term and its remaining useful life.

3.30.3 Methods of impairment testing and provision for impairment for right-of-use assets are set out in Note 3. 20.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.31 Production safety expense

The Company makes appropriation to production safety fee according to provisions of the Notice on Printing and Issuing the Measures for Management of Appropriation to and Use of Production Safety Fund of Enterprises issued by the Ministry of Finance and the State Administration of Work Safety.

Provisions for production safety expenses are included in the cost of related products or profit or loss of the current period and included in “special reserves” correspondingly.

When the provisions for production safety expenses and maintenance costs are utilised within the prescribed scope, if such production safety expenses are applied and related to revenue expenditures, specific reserve is directly offset. When fixed assets are incurred, they are included in the “construction in progress” item and transferred to fixed assets when the status of the assets is ready for intended use. They are then offset against specific reserve based on the amount included in fixed assets while corresponding amount is recognised in accumulated depreciation. Such fixed assets are no longer depreciated in subsequent periods.

3.32 Non-monetary asset exchange

Non-monetary asset exchange shall be measured on the basis of fair value if the exchange has commercial substance and the fair value of incoming assets or outgoing assets can be measured reliably. The difference between the consideration obtained upon derecognition of the outgoing asset and its carrying amount is recorded in profit or loss.

Non-monetary asset exchange not satisfying conditions for measurement on the basis of fair value are measured at carrying amount. Incoming assets are initially measured at the carrying amount of outgoing assets plus relevant taxes payable. No gain or loss is recognized on derecognition of outgoing assets.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.33 Segment

The Company determines operating segments based on internal organizational structure, management requirements, and internal reporting systems, and determines reporting segments and discloses segment information based on operating segments.

Operating segments refer to the components of the Company that meet all of the following conditions:

- (1) This component can generate income and incur expenses in daily activities;
- (2) Management can regularly evaluate operating results of this component, so as to decide to allocate resources to it and evaluate its performance.
- (3) Financial conditions, operating results, cash flows and other relevant accounting information of the component are available.

If two or more operating segments share similar economic characteristics and meet certain conditions, they are combined into one operating segment.

3.34 Significant accounting policies and estimates

The Company conducts an ongoing evaluation of the significant accounting estimates and key assumptions used in the light of historical experience and other factors, including reasonable expectations of future events. Significant accounting estimates and key assumptions that are likely to result in the risk of a material adjustment in the carrying amount of assets and liabilities during the next fiscal year are set out below:

- (1) Revenue recognition on engineering construction contract

The Company recognized revenue from engineering construction in proportion to the progress in performance, while the progress in performance is determined by the accumulative actual contract cost to the total estimated contract cost. Determining the estimated total revenue and estimated total cost of these contracts requires a lot of estimates and judgments from management, including estimating the transaction price adjustment caused by contract changes, estimating the work of quantities to occur, and estimating consumption and unit price of materials or equipment. In executing the contract, management revises their estimates of estimated total revenue and the estimated total cost from time to time based on the latest available information. Adjustments to these estimates may result in an increase or decrease in revenue or costs for the current and future periods and be reflected in the income statement for the corresponding periods.

SECTION 10 FINANCIAL REPORT

**3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES
(Continued)****3.34 Significant accounting policies and estimates (Continued)**

(2) Receivable and contract asset impairment provision

The Company accounts for impairment of and makes impairment of credit losses for receivables and contract assets based on expected credit risks. When they are assessed for impairment loss on a collective basis, the amount of provision is determined based on historical loss pattern of assets with similar credit risk characteristics, observable data reflecting current conditions and reasonable prediction of the future. The Company regularly reviews the methods and assumptions used to estimate the amount and timing of future cash flows of related assets and continuously revises the estimation of expected credit risks. If there are unexpected material changes in credit status of important debtors or customers, it may have a significant impact on operating performance for the relevant period in the future.

(3) Income tax

The Company's determination of income tax involves judgment on future tax treatment of certain transactions. In view of the fact that the Company pays corporate income tax in many regions, the Company will prudently assess the tax impact of various transactions and make provision for income tax. The Company regularly reevaluates the tax impact of these transactions in accordance with updated tax regulations. The recognition of deferred tax assets requires the Company to judge the possibility of obtaining future taxable income. The Company continuously reviews its judgment on deferred tax, and recognizes deferred tax assets on deductible temporary differences and deductible tax losses only if it expects that it is likely to obtain utilisable taxable income in future. Nevertheless, there remains the risk of significant differences between the ultimate tax impact and management's judgment.

(4) Retirement and internal retirement benefits liabilities

Retirement and retirement benefit plans recognized by the Company as liabilities are measured based on various assumptions, including expected life, discount rate, wage growth rate post early retirement, medical expense growth rate and other factors. Management continuously maintains the rationality of these assumptions by engaging professional actuarial institutions and other methods, but it is still possible to make significant adjustments to these assumptions as external economic situation changes, thus affecting the balance of liabilities, profits and other comprehensive income for the relevant period.

SECTION 10 FINANCIAL REPORT

3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

3.35 Changes in significant accounting policies and accounting estimates

3.35.1 Significant changes in accounting policies

N/A

3.35.2 Changes in significant accounting estimates

Details and reasons for changes	Approval process	Applicable time point	Affected items	Impairment of credit losses for the six months ended 30 June 2023
An accounting estimate change was made to the expected credit loss of contract assets. After the change, if expected credit losses can be estimated for contract assets individually significant (a contract asset is individually significant if it reaches RMB5 million) and some contract assets not individually significant without unnecessary extra costs or efforts, the Company measures them for impairment and recognizes provision of impairment on an individual basis. For the rest of contract assets, expected credit losses are estimated and provision of impairment is recognized by aging on a collective basis at the corresponding proportion (consistent with the proportion of provision of impairment for accounts receivable).	Approved by the 13th meeting of the 4th Board of Directors of the Company	1 May 2023	Contract assets	686,583,351.34
			Other non-current assets	521,558,213.56

SECTION 10 FINANCIAL REPORT

4. TAXATION**4.1 Major types of taxes and respective tax rates**

Tax type	Tax basis	Tax rate %
Value added tax (VAT)	Taxable value-added amount (the taxable amount is calculated based on the balance of taxable sales multiplied by the applicable tax rate after deducting the allowable input tax for the current period)	3, 5, 6, 9, 13
City maintenance and construction tax	The sum of VAT actually paid	1, 5, 7
Educational surcharge	The sum of VAT actually paid	2, 3
Enterprise income tax	Taxable income	2.65 (Indonesia), 16.50 (HK), (except preferential treatments as set out in Note 4. 2)

Taxpayers of the Company subject to different enterprise income taxes and their applicable income tax rates are set out below:

Name of taxpayer	Income tax rate %
China Aluminum International Engineering Corporation Limited	15.00
Shenyang Aluminum and Magnesium Engineering and Research Institute Co., Ltd.	15.00
Shenyang Boyu Technology Co., Ltd.	15.00
Shenyang Aluminum-Magnesium Technology Co., Ltd.	15.00
Shenyang Shengxin Construction Engineering Project Management Co., Ltd.	20.00
Beijing Autosky Science & Technology Co., Ltd.	20.00
Guiyang Aluminium Magnesium Design & Research Institute Co., Ltd.	15.00
Guiyang Zhenxing Al-Mg Science&Technology Industry Development Corp.,Ltd	15.00
Guiyang Xinyu Construction Supervision Co., Ltd.	25.00
Guiyang Aluminum Magnesium Design & Research Institute Engineering Contracting Co., Ltd.	25.00
Guizhou Chuangxin Light Metal Process & Equipment Engineering Research Center Company Ltd.	15.00
Guizhou Yundu Real Estate Co., Ltd.	25.00
Guizhou Shunan Electro-mechanical Equipment Co., Ltd.	15.00
CINF Engineering Co., Ltd.	15.00
Hunan Changye Construction Drawing Examination Co., Ltd.	20.00

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)**4.1 Major types of taxes and respective tax rates (Continued)**

Name of taxpayer	Income tax rate %
Hunan Huachu Project Management Co., Ltd.	20.00
China Aluminum International South Engineering Co., Ltd.	25.00
Huachu Hi Tech (Hunan) Co., Ltd.	20.00
Huachu Intelligent Technology (Hunan) Co., Ltd.	15.00
China Nonferrous Metals Processing Technology Co., Ltd.	15.00
Luoyang Jincheng Construction Supervision Co., Ltd.	20.00
Suzhou Doyum Environmental Technology Co., Ltd.	15.00
Luoyang Kaiying Technology Co., Ltd.	25.00
Luoyang Foyang Decoration Engineering Co., Ltd.	25.00
China Nonferrous Metal Changsha Survey and Design Institute Co., Ltd.	15.00
Shenzhen Changkan Reconnaissance Design Co., Ltd.	15.00
Changsha Tongxiang Construction Co., Ltd.	25.00
China Sixth Metallurgical Construction Co., Ltd.	15.00
China Non-ferrous Metal Industry Liuye Electromechanical Installation Company	25.00
China Nonferrous Metal Industry Liuye Luoyang Co., Ltd.	25.00
LiuYe (Zhengzhou) Technology Heavy Industry Co., Ltd.	15.00
Henan LiuYe Trade Co., Ltd.	20.00
Panzhou Haohong Project Management Co., Ltd.	25.00
Tongchuan Haotong Construction Co., Ltd.	25.00
China Aluminium Great Wall Construction Co., Ltd.	25.00
Huaian Tongyun Construction Limited Company	25.00
Liuye Xinjiang Construction Co., Ltd.	20.00
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	15.00
Chongqing Energy Saving Technology Co., Ltd.	20.00
China Aluminum International 12MCC Construction Co., Ltd.	25.00
China Nonferrous Metals Industry's 12th Metallurgical (Indonesia) Co., Ltd.	2.65
China Aluminum International (Tianjin) Construction Co., Ltd.	15.00
Chalieco Trading Co., Ltd.	25.00
Chalieco Shandong Trading Co., Ltd.	25.00
Duyun Development Zone Tongda Construction Co., Ltd.	25.00
Wenzhou Tongrun Construction Co., Ltd.	25.00
China Aluminum International Engineering (India) Private Limited	30.00
Wenzhou Tonghui Construction Co., Ltd.	25.00

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)**4.1 Major types of taxes and respective tax rates (Continued)**

Name of taxpayer	Income tax rate %
Guangxi Tongrui Investment Construction Co., Ltd.	25.00
Chinalco International Yunnan Aluminum Application Engineering Co., Ltd.	25.00
Chalieco Hong Kong Corporation Limited	16.50
Chalieco Malaysia Sdn. Bhd.	24.00
Jiuye Construction Co., Ltd.	15.00
Jiuye Steel Structure Co., Ltd.	15.00
Mian County Jiuye Kindergarten	25.00
Jiuye (Shaanxi) Construction Co., Ltd.	20.00
Xinjiang Jiuye Construction Co., Ltd.	25.00
Shaanxi Zhongmian Investment Co., Ltd.	25.00
Zhengzhou Jiuye Sanwei Chemical Machinery Co., Ltd.	15.00
Ankang Jiuye Changjiali Concrete Co., Ltd.	25.00
Henan No.9 Metallurgical Construction Corporation	25.00
Hanzhong Jiuye Construction Co., Ltd.	25.00
Chinalco International Aluminum Application Engineering Co., Ltd.	25.00
Shanxi Nonferrous Metal 12th Metallurgical Advanced Materials Co., Ltd.	20.00
Qingdao Xinfu Gongchuang Asset Management Co., Ltd.	25.00
China Aluminum Shandong Engineering Technology Corporation Limited	15.00
Chalco Wancheng Shandong Construction Co., Ltd.	25.00
Kunming Prospecting Design Institute Of China Nonferrous Metals Industry Co., Ltd	15.00
Kunming Prospecting Institute Technology Development Company	20.00
China Nonferrous Metals Kunming Prospecting Design Institute African Congo (Kinshasa) Company	15.00
Chinalco Southwest Construction Investment Co., Ltd.	25.00
China Aluminum International Technology Development Corporation Limited	15.00
Chinalco International Investment Management (Shanghai) Co., Ltd.	25.00
Kunming Engineering & Research Institute of Nonferrous Metallurgy Co., Ltd.	15.00
Kunming Kehui Electric Co., Ltd.	20.00
China Nonferrous Metals Industry Huakun Engineering Construction Co., Ltd.	25.00
Yunnan Jinji'an Construction Consulting Supervision Co., Ltd.	20.00

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)

4.2 Tax preferential treatments

4.2.1 Tax preferences applicable to high-tech companies

- 1) China Aluminum International Engineering Corporation Limited received the High-tech Enterprise Certificate on 18 October 2022 (Certificate number: GR202211000726, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.
- 2) Shenyang Aluminum and Magnesium Engineering and Research Institute Co., Ltd. received the High-tech Enterprise Certificate on 15 September 2020 (Certificate number: GR202021000737, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 3) Shenyang Boyu Technology Co., Ltd. received the High-tech Enterprise Certificate on 24 September 2021 (Certificate number: GR202121000538, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 4) Shenyang Aluminum-Magnesium Technology Co., Ltd. received the High-tech Enterprise Certificate on 10 November 2020 (Certificate number: GR202021001202, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 5) Guiyang Aluminium Magnesium Design & Research Institute Co., Ltd. received the High-tech Enterprise Certificate on 19 December 2022 (Certificate number: GR202252000612, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)

4.2 Tax preferential treatments (Continued)

4.2.1 Tax preferences applicable to high-tech companies (Continued)

- 6) Guiyang Zhenxing Al-Mg Science&Technology Industry Development Corp., Ltd. received the High-tech Enterprise Certificate on 15 November 2021 (Certificate number: GR202152000132, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 7) Guizhou Chuangxin Light Metal Process & Equipment Engineering Research Center Co., Ltd. received the High-tech Enterprise Certificate on 15 November 2021 (Certificate number: GR202152000554, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 8) Guizhou Shunan Electro-mechanical Equipment Co., Ltd. received the High-tech Enterprise Certificate on 15 November 2021 (Certificate number: GR202152000344, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 9) CINF Engineering Co., Ltd. received the High-tech Enterprise Certificate on 18 September 2021 (Certificate number: GR202143000730, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for for 2021, 2022 and 2023.
- 10) Huachu Intelligent Technology (Hunan) Co., Ltd. received the High-tech Enterprise Certificate on 15 December 2021 (Certificate number: GR202143004434, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)**4.2 Tax preferential treatments (Continued)****4.2.1 Tax preferences applicable to high-tech companies (Continued)**

- 11) China Nonferrous Metals Processing Technology Co., Ltd. received the High-tech Enterprise Certificate on 4 December 2020 (Certificate number: GR202041002031, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 12) Suzhou Doyum Environmental Technology Co., Ltd. received the High-tech Enterprise Certificate on 27 January 2021 (Certificate number: GR202032007736, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 13) China Nonferrous Metal Changsha Survey and Design Institute Co., Ltd. received the High-tech Enterprise Certificate on 15 December 2021 (Certificate number: GR202143004458, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 14) Shenzhen Changkan Reconnaissance Design Co., Ltd. received the High-tech Enterprise Certificate on 11 December 2020 (Certificate number: GR202044204582, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 15) China Sixth Metallurgical Construction Co., Ltd. of China Nonferrous Metals Industry received the High-tech Enterprise Certificate on 1 December 2022 (Certificate number: GR202241001733, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)**4.2 Tax preferential treatments (Continued)****4.2.1 Tax preferences applicable to high-tech companies (Continued)**

- 16) Liuye (Zhengzhou) Technology Heavy Industry Co., Ltd. received the High-tech Enterprise Certificate on 28 October 2021 (Certificate number: GR202141002396, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 17) China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd. received the High-tech Enterprise Certificate on 12 December 2022 (Certificate number: GR202214001133, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.
- 18) China Aluminum International (Tianjin) Construction Co., Ltd. received the High-tech Enterprise Certificate on 9 January 2023 (Certificate number: GR202212002914, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.
- 19) Jiuye Construction Co., Ltd. received the High-tech Enterprise Certificate on 3 November 2022 (Certificate number: GR202261000437, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.
- 20) Jiuye Steel Structure Co., Ltd. received the High-tech Enterprise Certificate on 14 December 2022 (Certificate number: GR202261005406, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)**4.2 Tax preferential treatments (Continued)****4.2.1 Tax preferences applicable to high-tech companies (Continued)**

- 21) Zhengzhou Jiuye Sanwei Chemical Machinery Co., Ltd. received the Hightech Enterprise Certificate on 9 September 2020 (Certificate number: GR202041000407, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China. As a high-tech enterprise vigorously supported by the State, it is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 22) China Aluminum Shandong Engineering Technology Corporation Limited received the High-tech Enterprise Certificate on 7 December 2021 (Certificate number: GR202137002601, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 23) Kunming Prospecting Design Institute Of China Nonferrous Metals Industry Co., Ltd received the High-tech Enterprise Certificate on 3 December 2021 (Certificate number: GR202153000314, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2021, 2022 and 2023.
- 24) China Aluminum International Technology Development Corporation Limited received the High-tech Enterprise Certificate on 2 December 2020 (Certificate number: GR202011009148, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2020, 2021 and 2022.
- 25) Kunming Engineering & Research Institute of Nonferrous Metallurgy Co., Ltd. received the High-tech Enterprise Certificate on 18 November 2022 (Certificate number: GR202253001003, valid for three years), which complies with Article 93 of the Regulations on Application of the Income Tax Law of the People's Republic of China, and as a High-tech Enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2022, 2023 and 2024.

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)

4.2 Tax preferential treatments (Continued)

4.2.2 Value added tax

- 1) Pursuant to Notice of the Ministry of Finance and the State Administration of Taxation on Bringing Railway Transportation and Postal Service into the Pilot Program of Business Tax to VAT (Cai Shui [2013] No. 106), China Aluminum International Engineering Corporation Limited is exempted from VAT on revenue from technology transfer.
- 2) Pursuant to Notice of the Ministry of Finance and the State Administration of Taxation on Bringing Railway Transportation and Postal Service into the Pilot Program of Business Tax to VAT (Cai Shui [2013] No. 106), China Nonferrous Metals Processing Technology Co., Ltd. is exempted from VAT on revenue from technology transfer.
- 3) Pursuant to Notice on VAT Policies for Software Products issued by the Ministry of Finance and the State Administration of Taxation (Cai Shui [2011] No. 100), Guiyang Zhenxing Al-Mg Science&Technology Industry Development Corp., Ltd. is entitled to the preferential VAT policy of refund upon levy in respect of the portion of VAT levied after actual tax burden on sales of software produced by itself reaches 3%.
- 4) Pursuant to Notice on VAT Policies for Software Products issued by the Ministry of Finance and the State Administration of Taxation (Cai Shui [2011] No. 100), Guizhou Chuangxin Light Metal Process & Equipment Engineering Research Center Co., Ltd. is entitled to the preferential VAT policy of refund upon levy in respect of the portion of VAT levied after actual tax burden on sales of software produced by itself reaches 3%.
- 5) China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd. completed the formalities for registration of simplified taxation for general VAT payers on 1 May 2016. Pursuant to the Notice of the Ministry of Finance and the State Administration of Taxation on Fully Pushing Forward the Pilot Program of Changing Business Tax to VAT (Cai Shui [2016] No. 36), as of 1 May 2016, it may elect to apply the preferential policy of simplified taxation for construction services for projects with materials supplied by Party A, engineering construction service provided for projects and sales of real estate obtained prior to 30 April 2016.
- 6) China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd. completed the formalities for registration for tax exemption for cross border taxable activities of general VAT payers in May 2017. Pursuant to the Notice of the Ministry of Finance and the State Administration of Taxation on Fully Pushing Forward the Pilot Program of Changing Business Tax to VAT (Cai Shui [2016] No. 36), domestic entities and individuals are exempted from VAT in rendering construction services overseas.

SECTION 10 FINANCIAL REPORT

4. TAXATION (Continued)

4.2 Tax preferential treatments (Continued)

4.2.3 Tax preferences for small and micro enterprises

The company has 15 subsidiary companies that enjoy the following tax preferential policies, including Shenyang Shengxin Construction Engineering Project Management Co., Ltd., Beijing Autosky Science & Technology Co., Ltd., Guiyang Xinyu Construction Supervision Co., Ltd., Hunan Changye Construction Drawing Examination Co., Ltd., Hunan Huachu Project Management Co., Ltd., Huachu Hi Tech (Hunan) Co., Ltd., Luoyang Jincheng Construction Supervision Co., Ltd., Henan Liuye Trade Co., Ltd., Liuye Xinjiang Construction Co., Ltd., China Nonferrous Metals Industry's 12th Metallurgical Chongqing Energy Saving Technology Co., Ltd., Jiuye (Shaanxi) Construction Co., Ltd., Shanxi Nonferrous Metal 12th Metallurgical Advanced Materials Co., Ltd., Kunming Prospecting Institute Technology Development Company, Kunming Kehui Electric Co., Ltd., and Yunnan Jinji'an Construction Consulting and Supervision Co., Ltd.

According to the Announcement of the Ministry of Finance and the State Administration of Taxation on the Preferential Policies for the Income of Small and Micro Enterprises and Individual Industrial and Commercial Households (Announcement No. 6 of the Ministry of Finance and the State Administration of Taxation in 2023), from January 1, 2023 to December 31, 2024, the portion of the annual taxable income of small and micro profit enterprises that does not exceed 1 million yuan shall be reduced by 25% and included in the taxable income, and the enterprise income tax shall be paid at a rate of 20%.

According to the Announcement of the Ministry of Finance and the State Administration of Taxation on Further Implementing the Income Preferential Policies for Small and Micro Enterprises (Announcement No. 13 of the Ministry of Finance and the State Administration of Taxation in 2022), from January 1, 2022 to December 31, 2024, for small and micro profit enterprises with an annual taxable income exceeding 1 million yuan but not exceeding 3 million yuan, a reduction of 25% will be included in the taxable income and a corporate income tax rate of 20% will be paid.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**5.1 Cash and cash equivalents**

Item	30 June 2023 (Unaudited)	31 December 2022
Cash on hand	913,148.73	4,050,614.86
Cash at banks	1,697,771,297.83	2,657,866,415.78
Deposits in Chinalco Finance	1,451,656,250.66	4,234,005,617.19
Other monetary funds	724,776,011.22	777,605,770.25
Total	3,875,116,708.44	7,673,528,418.08
Including: Total overseas deposits	242,692,831.55	115,590,165.18

Notes:

- A. As at 30 June 2023, cash and cash equivalents included restricted cash of RMB754,200,567.11, including deposits at banks secured for bank guarantees and acceptance bills and frozen deposits.
- B. As at 30 June 2023, the total of RMB1,451,656,250.66 are deposited by the Company in Chinalco Finance Company Limited ('Chinalco Finance'), a related non-banking financial institution under common control of China Aluminum Group.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.2 Bills receivable**

Item	30 June 2023 (Unaudited)			31 December 2022		
	Gross carrying amount	Impairment of credit losses	Carrying amount	Gross carrying amount	Impairment of credit losses	Carrying amount
Bank acceptance bill	1,727,786.80	-	1,727,786.80	6,450,051.85	-	6,450,051.85
Commercial acceptance bill	-	-	-	-	-	-
Total	1,727,786.80	-	1,727,786.80	6,450,051.85	-	6,450,051.85

(1) The pledged bills receivable of the Company as at 30 June 2023

Nil.

(2) Outstanding endorsed or discounted bills that have not matured as at 30 June 2023

Item	Amount derecognized as at 30 June 2023	Amount not-derecognized as at 30 June 2023
Bank acceptance bills	6,377,110.00	-
Commercial acceptance bill	-	-
Total	6,377,110.00	-

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.3 Accounts receivable**

(1) An aging analysis of trade receivables is listed as follows:

Item	30 June 2023 (Unaudited)	31 December 2022
Within 1 year	8,569,786,645.80	8,438,721,092.24
1 to 2 years	3,709,317,305.95	4,020,152,947.60
2 to 3 years	2,992,402,837.61	2,843,201,904.59
3 to 4 years	1,079,956,438.86	906,801,501.19
4 to 5 years	849,393,220.26	900,732,766.30
More than 5 years	1,293,217,026.96	1,501,889,357.46
Subtotal	18,494,073,475.44	18,611,499,569.38
Less: Impairment of credit losses	3,268,721,589.16	3,346,460,728.21
Total	15,225,351,886.28	15,265,038,841.17

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.3 Accounts receivable (Continued)**

(2) Accounts receivable and impairment of credit losses by category are listed as follows:

Item	Gross carrying amount		30 June 2023 (Unaudited) Impairment of credit losses		Carrying amount
	Amount	Percentage (%)	Amount	Expected credit	
				loss rate (%)	
Impairment of credit losses on an individual basis	1,708,094,437.05	9.24	1,080,022,722.03	63.23	628,071,715.02
Impairment of credit losses on group basis	16,785,979,038.39	90.76	2,188,698,867.13	13.04	14,597,280,171.26
Including: Aging group	16,785,979,038.39	90.76	2,188,698,867.13	13.04	14,597,280,171.26
Total	18,494,073,475.44	100.00	3,268,721,589.16	17.67	15,225,351,886.28

Continued:

Item	Gross carrying amount		31 December 2022 Impairment of credit losses		Carrying amount
	Amount	Percentage (%)	Amount	Expected credit	
				loss rate (%)	
Impairment of credit losses on an individual basis	1,877,771,691.94	10.09	1,175,076,535.43	62.58	702,695,156.51
Impairment of credit losses on group basis	16,733,727,877.44	89.91	2,171,384,192.78	12.98	14,562,343,684.66
Including: Aging group	16,733,727,877.44	89.91	2,171,384,192.78	12.98	14,562,343,684.66
Total	18,611,499,569.38	100.00	3,346,460,728.21	17.98	15,265,038,841.17

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.3 Accounts receivable (Continued)**

(2) (Continued)

As at 30 June 2023 and 31 December 2022, accounts receivable whose impairment of credit losses were assessed individually are listed as follows:

Entity	Gross carrying amount	Impairment of credit losses	30 June 2023	
			Expected credit loss rate (%)	Reasons
Company 1	499,543,254.06	299,725,952.44	60.00	The company made impairment of credit losses based on the recoverability
Company 2	212,855,167.01	78,641,751.75	36.95	The company made impairment of credit losses based on the recoverability
Company 3	162,443,184.19	89,343,751.30	55.00	The company made impairment of credit losses based on the recoverability
Company 4	107,906,698.20	107,906,698.20	100.00	The company made impairment of credit losses based on the recoverability
Company 5	59,063,668.67	29,531,834.34	50.00	The company made impairment of credit losses based on the recoverability
Others	666,282,464.92	474,872,734.00	71.27	The company made impairment of credit losses based on the recoverability
Total	1,708,094,437.05	1,080,022,722.03	63.23	-

Continued:

Entity	Gross carrying amount	Impairment of credit losses	31 December 2022	
			Expected credit loss rate (%)	Reasons
Company 1	481,762,713.12	289,057,627.88	60.00	The company made impairment of credit losses based on the recoverability
Company 6	236,668,344.63	142,001,006.78	60.00	The company made impairment of credit losses based on the recoverability
Company 2	212,855,167.01	78,641,751.75	36.95	The company made impairment of credit losses based on the recoverability
Company 3	162,443,184.19	81,221,592.10	50.00	The company made impairment of credit losses based on the recoverability
Company 4	107,906,698.20	107,906,698.20	100.00	The company made impairment of credit losses based on the recoverability
Others	676,135,584.79	476,247,858.72	70.44	The company made impairment of credit losses based on the recoverability
Total	1,877,771,691.94	1,175,076,535.43	62.58	-

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.3 Accounts receivable (Continued)**

(2) (Continued)

As at 30 June 2023 and 31 December 2022, accounts receivable whose impairment of credit losses were assessed on aging group basis are listed as follows:

Item	30 June 2023		
	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)
Within 1 year	8,399,230,504.51	44,681,478.48	0.50
1 to 2 years	3,570,082,448.05	359,288,122.23	10.00
2 to 3 years	2,670,760,998.72	534,152,199.74	20.00
3 to 4 years	920,702,597.43	276,210,779.35	30.00
4 to 5 years	501,672,405.58	250,836,203.18	50.00
More than 5 years	723,530,084.10	723,530,084.15	100.00
Total	16,785,979,038.39	2,188,698,867.13	–

Continued:

Item	31 December 2022		
	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)
Within 1 year	8,359,566,514.07	41,796,895.57	0.50
1 to 2 years	3,731,829,676.46	373,182,967.85	10.00
2 to 3 years	2,604,586,229.78	520,917,245.90	20.00
3 to 4 years	790,943,596.06	237,283,078.90	30.00
4 to 5 years	497,195,713.68	248,597,857.17	50.00
More than 5 years	749,606,147.39	749,606,147.39	100.00
Total	16,733,727,877.44	2,171,384,192.78	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.3 Accounts receivable (Continued)**

(3) Movements in impairment of credit losses for accounts receivable are listed as follows:

Item	Impairment of credit losses
Amount as at 1 January 2023	3,346,460,728.21
Additions	76,994,638.25
Recoveries or reversals	154,616,113.96
Written-off	–
Others	117,663.34
Amount as at 30 June 2023	3,268,721,589.16

Including: the significant impairment of credit losses recovered or reversed in the current period are as follows:

Entity	Amount received or recovered	Impairment of credit losses before reversal or recovery	Reason for reversal
Company 6	142,001,006.78	142,001,006.78	The debt was recovered
Company 7	3,674,000.00	3,674,000.00	The debt was recovered
Company 8	2,000,000.00	31,350,410.22	The debt was recovered
Company 9	1,500,000.00	2,500,000.00	The debt was recovered
Total	149,175,006.78	179,525,417.00	–

(4) Actual accounts receivable written off during the current period

Nil.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.3 Accounts receivable (Continued)**

(5) As at 30 June 2023, accounts receivable from the five largest customers are listed as follows:

Entity	Gross carrying amount	Percentage in total accounts receivable (%)	Impairment of credit losses as at 30 June 2023
Company 10	624,554,648.90	3.38	66,695,135.08
Company 1	499,543,254.06	2.70	299,725,952.44
Company 11	373,384,830.66	2.02	2,489,173.13
Company 12	297,227,336.93	1.61	64,263,944.49
Company 13	295,625,249.28	1.60	50,659,831.73
Total	2,090,335,319.83	11.31	483,834,036.87

5.4 Financing receivables

Item	30 June 2023 (Unaudited)	31 December 2022
Bills receivable	446,769,913.34	690,552,523.80
Accounts receivable	–	–
Subtotal	446,769,913.34	690,552,523.80
Less: Other comprehensive income – change in fair value	–	–
Closing fair value	446,769,913.34	690,552,523.80

Note:

The bank acceptance bills of the Company are classified as financial assets measured at fair value through other comprehensive income, because some subsidiaries of the Company discount and endorse part of the bank acceptance bills according to the needs of their daily fund management.

As at 30 June 2023, the Company believes that there is no significant credit risk in the bank acceptance bills held by the Company and that there will be no credit losses to be recognised.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.4 Financing receivables (Continued)****(1) Bills receivable pledged by the Company as at 30 June 2023**

Item	Amount pledged as at 30 June 2023
Bank acceptance bills	72,562,939.08
Commercial acceptance bill	–
Total	72,562,939.08

(2) Bills receivable endorsed or discounted by the Company but not yet matured at the end of the period

Item	Amount derecognized as at 30 June 2023	Amount not derecognized as at 30 June 2023
Bank acceptance bills	1,811,456,716.69	–
Commercial acceptance bill	8,359,103.14	–
Total	1,819,815,819.83	–

5.5 Prepayments

(1) An aging analysis of prepayments is listed as follows:

Item	30 June 2023 (Unaudited)		31 December 2022	
	Amount	Percentage %	Amount	Percentage %
Within 1 year	459,924,031.09	89.16	438,457,496.21	92.49
1 to 2 years	28,739,614.06	5.57	11,042,919.82	2.33
2 to 3 years	12,164,344.16	2.36	11,259,829.76	2.38
More than 3 years	15,025,067.81	2.91	13,298,055.54	2.80
Total	515,853,057.12	100.00	474,058,301.33	100.00

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.5 Prepayments (Continued)**

(2) Significant prepayments aged over 1 year are as follows:

Entity	Gross carrying amount	Percentage of total prepayments (%)	Impairment of credit losses	Reason for unsettlement
Company 1	19,091,886.00	3.70	-	Settlement conditions not met
Company 2	5,665,356.30	1.10	-	Settlement conditions not met
Company 3	3,357,508.94	0.65	-	Settlement conditions not met
Total	28,114,751.24	5.45	-	-

(3) As at 30 June 2023, prepayments to the five largest suppliers are listed as follows:

Entity	Gross carrying amount as at 30 June 2023	Percentage of total prepayments (%)
Company 4	22,429,298.52	4.35
Company 5	21,128,597.80	4.10
Company 1	19,091,886.00	3.70
Company 6	16,890,000.00	3.27
Company 7	14,300,465.24	2.77
Total	93,840,247.56	18.19

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.6 Other receivables**

Item	30 June 2023 (Unaudited)	31 December 2022
Interests receivable	4,849,581.53	2,685,407.11
Dividends receivable	8,125,422.21	8,125,422.21
Other receivables	1,610,131,336.81	2,466,634,169.16
Total	1,623,106,340.55	2,477,444,998.48

(1) Interests receivable

Item	30 June 2023 (Unaudited)	31 December 2022
Time deposits	–	–
Others	4,849,581.53	2,685,407.11
Subtotal:	4,849,581.53	2,685,407.11
Less: Impairment of credit losses	–	–
Total	4,849,581.53	2,685,407.11

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.6 Other receivables (Continued)****(2) Dividends receivable**

Item	30 June 2023 (Unaudited)	31 December 2022
Chinalco Tendering Co., Ltd.	8,125,422.21	8,125,422.21
Subtotal:	8,125,422.21	8,125,422.21
Less: Impairment of credit losses	-	-
Total	text-align: right;"> 8,125,422.21	text-align: right;">8,125,422.21

(3) Other receivables

① An aging analysis of other receivables is listed as follows:

Item	30 June 2023 (Unaudited)	31 December 2022
Within 1 year	802,451,827.35	1,722,972,855.54
1 to 2 years	771,174,264.63	630,019,308.30
2 to 3 years	418,587,314.41	397,719,066.99
3 to 4 years	316,678,065.67	272,842,918.18
4 to 5 years	196,393,599.57	206,305,227.61
More than 5 years	185,476,579.53	369,649,168.48
Subtotal	2,690,761,651.16	3,599,508,545.10
Less: Impairment of credit losses	1,080,630,314.35	1,132,874,375.94
Total	text-align: right;"> 1,610,131,336.81	text-align: right;">2,466,634,169.16

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.6 Other receivables (Continued)****(3) Other receivables (Continued)**

- ② As at 30 June 2023 and 31 December 2022, gross carrying amount of other receivables categorized by nature is listed as follows:

Item	Gross carrying amount	30 June 2023 (Unaudited) Impairment of credit losses	Carrying amount
Financing provided to Party A and its related parties	181,141,910.44	99,939,436.75	81,202,473.69
Retention funds or deposits	1,555,632,788.77	660,514,806.67	895,117,982.10
Advance	835,472,000.20	285,491,508.19	549,980,492.01
Equity transfer payment	2,421,000.00	1,210,500.00	1,210,500.00
Reserve fund	36,325,686.29	1,616,564.06	34,709,122.23
Others	79,768,265.46	31,857,498.68	47,910,766.78
Total	2,690,761,651.16	1,080,630,314.35	1,610,131,336.81

Continued:

Item	Gross carrying amount	31 December 2022 Impairment of credit losses	Carrying amount
Financing provided to Party A and its related parties	185,581,666.38	99,939,436.75	85,642,229.63
Retention funds or deposits	1,223,822,925.89	683,490,096.09	540,332,829.80
Advance	1,325,984,970.31	302,797,652.60	1,023,187,317.71
Equity transfer payment	768,945,960.00	16,044,950.28	752,901,009.72
Reserve fund	25,869,889.25	5,950,673.59	19,919,215.66
Others	69,303,133.27	24,651,566.63	44,651,566.64
Total	3,599,508,545.10	1,132,874,375.94	2,466,634,169.16

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.6 Other receivables (Continued)****(3) Other receivables (Continued)**

③ Movements in the impairment of credit losses of other receivables are listed as follows:

Item	Stage I	Stage II	Stage III	Total
	Expected credit losses over the next 12 months	Lifetime expected credit losses (no credit impairment)	Lifetime expected credit losses (credit impaired)	
Balance as at 1 January 2023	8,383,261.35	61,739,204.68	1,062,751,909.91	1,132,874,375.94
Balance as at 1 January 2023 in the current period	8,383,261.35	61,739,204.68	1,062,751,909.91	1,132,874,375.94
- Transfer to Stage II	-1,889,269.84	1,889,269.84	-	-
- Transfer to Stage III	-	-22,827,412.09	22,827,412.09	-
- Transfer back to Stage II	-	140,985,894.34	-140,985,894.34	-
Additions	-	24,349,042.81	-	24,349,042.81
Reversals	2,309,868.42	-	74,283,235.98	76,593,104.40
Balance as at 30 June 2023	4,184,123.09	206,135,999.58	870,310,191.68	1,080,630,314.35

Impairment of credit losses assessed individually of other receivables are listed as follows:

Entity	Reason for reversal	Original basis for determining impairment of credit losses	Amount reversed or recovered
Company 1	Partial recovery of funds	Other accounts receivable with individual assessment for impairment of credit losses	51,763,496.06

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.6 Other receivables (Continued)****(3) Other receivables (Continued)**

- ④ Other receivables actually written off in the current period

Nil.

- ⑤ As at 30 June 2023, other receivables from the five largest customers are listed as follows:

Entity	Nature	Closing balance	Aging	Percentage in total other receivable (%)	Closing balance of impairment of credit losses
Company 2	Security deposit or deposits	204,550,302.00	2 to 3 years	7.60	204,550,302.00
Company 3	Security deposit or deposits	199,452,427.28	1 to 2 years	7.41	198,158,416.63
Company 4	Security deposit or deposits	168,127,014.46	3 to 4 years, 4 to 5 years	6.25	92,436,625.91
Company 5	Security deposit or deposits	139,771,212.20	4 to 5 years	5.19	69,885,606.10
Company 6	Security deposit or deposits	138,324,099.31	Within 1 year, 1 to 2 years	5.14	9,241,620.50
Total	-	850,225,055.25	-	31.59	574,272,571.14

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.7 Inventories****(1) Classification of inventories**

Item	Gross carrying amount	30 June 2023 (Unaudited)	
		Impairment for provision of inventories	Carrying amount
Raw materials	340,918,110.80	1,995,094.89	338,923,015.91
Work in progress	1,364,154,674.48	109,988,351.04	1,254,166,323.44
Finished goods	1,500,622,296.46	443,898,752.33	1,056,723,544.13
Turnover materials and spare parts	12,527,361.27	–	12,527,361.27
Properties under development	246,331,573.07	5,000,000.00	241,331,573.07
Total	3,464,554,016.08	560,882,198.26	2,903,671,817.82

Continued:

Item	Gross carrying amount	31 December 2022	
		Impairment for provision of inventories	Carrying amount
Raw materials	284,539,603.82	3,496,620.36	281,042,983.46
Work in progress	1,331,029,580.97	110,781,371.34	1,220,248,209.63
Stock goods	1,485,891,130.75	431,998,317.59	1,053,892,813.16
Turnover materials and spare parts	13,013,331.79	–	13,013,331.79
Properties under development	291,756,901.06	5,000,000.00	286,756,901.06
Total	3,406,230,548.39	551,276,309.29	2,854,954,239.10

Note: As at 30 June 2023, the amount of property in inventories in the process of applying for and handling registration or transfer of the title certificates is RMB1,340,178,632.04.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.7 Inventories (Continued)****(2) Movements in the provision of inventories in current period are listed as follows:**

Item	Opening balance	Additions		Decreases		Closing balance
		Provision	Others	Reversed or written-off	Others	
Raw materials	3,496,620.36	-	-	1,501,525.47	-	1,995,094.89
Work in progress	110,781,371.34	-	-	793,020.30	-	109,988,351.04
Stock goods	431,998,317.59	16,229,871.06	-	4,329,436.32	-	443,898,752.33
Properties under development	5,000,000.00	-	-	-	-	5,000,000.00
Total	551,276,309.29	16,229,871.06	-	6,623,982.09	-	560,882,198.26

5.8 Contract assets

Item	Gross carrying amount	30 June 2023 (Unaudited) Impairment of credit losses	Carrying amount
Impairment of credit losses on an individual basis	2,350,249,275.77	1,027,407,499.71	1,322,841,776.06
Impairment of credit losses on group basis	7,407,082,581.19	847,051,974.15	6,560,030,607.04
Subtotal	9,757,331,856.96	1,874,459,473.86	7,882,872,383.10
Less: Contract assets presented in other non-current assets	783,514,350.51	526,695,388.47	256,818,962.04
Total	8,973,817,506.45	1,347,764,085.39	7,626,053,421.06

Continued:

Item	Gross carrying amount	31 December 2022 Impairment of credit losses	Carrying amount
Impairment of credit losses on an individual basis	2,355,135,461.30	531,468,176.08	1,823,667,285.22
Impairment of credit losses on group basis	6,909,377,482.88	134,849,732.88	6,774,527,750.00
Subtotal	9,264,512,944.18	666,317,908.96	8,598,195,035.22
Less: Contract assets presented in other non-current assets	741,774,024.28	5,137,174.91	736,636,849.37
Total	8,522,738,919.90	661,180,734.05	7,861,558,185.85

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.8 Contract Assets (Continued)****(1) Impairment of credit losses of contract assets**

Item	Gross carrying amount		30 June 2023		Carrying Amount
			Impairment losses on contract assets		
	Amount	Percentage (%)	Amount	Expected credit loss rate (%)	
Impairment of credit losses on an individual basis	1,566,734,925.26	17.46	500,712,111.24	31.96	1,066,022,814.02
Impairment of credit losses on group basis	7,407,082,581.19	82.54	847,051,974.15	11.44	6,560,030,607.04
Including: Aging group	7,407,082,581.19	82.54	847,051,974.15	11.44	6,560,030,607.04
Total	8,973,817,506.45	100.00	1,347,764,085.39	15.02	7,626,053,421.06

Continued:

Type	Gross carrying amount		30 June 2022		Carrying Amount
			Impairment of credit losses		
	Amount	Percentage (%)	Amount	Expected credit loss rate (%)	
Impairment of credit losses on an individual basis	1,613,361,437.02	18.93	526,331,001.17	32.62	1,087,030,435.85
Impairment of credit losses on group basis	6,909,377,482.88	81.07	134,849,732.88	1.95	6,774,527,750.00
Including:					
Contract assets not delivered to customers for use	6,554,183,800.08	76.90	32,752,593.29	0.50	6,521,431,206.79
Contract assets delivered to customers for use	355,193,682.80	4.17	102,097,139.59	28.74	253,096,543.21
Total	8,522,738,919.90	100.00	661,180,734.05	7.76	7,861,558,185.85

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.8 Contract Assets (Continued)****(1) Impairment of credit losses of contract assets (Continued)**

Contract assets and impairment losses of contract assets by category are listed as follows:

Item	Gross carrying amount	Impairment losses of contract assets	30 June 2023	
			Expected credit loss rate (%)	Reasons
Company 1	297,212,206.75	20,253,340.24	6.81	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 2	168,772,241.81	151,895,017.63	90.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 3	160,268,247.45	160,268,247.45	100.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 4	56,552,345.05	5,655,234.51	10.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 5	30,610,011.11	29,939,617.85	97.81	Impairment losses of contract assets was made based on project implementation and expected settlement
Others	853,319,873.09	132,700,653.56	15.55	Impairment losses of contract assets was made based on project implementation and expected settlement
Total	1,566,734,925.26	500,712,111.24	31.96	-

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.8 Contract Assets (Continued)****(1) Impairment of credit losses of contract assets (Continued)**

Continued:

Item	Gross carrying amount	Impairment losses of contract assets	31 December 2022	
			Expected credit loss rate (%)	Reasons
Company 1	297,212,206.75	20,253,340.24	6.81	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 2	168,772,241.81	151,895,017.63	90.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 3	164,653,047.76	164,653,047.76	100.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 4	54,922,751.76	5,492,275.18	10.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Company 6	45,703,825.47	4,570,382.55	10.00	Impairment losses of contract assets was made based on project implementation and expected settlement
Others	882,097,363.47	179,466,937.81	20.35	Impairment losses of contract assets was made based on project implementation and expected settlement
Total	1,613,361,437.02	526,331,001.17	32.62	-

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.8 Contract Assets (Continued)****(1) Impairment of credit losses of contract assets (Continued)**

Impairment losses of contract assets on ageing group basis are listed as follows:

Item	Contract assets	30 June 2023	Expected credit loss rate (%)
		Impairment losses of contract assets	
Within 1 year	4,596,014,588.28	21,516,383.82	0.50
1 to 2 years	1,197,442,109.50	117,628,935.23	10.00
2 to 3 years	742,005,852.07	147,620,989.18	20.00
3 to 4 years	252,742,227.10	75,951,849.03	30.00
4 to 5 years	269,441,417.41	134,897,430.06	50.00
More than 5 years	349,436,386.83	349,436,386.83	100.00
Total	7,407,082,581.19	847,051,974.15	-

5.9 Non-current assets due within one year

Item	30 June 2023	31 December 2022
	(Unaudited)	
Long-term receivables due within 1 year	215,461,580.84	396,416,681.30
Total	215,461,580.84	396,416,681.30

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.10 Other current assets**

Item	30 June 2023 (Unaudited)	31 December 2022
Deductible VAT input	441,120,561.19	436,769,795.17
Prepaid income tax	38,130,370.59	39,630,373.45
Others	21,691,578.57	5,877,212.37
Total	500,942,510.35	482,277,380.99

5.11 Long-term receivables

(1) Gross carrying amount of long-term receivables categorized by nature is listed as follows:

Item	Gross carrying amount	30 June 2023 (Unaudited) Impairment of credit losses	Carrying amount	Discount rate range
Repurchase payment under BT Contract	186,085,423.87	57,094,872.28	128,990,551.59	87.00-100.00
Long-term receivables from customers	2,217,925,414.02	354,594,413.36	1,863,331,000.66	87.00-100.00
Subtotal	2,404,010,837.89	411,689,285.64	1,992,321,552.25	-
Less: Current portion of long-term receivables due within one year	271,997,210.01	56,535,629.17	215,461,580.84	87.00-100.00
Total	2,132,013,627.88	355,153,656.47	1,776,859,971.41	-

Continued:

Item	Gross carrying amount	31 December 2022 (Unaudited) Impairment of credit losses	Carrying amount	Discount rate range
Repurchase payment under BT Contract	226,930,235.95	57,299,096.34	169,631,139.61	87.00-100.00
Long-term receivables from customers	2,335,668,278.13	364,908,685.67	1,970,759,592.46	87.00-100.00
Subtotal	2,562,598,514.08	422,207,782.01	2,140,390,732.07	-
Less: Current portion of long-term receivables due within one year	463,594,819.37	67,178,138.07	396,416,681.30	87.00-100.00
Total	2,099,003,694.71	355,029,643.94	1,743,974,050.77	-

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.11 Long-term receivables (Continued)**

- (2) Movements in the impairment of credit losses of long-term receivables for the current period are as follows:**

Item	Impairment of credit losses
Amount as at 1 January 2023	355,029,643.94
Additions	124,012.53
Amount as at 30 June 2023	355,153,656.47

- (3) Analysis of long-term receivables overdue**

Overdue	30 June 2023	31 December 2022
Within 1 year	17,216,272.38	17,216,272.38
More than 3 years	387,528,373.20	387,578,285.01
Total	404,744,645.58	404,794,557.39

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.13 Other equity instrument investments****(1) Details of other equity instrument investments**

Item	30 June 2023 (Unaudited)	31 December 2022
Yunnan Huineng Power Sales Co., Ltd.	19,691,711.02	19,489,158.61
Guizhou Aerospace Wujiang Electro-mechanical Equipment Co., Ltd.	13,773,501.85	13,773,501.85
Shandong Yixing Carbon New Material Co., Ltd.	–	7,204,381.50
Yunnan Zhonghui Energy Co., Ltd	4,496,899.35	4,489,620.16
Others	13,197,638.40	12,210,654.00
Total	51,159,750.62	57,167,316.12

(2) Investment in other equity instruments at the end of the period

Item	Income from dividends recognized in the current period	Accumulated gains	Accumulated losses	Amount transferred from other comprehensive income to retained earnings	Reason for transfer in
Guizhou Aerospace Wujiang Electro-mechanical Equipment Co., Ltd.	–	3,800,841.85	–	–	According to management intention and contract cash flow
Yunnan Huineng Power Sales Co., Ltd.	–	4,691,711.02	–	–	According to management intention and contract cash flow
Yunnan Zhonghui Energy Co., Ltd	–	203,599.35	–	–	According to management intention and contract cash flow
Shandong Yixing Carbon New Material Co., Ltd.	–	–	18,000,000.00	–	According to management intention and contract cash flow
Others	–	1,082,117.47	43,907,479.07	–	According to management intention and contract cash flow
Total	–	9,778,269.69	61,907,479.07	–	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.14 Investment properties**

Item	Plant and buildings	Land use rights	Total
I. Original Cost			
1. 1 January 2023	565,133,167.44	182,351,148.79	747,484,316.23
2. Increase	12,663,825.43	–	12,663,825.43
(1) Additions	–	–	–
(2) Transferred in from fixed assets	12,663,825.43	–	12,663,825.43
3. Decrease	–	–	–
4. 30 June 2023	577,796,992.87	182,351,148.79	760,148,141.66
II. Accumulated depreciation and amortization			
1. 1 January 2023	132,836,222.76	39,704,963.52	172,541,186.28
2. Increase	16,262,733.26	2,460,462.93	18,723,196.19
(1) Provision	9,419,446.57	2,460,462.93	11,879,909.50
(2) Transferred in from fixed assets	6,843,286.69	–	6,843,286.69
3. Decrease	–	–	–
4. 30 June 2023	149,098,956.02	42,165,426.45	191,264,382.47
III. Provision for impairment			
1. 1 January 2023	–	–	–
2. Increase	–	–	–
3. Reductions for the period	–	–	–
4. 30 June 2023	–	–	–
IV. Carrying amount			
1. 30 June 2023 (Unaudited)	428,698,036.85	140,185,722.34	568,883,759.19
2. 1 January 2023	432,296,944.68	142,646,185.27	574,943,129.95

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.15 Fixed assets**

Item	30 June 2023 (Unaudited)	31 December 2022
Fixed assets	2,275,319,372.40	2,313,140,998.19
Fixed assets to be disposed of	-	-
Total	2,275,319,372.40	2,313,140,998.19

(1) Fixed assets

① Fixed assets

Item	Plant and buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
i. Original Cost					
1. 1 January 2023	2,773,419,901.28	848,484,025.18	268,469,682.34	427,922,730.89	4,318,296,339.69
2. Increase	28,006,040.46	5,568,246.33	593,540.93	7,683,756.99	41,851,584.71
(1) Additions	523,440.37	5,568,246.33	593,540.93	7,683,756.99	14,368,984.62
(2) Transferred in from construction in progress	515,470.42	-	-	-	515,470.42
(3) Transferred in	26,967,129.67	-	-	-	26,967,129.67
3. Decrease	15,956,925.43	11,174,699.66	1,722,873.64	2,580,489.12	31,434,987.85
(1) Disposals	3,293,100.00	11,174,699.66	1,722,873.64	2,580,489.12	18,771,162.42
(2) Transferred out to investment properties	12,663,825.43	-	-	-	12,663,825.43
4. 30 June 2023	2,785,469,016.31	842,877,571.85	267,340,349.63	433,025,998.76	4,328,712,936.55
ii. Accumulated depreciation:					
1. 1 January 2023	810,466,039.75	649,806,610.26	212,667,361.30	328,183,142.51	2,001,123,153.82
2. Increase	36,885,078.30	16,773,096.34	5,038,172.03	14,945,123.76	73,641,470.43
(1) Provision	36,885,078.30	16,773,096.34	5,038,172.03	14,945,123.76	73,641,470.43
3. Decrease	10,757,849.40	10,591,692.89	1,671,111.91	2,382,593.58	25,403,247.78
(1) Disposals	3,914,562.71	10,591,692.89	1,671,111.91	2,382,593.58	18,559,961.09
(2) Transferred out to investment properties	6,843,286.69	-	-	-	6,843,286.69
4. 30 June 2023	836,593,268.65	655,988,013.71	216,034,421.42	340,745,672.69	2,049,361,376.47

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.15 Fixed assets (Continued)****(1) Fixed assets (Continued)**

① Fixed assets (Continued)

Item	Plant and buildings	Machinery and equipment	Motor vehicles	Office equipment and others	Total
III. Provision for impairment					
1. 1 January 2023	3,345,832.81	8,929.28	161,350.00	516,075.59	4,032,187.68
2. Increase	-	-	-	-	-
3. Decrease	-	-	-	-	-
4. 30 June 2023	3,345,832.81	8,929.28	161,350.00	516,075.59	4,032,187.68
IV. Carrying amount					
1. 30 June 2023	1,945,529,914.85	186,880,628.86	51,144,578.21	91,764,250.48	2,275,319,372.40
2. 1 January 2023	1,959,608,028.72	198,668,485.64	55,640,971.04	99,223,512.79	2,313,140,998.19

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.15 Fixed assets (Continued)****(1) Fixed assets (Continued)**

② As at 30 June 2023, the temporary idle fixed assets are as follows:

Item	Original Gross carrying amount	Accumulated depreciation	Impairment provision	Carrying amount	Remark
Motor vehicles	1,069,589.00	1,016,109.55	–	53,479.45	–
Office equipment and others	463,527.80	388,728.37	–	74,799.43	–
Total	1,533,116.80	1,404,837.92	–	128,278.88	–

③ Fixed assets leased through operating leases

Item	Carrying amount
Plant and Buildings	7,792,055.62
Machinery and equipment	4,247,519.81
Motor vehicles	130,791.43
Office equipment and others	45,576.72
Total	12,215,943.58

④ Fixed assets in the process of applying for and handling registration or transfer of the title certificates

Item	Carrying amount	Reasons for failure to get certificate of ownership
Plant and Buildings	245,555,423.02	Processing

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.16 Construction in progress**

Item	30 June 2023 (Unaudited)	31 December 2022
Construction in progress	245,161,466.63	195,714,635.58
Construction materials	-	-
Total	245,161,466.63	195,714,635.58

(1) Construction in progress

① Details of construction in progress

Item	30 June 2023			31 December 2022		
	Gross carrying amount	Provision for impairment	Carrying amount	Gross carrying amount	Provision for impairment	Carrying amount
Yue Liang Wan health project	152,843,570.74	-	152,843,570.74	148,982,279.41	-	148,982,279.41
Donghe District Aluminum Factory West						
District Real Estate Project	45,280,255.62	-	45,280,255.62	-	-	-
Fuping Steel Structure Factory	9,092,666.75	-	9,092,666.75	9,092,666.75	-	9,092,666.75
Others	38,824,402.94	879,429.42	37,944,973.52	38,519,118.84	879,429.42	37,639,689.42
Total	246,040,896.05	879,429.42	245,161,466.63	196,594,065.00	879,429.42	195,714,635.58

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.16 Construction in progress (Continued)****(1) Construction in progress (Continued)**

② Movements of material construction in progress

Project	1 January 2023	Additions	Transferred out		30 June 2023
			to fixed assets	Other decreases	
Yue Liang Wan health project	148,982,279.41	3,861,291.33	-	-	152,843,570.74
Donghe District Aluminum Factory					
West District Real Estate Project	-	45,280,255.62	-	-	45,280,255.62
Fuping Steel Structure Factory	9,092,666.75	-	-	-	9,092,666.75
Others	38,519,118.84	2,019,137.02	515,470.42	1,198,382.50	38,824,402.94
Total	196,594,065.00	51,160,683.97	515,470.42	1,198,382.50	246,040,896.05

Project	Budget	Proportion of investment to budget %	Project progress	Accumulated capitalized interest	Including: interest capitalized in the current period	Current interest capitalization rate %	Sources of funding
Yue Liang Wan health project	498,000,000.00	87.82	87.82	25,778,153.74	2,560,041.13	5.085	Self-funding/loan
Donghe District Aluminum Factory West District Real Estate Project	48,280,255.62	93.79	93.79	-	-	-	Self-funding
Fuping Steel Structure Factory	10,000,000.00	90.93	90.93	-	-	-	Self-funding
Others	51,856,835.40	-	-	-	-	-	Self-funding
Total	608,137,091.02	-	-	25,778,153.74	2,560,041.13	-	-

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.17 Right-of-use assets**

Item	Plant and buildings	Machinery and equipment	Total
I. Original Cost:			
1. 1 January 2023	38,196,177.18	516,320.50	38,712,497.68
2. Increase	2,362,954.45	–	2,362,954.45
(1) Additions	2,362,954.45	–	2,362,954.45
3. Decrease	2,086,087.59	516,320.50	2,602,408.09
(1) Others	2,086,087.59	516,320.50	2,602,408.09
4. 30 June 2023	38,473,044.04	–	38,473,044.04
II. Accumulated depreciation			
1. 1 January 2023	26,722,494.35	438,067.05	27,160,561.40
2. Increase	4,096,109.56	78,253.45	4,174,363.01
(1) Provision	4,096,109.56	78,253.45	4,174,363.01
3. Decrease	1,356,208.06	516,320.50	1,872,528.56
(1) Others	1,356,208.06	516,320.50	1,872,528.56
4. 30 June 2023	29,462,395.85	–	29,462,395.85
III. Provision for impairment			
1. 1 January 2023	–	–	–
2. Increase	–	–	–
3. Decrease	–	–	–
4. 30 June 2023	–	–	–
IV. Carrying amount			
1. 30 June 2023 (Unaudited)	9,010,648.19	–	9,010,648.19
2. 1 January 2023	11,473,682.83	78,253.45	11,551,936.28

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.18 Intangible assets****(1) Intangible assets**

Item	Land use right	Patent right	Software	Others	Total
I. Original Cost					
1. 1 January 2023	834,285,710.80	257,637,008.34	170,020,474.31	622,039,582.38	1,883,982,775.83
2. Increase	-	30,141.48	7,308,926.38	32,535,715.61	39,874,783.47
(1) Additions	-	30,141.48	7,308,926.38	-	7,339,067.86
(2) Others	-	-	-	32,535,715.61	32,535,715.61
3. Decrease	-	-	-	-	-
(1) Disposal	-	-	-	-	-
4. 30 June 2023	834,285,710.80	257,667,149.82	177,329,400.69	654,575,297.99	1,923,857,559.30
II. Accumulated amortization					
1. 1 January 2023	232,141,685.32	254,362,747.22	133,477,490.24	362,476.08	619,982,285.34
2. Increase	9,698,981.08	760,244.42	4,603,176.28	16,929.18	15,079,330.96
(1) Provision	9,698,981.08	760,244.42	4,603,176.28	16,929.18	15,079,330.96
3. Decrease	-	-	-	-	-
(1) Disposal	-	-	-	-	-
4. 30 June 2023	241,840,666.40	255,122,991.64	138,080,666.52	379,405.26	635,423,729.82
III. Provision for impairment					
1. 1 January 2023	-	-	-	-	-
2. Increase	-	-	-	-	-
3. Decrease	-	-	-	-	-
4. 30 June 2023	-	-	-	-	-
IV. Carrying amount					
1. 30 June 2023 (Unaudited)	592,445,044.40	2,544,158.18	39,248,734.17	654,195,892.73	1,288,433,829.48
2. 1 January 2023	602,144,025.48	3,274,261.12	36,542,984.07	621,677,106.30	1,263,638,376.97

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.19 Development costs**

Item	1 January 2023	Additions for the period		Decreases in the current period		30 June 2023 (Unaudited)
		In-house development costs	Others	Recognized as intangible assets	Recorded in current profit or loss	
Integrated management and control platform	3,823,008.84	-	-	-	-	3,823,008.84
Geotechnical data intelligence system development	-	452,830.17	-	-	-	452,830.17
Others	-	14,455.45	-	-	-	14,455.45
Total	3,823,008.84	467,285.62	-	-	-	4,290,294.46

5.20 Goodwill**(1) Original Cost**

The name of the invested entity	1 January 2023	Additions for the period		Reductions for the period		30 June 2023 (Unaudited)
		Arising from business combination	Others	Disposal	Others	
China Nonferrous Metals Industry Huakun Engineering Construction Co., Ltd.	579,407.09	-	-	-	-	579,407.09
Kunming Kehui Electric Co., Ltd.	295,721.83	-	-	-	-	295,721.83
Total	875,128.92	-	-	-	-	875,128.92

5.21 Long-term deferred expenses

Item	1 January 2023	Increase	Decrease		30 June 2023 (Unaudited)
			Provision	Others	
Rental cost of the underground garage of Twelfth Metallurgical Company	8,999,200.15	-	124,988.88	-	8,874,211.27
Site renovation costs	4,831,989.51	239,606.17	924,448.91	-	4,147,146.77
Others	29,394,444.46	19,711,247.33	17,853,707.83	189,455.35	31,062,528.61
Total	43,225,634.12	19,950,853.50	18,903,145.62	189,455.35	44,083,886.65

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.22 Deferred tax assets and deferred tax liabilities****(1) Unoffset deferred tax assets and deferred tax liabilities**

Item	30 June 2023 (Unaudited)		31 December 2022	
	Deductible/taxable	Deferred tax	Deductible/taxable	Deferred tax
	temporary differences	assets/liabilities	temporary differences	assets/liabilities
Deferred tax assets:	-	-	-	-
Retirement and termination benefits	486,038,892.43	89,210,726.28	492,690,138.64	95,641,445.00
Provision for impairment of credit losses and assets	5,456,147,448.55	1,018,667,659.92	4,240,079,399.76	825,050,568.14
Deductible tax losses	389,719,654.43	74,451,050.50	645,473,209.83	112,207,354.57
Changes in fair value of other equity instrument investments	26,843,851.67	4,398,047.59	19,639,470.17	3,317,390.37
Others	318,029,227.83	47,704,384.17	109,768,661.85	19,044,087.24
Subtotal	6,676,779,074.91	1,234,431,868.46	5,507,650,880.25	1,055,260,845.32
Deferred tax liabilities:	-	-	-	-
Appreciation on asset from appraisal for business combinations involving entities not under common control	269,505,784.14	54,123,940.13	295,148,101.20	60,285,625.60
Changes in fair value of other equity instrument investment	3,800,841.87	570,126.28	3,800,841.87	570,126.28
Others	496,753,802.30	49,675,380.23	496,753,802.30	49,675,380.23
Subtotal	770,060,428.31	104,369,446.64	795,702,745.37	110,531,132.11

(2) Deferred tax assets and deferred tax liabilities that are presented at the net amount after offset:

Item	Deferred tax		Offset amount of deferred tax assets and liabilities at the end of last year	Deferred tax assets or liabilities after offset at the end of last year
	Offset amount of deferred tax assets and liabilities at the end of the period	assets or liabilities after offset at the end of the period (Unaudited)		
Deferred tax assets	32,517,642.57	1,201,914,225.89	38,283,823.91	1,016,977,021.41
Deferred tax liabilities	32,517,642.57	71,851,804.07	38,283,823.91	72,247,308.20

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.22 Deferred tax assets and deferred tax liabilities (Continued)**

- (3) Deductible temporary differences and deductible tax losses for which deferred tax assets are not recognised are listed as follows:**

Item	30 June 2023	31 December 2022
Deductible temporary differences	1,083,991,869.59	1,082,624,543.00
Deductible losses	2,632,740,996.82	4,856,511,794.21
Total	3,716,732,866.41	5,939,136,337.21

- (4) Deductible losses, for which no deferred tax assets are recognised, will expire in the following years:**

Year	30 June 2023	31 December 2022	Remarks
2023	69,358,278.30	129,789,642.95	–
2024	207,664,409.51	615,387,534.35	–
2025	1,031,045,293.32	1,780,922,358.23	–
2026	437,615,938.81	1,790,622,266.72	–
2027	627,946,248.73	539,789,991.96	–
2028	259,110,828.15	–	–
Total	2,632,740,996.82	4,856,511,794.21	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.23 Other non-current assets**

Item	Gross carrying amount	30 June 2023 (Unaudited)		Book balance	31 December 2022	
		Provision for impairment	Carrying amount		Provision for impairment	Carrying amount
Long-term contract assets	783,514,350.51	526,695,388.47	256,818,962.04	784,227,638.60	5,137,174.91	779,090,463.69
Runover materials	359,283,881.51	-	359,283,881.51	361,073,744.74	-	361,073,744.74
Prepayment for property purchased	54,581,060.00	-	54,581,060.00	54,591,720.00	-	54,591,720.00
Assets held for disposal	38,394,846.72	-	38,394,846.72	38,394,846.72	-	38,394,846.72
Others	69,001.11	-	69,001.11	69,001.11	-	69,001.11
Total	1,235,843,139.85	526,695,388.47	709,147,751.38	1,238,356,951.17	5,137,174.91	1,233,219,776.26

5.24 Short-term loans**(1) Short-term loans by category are listed as follows:**

Item	30 June 2023 (Unaudited)		31 December 2022
Pledged loans	5,825,818.01		5,408,564.43
Guaranteed loans	-		45,000,000.00
Credit loans	3,616,782,513.34		4,133,816,568.95
Total	3,622,608,331.35		4,184,225,133.38

Note: The company provided pledge guarantee with accounts receivable of RMB5,825,818.01 and obtained pledged loans of RMB5,825,818.01 from non-bank financial institutions.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.25 Bills payable**

Item	30 June 2023 (Unaudited)	31 December 2022
Commercial acceptance bills	–	367,568,496.39
Bank acceptance bills	3,498,498,901.22	3,028,768,727.02
Total	text-align: right;"> 3,498,498,901.22	text-align: right;">3,396,337,223.41

5.26 Accounts payable

Item	30 June 2023 (Unaudited)	31 December 2022
Within 1 year	9,079,213,763.46	9,290,048,810.06
More than 1 year	3,270,660,974.67	3,378,329,136.65
Total	text-align: right;"> 12,349,874,738.13	text-align: right;">12,668,377,946.71

Including: material accounts payable aged over 1 year

Item	30 June 2023	Reasons for non-repayment or non-carryover
Company 1	60,788,097.02	Payment conditions not satisfied yet
Company 2	34,362,158.09	Payment conditions not satisfied yet
Company 3	33,171,009.87	Payment conditions not satisfied yet
Company 4	29,953,289.04	Payment conditions not satisfied yet
Company 5	28,913,002.38	Payment conditions not satisfied yet
Total	text-align: right;"> 187,187,556.40	text-align: center;">–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.27 Contract liabilities**

Item	30 June 2023 (Unaudited)	31 December 2022
Within 1 year	2,623,918,786.41	3,141,367,349.94
More than 1 year	562,413,413.05	417,370,597.37
Less: contract liabilities presented in other non-current liabilities	—	—
Total	3,186,332,199.46	3,558,737,947.31

5.28 Employee compensation payables

Item	1 January 2023	Accrued	Paid	30 June 2023 (Unaudited)
Short-term employee benefits	130,136,686.68	929,797,975.95	909,530,525.11	150,404,137.52
Post-employment benefits – defined contribution plans	13,861,321.68	130,961,778.30	125,551,325.17	19,271,774.81
Termination benefits	59,249,000.00	26,541,179.22	26,221,230.55	59,568,948.67
Other benefits due within one year	7,259,000.00	4,167,395.00	4,487,343.67	6,939,051.33
Total	210,506,008.36	1,091,468,328.47	1,065,790,424.50	236,183,912.33

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.28 Employee compensation payables (Continued)****(1) Short-term employee compensation**

Item	1 January 2023	Accrued	Paid	30 June 2023
Salaries, bonuses, and allowances	86,692,875.34	664,706,889.32	644,228,971.47	107,170,793.19
Employee welfare	–	15,445,273.63	15,314,094.63	131,179.00
Social insurance	3,977,038.22	76,346,171.73	75,804,876.27	4,518,333.68
Including: 1. Medical insurance	3,309,693.95	70,380,704.70	69,755,720.09	3,934,678.56
2. Work-related injury insurance	438,154.22	4,962,258.98	5,106,505.38	293,907.82
3. Maternity insurance	229,190.05	1,003,208.05	942,650.80	289,747.30
Housing fund	5,394,875.51	84,782,935.04	83,939,771.05	6,238,039.50
Union fund and employee education fund	29,604,700.27	17,674,162.02	19,953,902.25	27,324,960.04
Non-monetary benefits	–	34,757,558.22	34,757,558.22	–
Other short-term employee benefits	4,467,197.34	36,084,985.99	35,531,351.22	5,020,832.11
Total	130,136,686.68	929,797,975.95	909,530,525.11	150,404,137.52

(2) Defined contribution plans

Item	1 January 2023	Accrued	Paid	30 June 2023
Post-employment benefits	13,861,321.68	130,961,778.30	125,551,325.17	19,271,774.81
Including: 1. Basic pension insurance	7,383,623.59	108,944,893.50	106,201,035.33	10,127,481.76
2. Unemployment insurance	1,016,373.11	4,756,122.40	4,773,471.25	999,024.22
3. Annuity	5,461,324.98	17,260,762.40	14,576,818.59	8,145,268.83
Total	13,861,321.68	130,961,778.30	125,551,325.17	19,271,774.81

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.28 Employee compensation payables (Continued)****(3) Termination benefits**

Item	1 January 2023	Accrued	Paid	30 June 2023
Termination benefits	59,249,000.00	26,541,179.22	26,221,230.55	59,568,948.67
Including: 1. Compensation for termination of labor relations	–	685,968.91	625,368.91	60,600.00
2. Expenses for internal retirement	30,901,000.00	11,957,341.17	11,690,842.44	31,167,498.73
Total	59,249,000.00	26,541,179.22	26,221,230.55	59,568,948.67

5.29 Taxes payable

Item	30 June 2023 (Unaudited)	31 December 2022
VAT	52,226,295.35	102,518,753.48
Corporate income tax	30,240,070.59	79,142,185.89
House property tax	1,685,876.18	1,172,143.35
Land use tax	1,467,048.39	1,135,716.65
Individual income tax	4,168,702.71	15,855,807.28
Urban maintenance and construction tax	6,201,362.93	7,926,577.90
Educational surcharges	2,702,055.71	5,427,262.38
Others	10,302,135.74	3,142,562.05
Total	108,993,547.60	216,321,008.98

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.30 Other payables**

Item	30 June 2023 (Unaudited)	31 December 2022
Interests payable	–	–
Dividends payable	2,408,891.77	2,408,891.77
Other payables	1,502,622,563.29	1,875,893,404.04
Total	1,505,031,455.06	1,878,302,295.81

(1) Dividends payable

Item	30 June 2023 (Unaudited)	31 December 2022
Ordinary share dividend	2,408,891.77	2,408,891.77
Total	2,408,891.77	2,408,891.77

Significant dividends payable have not paid for more than 1 year:

Entity	Closing balance	Reason for non-payment
Company 1	1,800,405.76	Unpaid
Company 2	521,367.30	Unpaid
Company 3	78,280.58	Unpaid
Company 4	8,838.13	Unpaid
Total	2,408,891.77	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.30 Other payables (Continued)****(2) Other payables**

Item	30 June 2023 (Unaudited)	31 December 2022
Guarantees and deposits payable	914,646,360.46	1,126,516,589.65
Payables for advances	295,034,139.12	330,813,276.15
Temporary payment	166,298,842.21	210,734,583.32
Others	126,643,221.50	207,828,954.92
Total	1,502,622,563.29	1,875,893,404.04

Including: significant other payables with aging of more than 1 year

Entity	Closing balance	Reasons for non-repayment or non-carryover
Creditor 1	44,665,544.85	Payment conditions not satisfied yet
Creditor 2	33,987,500.00	Payment conditions not satisfied yet
Creditor 3	30,658,773.81	Payment conditions not satisfied yet
Creditor 4	11,354,000.00	Payment conditions not satisfied yet
Creditor 5	8,931,801.32	Payment conditions not satisfied yet
Total	129,597,619.98	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.31 Non-current liabilities due within one year**

Item	30 June 2023 (Unaudited)	31 December 2022
Long-term loans due within one year	2,902,746,518.02	3,113,882,129.15
Interest payable due within one year	4,915,809.53	14,269,789.10
Lease liabilities due within one year	2,643,620.48	9,212,832.77
Total	2,910,305,948.03	3,137,364,751.02

(1) Long-term loans due within one year

Item	30 June 2023	31 December 2022
Pledged loans	–	7,000,000.00
Credit loans	2,902,746,518.02	3,106,882,129.15
Total	2,902,746,518.02	3,113,882,129.15

5.32 Other current liabilities

Item	30 June 2023 (Unaudited)	31 December 2022
Pending VAT output	1,565,924,934.28	1,723,137,407.53
Total	1,565,924,934.28	1,723,137,407.53

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.33 Long-term loans**

Item	30 June 2023 (Unaudited)	31 December 2022
Guaranteed loans	403,800,000.00	405,300,000.00
Credit loans	7,629,485,976.17	7,965,582,129.15
Subtotal	8,033,285,976.17	8,370,882,129.15
Including: Loans by non-bank financial institution	1,599,555,777.77	1,204,882,129.15
Less: long-term loans due within one year	2,907,662,327.55	3,113,882,129.15
Total	5,125,623,648.62	5,257,000,000.00

Notes:

- A. As at 30 June 2023, guaranteed loans were guaranteed by the Company and certain subsidiaries.
- B. As at 30 June 2023, the long-term loans rate range is 0% to 5.085%.

(1) As at 30 June 2023, the maturity profile of the long-term loans is listed as follows:

Item	30 June 2023	31 December 2022
Between 1 to 2 years	3,097,267,870.85	2,233,920,000.00
Between 2 to 5 years	1,464,555,777.77	2,450,780,000.00
More than 5 years	563,800,000.00	572,300,000.00
Total	5,125,623,648.62	5,257,000,000.00

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.34 Lease liabilities**

Item	30 June 2023 (Unaudited)	31 December 2022
Lease liabilities	9,699,349.79	20,333,468.51
Less: unrecognized financing expenses	684,455.22	2,586,949.15
Subtotal	9,014,894.57	17,746,519.36
Less: lease liabilities due within one year	2,643,620.48	9,212,832.77
Total	6,371,274.09	8,533,686.59

Note: The amount of interest expense on lease liabilities accrued in the current period is RMB1,902,493.93, which is included in finance expenses – interest expenses.

5.35 Long-term payables

Item	30 June 2023 (Unaudited)	31 December 2022
Long-term payables	–	–
Special payables	1,419,611.80	1,479,611.80
Total	1,419,611.80	1,479,611.80

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.35 Long-term payables (Continued)****(1) Special payables**

Item	1 January 2023	Additions	Reductions	30 June 2023
Research funding for research and development of prototype of furnace-building robot for aluminum electrolysis cell lining	1,046,302.95	–	–	1,046,302.95
Others	433,308.85	–	60,000.00	373,308.85
Total	1,479,611.80		60,000.00	1,419,611.80

5.36 Long-term employee compensation payables

Item	30 June 2023 (Unaudited)	31 December 2022
Post-employment benefits-net liabilities under defined benefit plan	564,043,200.00	583,558,200.00
Termination benefits	41,185,800.00	45,360,800.00
Subtotal	605,229,000.00	628,919,000.00
Less: Portion due within one year	66,508,000.00	66,508,000.00
Total	538,721,000.00	562,411,000.00

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.36 Long-term employee compensation payables (Continued)****(1) Movements of defined benefit plan are listed as follows:**

Present value of obligations of defined benefit plan

Item	30 June 2023	31 December 2022
I. Opening balance	628,919,000.00	681,001,150.00
II. Defined benefit cost included in current profit and loss	9,739,000.00	21,429,847.51
1. Current service cost	1,535,000.00	3,047,000.00
2. Past service cost	–	50,000.00
3. Net interest	8,200,000.00	19,039,847.51
4. Gains excluded from other comprehensive income	4,000.00	–707,000.00
III. Defined benefit costs included in other comprehensive income	–16,000.00	10,497,100.00
1. Actuarial (losses)/gain	–16,000.00	10,497,100.00
IV. Other changes	–33,413,000.00	–84,009,097.51
1. Liabilities eliminated at settlement	–	–
2. Benefits paid	–33,413,000.00	–84,009,097.51
V. Closing balance	605,229,000.00	628,919,000.00

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.36 Long-term employee compensation payables (Continued)****(1) Movements of defined benefit plan are listed as follows: (Continued)**

Net liabilities of defined benefit plan

Item	30 June 2023	31 December 2022
I. Opening balance	628,919,000.00	681,001,150.00
II. Net interest	8,200,000.00	19,039,847.51
III. Paid Benefits	-33,413,000.00	-84,009,097.51
IV. Actuarial (gains)/losses	-12,000.00	9,790,100.00
V. Previous service cost	-	50,000.00
VI. Current service cost	1,535,000.00	3,047,000.00
VII. Closing balance	605,229,000.00	628,919,000.00

(2) The key actuarial assumptions

Item	30 June 2023	31 December 2022
Discount rate	2.75%	2.75%
Mortality rate	China Life Insurance Mortality Table (2010-2013)	China Life Insurance Mortality Table (2010-2013)
Annual increase rate of medical benefits	8.00%	8.00%
Annual growth rate of pension benefits for beneficiaries	4.50%	4.50%

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.37 Deferred income**

Item	1 January 2023	Additions	Reductions	30 June 2023	
				(Unaudited)	Reasons
Government grants	61,250,000.00	14,921,267.81	8,712,293.17	67,458,974.64	Financial provision
Total	61,250,000.00	14,921,267.81	8,712,293.17	67,458,974.64	–

Details of government grants:

Item	1 January 2023	Additions for the period	Amount recognized in profit or loss for the current period	Other changes	30 June 2023	
					Related to assets/income	Reasons
Urban roads in Tongchuan New District + Comprehensive packaged PPP project of underground comprehensive pipelines	44,900,000.00	2,000,000.00	–	–	46,900,000.00	Related to assets
Government subsidy for overall relocation of Shandong project	16,000,000.00	–	–	–	16,000,000.00	Related to assets
Others	350,000.00	12,921,267.81	8,712,293.17	–	4,558,974.64	Related to income
Total	61,250,000.00	14,921,267.81	8,712,293.17	–	67,458,974.64	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.38 Share capital**

Items	Opening balance	New share issued	Bonus shares	Increase/Decrease (+,-) Shares converted from provident fund	Others	Subtotal	Closing balance (Unaudited)
Total number of shares	2,959,066,667.00	-	-	-	-	-	2,959,066,667.00
Aluminum Corporation of China	2,176,758,534.00	-	-	-	-	-	2,176,758,534.00
Luoyang Engineering&Research Institute for Nonferrous Metals Processing	86,925,466.00	-	-	-	-	-	86,925,466.00
National Council for Social Security Fund, PRC	36,316,000.00	-	-	-	-	-	36,316,000.00
Holders of overseas listed H shares	363,160,000.00	-	-	-	-	-	363,160,000.00
Public ordinary shareholders	295,906,667.00	-	-	-	-	-	295,906,667.00

5.39 Other equity instruments

Outstanding financial instruments	Date of issuance	Accounting classification	Stock interest rate or interest rate	Issue price	Quantity	Amount	Expiration date or renewal status	Conversion conditions	Conversion
Industrial Bank Renewable Trust Loan	FY 2022	Equity instruments	Determined through listing pricing and centralized allocation	4.06	1,500,000,000.00	1,464,684,905.65	2+N years	N/A	N/A
Industrial Bank Renewable Trust Loan	FY 2022	Equity instruments	Determined through listing pricing and centralized allocation	3.79	1,000,000,000.00	969,000,000.00	3+N years	N/A	N/A
Total	-	-	-	-	2,500,000,000.00	2,433,684,905.65	-	-	-

Movements in preferred shares, perpetual bonds and other financial instruments outstanding at the end of the period:

Outstanding financial instruments	31 December 2022		Additions		Reductions		30 June 2023 (Unaudited)	
	Number	Book value	Number	Book value	Number	Book value	Number	Book value
Industrial Bank Renewable Trust Loan	1,500,000,000.00	1,464,684,905.65	-	-	-	-	1,500,000,000.00	1,464,684,905.65
Industrial Bank Renewable Trust Loan	1,000,000,000.00	969,000,000.00	-	-	-	-	1,000,000,000.00	969,000,000.00
Total	2,500,000,000.00	2,433,684,905.65	-	-	-	-	2,500,000,000.00	2,433,684,905.65

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.40 Capital reserves**

Item	1 January 2023	Increase	Decrease	30 June 2023 (Unaudited)
Equity premium	910,049,066.34	–	–	910,049,066.34
Other capital reserves	9,207,632.77	–	7,782,087.76	1,425,545.01
Total	919,256,699.11	–	7,782,087.76	911,474,611.35

5.41 Other comprehensive income

Other comprehensive income attributable to the Company in the balance sheet:

Item	1 January 2023	Movements during the period		30 June 2023 (Unaudited)
		Net-of-tax amount attributable to the Company	Less: previously recognized amount transferred to retained earnings	
I. Items that will not be reclassified to profit or loss	55,765,630.66	–5,313,950.99	–	50,451,679.67
1. Remeasurement of net defined benefit plan	84,946,854.20	10,169.62	–	84,957,023.82
2. Changes in fair value of other equity instrument investments	–29,181,223.54	–5,324,120.61	–	–34,505,344.15
II. Other comprehensive income reclassified into profit or loss	114,305,071.91	–20,936,998.80	–	93,368,073.11
1. Translation differences arising from translation of foreign currency financial statements	114,305,071.91	–20,936,998.80	–	93,368,073.11
Total other comprehensive income	170,070,702.57	–26,250,949.79	–	143,819,752.78

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.41 Other comprehensive income (Continued)**

Other comprehensive income attributable to the Company in the income statement:

Item	Before-tax amount	Movements during the period		Net-of-tax amount attributable to non-controlling interests	Net-of-tax amount attributable to the Company
		Less: previously recognized amount transferred to profit or loss	Less: income tax expense		
I. Items that will not be reclassified to profit or loss	-5,784,336.44	-	-867,650.47	397,265.02	-5,313,950.99
1. Remeasurement of net defined benefit plan	16,000.00	-	2,400.00	3,430.38	10,169.62
2. Changes in fair value of other equity instrument investments	-5,800,336.44	-	-870,050.47	393,834.64	-5,324,120.61
II. Other comprehensive income reclassified into profit or loss	-20,936,998.80	-	-	-	-20,936,998.80
1. Translation differences arising from translation of foreign currency financial statements	-20,936,998.80	-	-	-	-20,936,998.80
Total other comprehensive income	-26,721,335.24	-	-867,650.47	397,265.02	-26,250,949.79

Note: As at 30 June 2023, net-of-tax amount of other comprehensive income is RMB-25,849,869.68, in which net-of-tax amount of other comprehensive income attributable to shareholders of the Company is RMB-26,250,949.79, and net-of-tax amount of other comprehensive income attributable to non-controlling interests is RMB401,080.11.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.42 Special reserve**

Item	1 January 2023	Increase	Decrease	30 June 2023 (Unaudited)
Production safety fee	219,378,446.60	107,782,857.12	92,034,639.86	235,126,663.86
Total	219,378,446.60	107,782,857.12	92,034,639.86	235,126,663.86

5.43 Surplus reserve

Item	1 January 2023	Increase	Decrease	30 June 2023 (Unaudited)
Statutory surplus reserve	229,735,034.17	–	–	229,735,034.17
Total	229,735,034.17	–	–	229,735,034.17

5.44 Retained profits

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)	Appropriation or distribution percentage
Retained profits as at 31 December 2022 (before adjustment)	598,623,010.70	794,976,623.67	–
Total adjustments for opening retained profits (“+” for increase; “–” for decrease)	–	–180,333,262.68	–
Retained profits as at 1 January 2023 (after adjustment)	598,623,010.70	614,643,360.99	–
Add: Net profits for the period attributable to shareholders of the Company	–830,642,028.64	123,644,711.6	–
Less: Appropriation for statutory surplus reserve	–	–	–
Appropriation for discretionary surplus reserve	–	–	–
Interest payable on perpetual bonds	49,153,611.11	14,861,111.23	–
Retained profits as at 30 June 2023	–281,172,629.05	723,426,961.40	–

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.45 Operating revenue and operating costs****(1) Operating revenue and operating costs**

Item	For the six months ended 30 June 2023 (Unaudited)		For the six months ended 30 June 2022 (Restated)	
	Operating revenue	Operating	Revenue	Operating Costs
Revenue from principal activities	9,519,655,916.23	8,496,462,289.44	10,384,962,227.97	9,327,155,013.68
Other operating activities	102,400,002.44	81,033,512.72	132,128,900.54	102,192,608.09
Total	9,622,055,918.67	8,577,495,802.16	10,517,091,128.51	9,429,347,621.77

(2) Operating revenue and operating costs by major segments

Major segments	For the six months ended 30 June 2023 (Unaudited)		For the six months ended 30 June 2022 (Restated)	
	Revenue	Costs	Revenue	Costs
Principal activities:				
Engineering and construction				
contracting	7,312,512,488.63	6,686,446,359.61	8,438,569,990.51	7,765,916,632.58
Engineering design and consultancy	1,131,541,539.73	827,580,782.49	1,083,367,794.12	805,942,630.77
Equipment manufacturing	1,139,098,542.90	1,049,033,610.71	1,005,229,590.79	893,913,099.68
Less: inter-segment elimination	63,496,655.03	66,598,463.37	142,205,147.45	138,617,349.35
Subtotal	9,519,655,916.23	8,496,462,289.44	10,384,962,227.97	9,327,155,013.68
Other operating activities:				
Sales of materials	36,944,836.80	29,624,783.82	60,230,545.60	52,444,881.82
Lease revenue	34,349,216.04	11,892,551.70	33,310,499.36	13,962,349.42
Others	42,082,628.45	49,015,187.56	38,690,526.64	35,785,376.85
Less: inter-segment elimination	10,976,678.85	9,499,010.36	102,671.06	–
Subtotal	102,400,002.44	81,033,512.72	132,128,900.54	102,192,608.09
Total	9,622,055,918.67	8,577,495,802.16	10,517,091,128.51	9,429,347,621.77

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.45 Operating revenue and operating costs (Continued)****(3) Disaggregated information of operating income**

- ① Operating revenue for the period by revenue recognition time

Revenue recognition time	For the six months ended 30 June 2023 (Unaudited)			Total
	Engineering and construction contracting	Engineering design and consultancy	Equipment manufacturing	
Recognised at a point in time	-	-	221,303,233.27	221,303,233.27
Recognised over a period time	7,374,649,441.16	1,142,297,062.04	923,186,204.06	9,440,876,803.24
Total	7,374,649,441.16	1,142,297,062.04	1,144,489,437.33	9,662,180,036.51

- ② Operating revenue for the period by reporting segment

Segment	For the six months ended 30 June 2023 (Unaudited)		Total
	Revenue from contracts with clients	Lease income	
Engineering and construction contracting	7,375,393,537.14	13,261,019.31	7,388,654,556.45
Engineering design and consultancy	1,142,297,062.04	6,617,857.04	1,148,914,919.08
Equipment manufacturing	1,144,489,437.33	14,470,339.69	1,158,959,777.02
Less: inter-segment elimination	74,473,333.88	-	74,473,333.88
Total	9,587,706,702.63	34,349,216.04	9,622,055,918.67

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.45 Operating revenue and operating costs (Continued)****(3) Disaggregated information of operating income (Continued)**

③ Details of operating revenue

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Operating revenue	9,622,055,918.67	10,517,091,128.51
Less: Revenue not related to principal activities	102,400,002.44	132,128,900.54
Less: Revenue lacking commercial substance	-	-
Operating revenue net of revenue not related to principal activities and revenue lacking commercial substance	9,519,655,916.23	10,384,962,227.97

5.46 Taxes and surcharges

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Urban maintenance and construction tax	10,691,145.74	16,140,121.99
Education surcharge	8,131,520.70	12,794,296.21
Others	32,522,334.07	29,954,310.86
Total	51,345,000.51	58,888,729.06

Note:

A. The criteria of taxes and surcharges accrued and paid refer to Note 4. Taxation.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.47 Selling and distribution expenses**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Employee compensation	37,417,108.35	33,170,199.85
Travel expenses	3,311,116.36	3,092,891.33
Business expense	2,810,842.70	2,135,193.10
Warehousing and logistics	94,228.18	813,672.19
Others	6,619,298.94	2,687,908.65
Total	50,252,594.53	41,899,865.12

5.48 General and administrative expenses

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Employee compensation	313,353,836.56	322,913,664.99
Depreciation and amortization	49,039,665.43	50,627,434.10
Office expenses	50,709,604.48	48,194,981.35
Travel expenses	11,844,110.70	7,591,413.25
Intermediary expenses	7,713,450.02	7,343,637.20
Business expenses	7,445,366.73	5,144,259.98
Party development expenses	252,461.80	167,306.32
Others	25,287,227.83	12,153,004.65
Total	465,645,723.55	454,135,701.84

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.49 Research and development expenses**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Employee compensation	178,405,579.47	118,565,886.70
Raw materials and main materials	106,938,113.23	131,328,958.83
Outsourced R&D expenses	14,296,259.69	3,292,607.28
Depreciation and amortization	2,535,716.20	3,137,235.93
Auxiliary expense	803,614.38	1,366,493.49
Fuel and power	530,242.51	526,117.15
Other expenses	16,982,018.35	7,046,686.97
Total	320,491,543.83	265,263,986.35

5.50 Finance expenses

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Interest payments	201,717,160.49	225,384,947.21
Actuarial expenses interest expenses	8,200,000.00	8,183,000.00
Less: interest income	87,521,999.07	67,178,264.81
Exchange losses	535,629,937.64	468,506,077.99
Less: exchange gains	653,521,347.74	535,674,842.05
Handling charges	4,877,839.29	13,038,724.34
Others	23,388,334.84	4,903,677.55
Total	32,769,925.45	127,163,320.23

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.51 Other income**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Income related	2,902,686.35	1,995,785.33
Total	2,902,686.35	1,995,785.33

5.52 Investment income

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Gain on long-term equity investment accounted for under the equity method	4,898,632.17	2,762,154.43
Investment income from disposal of long-term equity investments	1,344,595.66	–
Investment income during the holding period of other equity instrument investments	–	94,522.07
Others	–605,865.34	2,452,311.74
Total	5,637,362.49	5,308,988.24

5.53 Impairment of credit losses (“–” for losses)

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Impairment of credit losses on accounts receivable	77,621,475.76	120,704,784.80
Impairment of credit losses on other receivables	52,244,061.53	–8,815,739.36
Impairment of credit losses on long-term receivables	10,518,496.37	11,584,575.62
Total	140,384,033.66	123,473,621.06

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.54 Impairment losses on assets (“-” for losses)**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Impairment losses on contract assets	-1,208,141,564.90	3,262,849.58
Impairment losses on inventories	-9,605,888.97	3,191,706.55
Impairment losses on fixed assets	-	-482,568.09
Total	-1,217,747,453.87	5,971,988.04

5.55 Gains from assets disposal (“-” for losses)

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Gains from disposals of fixed assets (“-” for losses)	2,558,475.76	161,768.39
Total	2,558,475.76	161,768.39

5.56 Non-operating income

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)	Amount included in non-recurring gain or loss for the period
Income from liquidated damages	398,671.85	422,287.28	398,671.85
Approved unpayable balances	1,852,302.48	3,488,032.41	1,852,302.48
Government grants	200,000.00	-	200,000.00
Others	1,461,861.96	2,181,602.26	1,461,861.96
Total	3,912,836.29	6,091,921.95	3,912,836.29

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.57 Non-operating expenses**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)	Amount included in non-recurring gain or loss for the period
Penalty expenses	4,684,501.14	36,878,974.93	4,684,501.14
Compensation expenses	306,503.56	353,798.16	306,503.56
Others	3,434,049.28	1,505,600.34	3,434,049.28
Total	8,425,053.98	38,738,373.43	8,425,053.98

5.58 Income tax expenses**(1) Details of income tax expenses**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Income tax expense for the year calculated according to the tax law and relevant regulations	52,751,294.55	46,428,170.68
Deferred income tax expense	-184,295,047.97	14,597,029.34
Total	-131,543,753.42	61,025,200.02

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.58 Income tax expenses (Continued)****(2) Reconciliation between income tax expenses and accounting profit is as follows:**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Profits/losses before tax	-946,721,784.66	244,657,603.72
Expected income tax expenses at applicable tax rate	-142,008,267.70	36,698,640.56
Effect of different tax rates applied by subsidiaries	-48,254,788.16	-4,621,035.32
Adjustment to income tax of previous years	18,313,481.43	-12,304,257.41
Effect of gains or losses from joint ventures and associates accounted for using the equity method	-734,794.83	-414,323.16
Effect of non-taxable income	-4,252,588.74	-1,809,553.89
Effect of non-deductible costs, expenses and losses	24,108,001.88	27,941,105.61
Effect on opening balance of deferred tax due to changes in tax rate	15,112,355.27	-
Effect of using the deductible temporary differences or deductible losses for which no deferred tax asset was recognized in the previous period	-23,139,852.17	-2,821,881.04
Effect of deductible temporary differences or deductible losses for which no deferred tax asset was recognized this period	41,358,256.46	28,546,704.75
Income tax impact of interest on perpetual bonds recorded in equity	-9,295,256.25	-8,736,787.50
Others	-2,750,300.61	-1,453,412.58
Income tax expenses	-131,543,753.42	61,025,200.02

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.59 Notes on cash flow statement****(1) Proceeds from other operating activities**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Cash received for payment on behalf	7,277,486.30	19,088,399.44
Interest on demand deposits received	85,357,824.65	29,283,015.37
Government grants received related to income received	9,111,660.99	14,720,808.83
Decrease in restricted cash	–	47,104,540.03
Others	–	36,106,655.59
Total	101,746,971.94	146,303,419.26

(2) Payment for other operating activities

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Production safety expenses paid	92,034,639.86	108,948,059.51
R&D expense and intermediary fee paid	39,521,970.57	34,528,842.94
Office expense paid	50,709,604.48	91,527,145.19
Travel expense paid	15,155,227.06	28,757,220.02
Bank handling fees paid	4,877,839.29	16,599,692.97
Hospitality expense paid	10,256,209.43	5,278,999.48
Litigation loss paid	11,378,962.91	3,415,851.98
Reserve fund and security current account	20,920,929.23	45,507,914.69
Others	36,556,437.89	40,488,092.22
Total	281,411,820.72	375,051,819.00

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.59 Notes on cash flow statement (Continued)****(3) Proceeds from other financing activities**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Cash received from issuing bonds	–	1,466,100,000.00
Others	–	137,371,967.50
Total	–	1,603,471,967.50

(4) Payment for other financing activities

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
Payment of principal and interest of lease obligation	8,731,624.79	991,560.00
Repayment of perpetual bonds	2,460,710,000.00	1,000,000,000.00
Perpetual bond issuance cost	18,000,000.00	20,069,940.00
Total	2,487,441,624.79	1,021,061,500.00

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.60 Supplementary information on cash flow statement****(1) Supplementary information on cash flow statement**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
1. Reconciliation of net profit/loss to cash flows from operating activities:		
Net profit/loss	-815,178,031.24	183,632,403.70
Add: Impairment on assets	1,217,747,453.87	-6,423,876.36
Impairment of credit losses	-140,384,033.66	-123,473,621.06
Depreciation of fixed assets, investment properties and right-of-use assets	89,695,742.94	97,138,749.62
Amortization of intangible assets	15,079,330.96	14,470,106.01
Amortization of long-term deferred expenses	18,903,145.62	25,848,313.91
Loss on disposal of fixed assets, intangible assets and other long-term assets/(gains)	-	-161,768.39
Loss on scrapping of fixed assets	-	96,252.81
Finance expenses	110,025,750.39	213,949,181.61
Investment loss/(gains)	-6,243,228.00	444,078.82
(Increase)/Decrease in deferred tax assets	-184,937,204.48	15,438,724.07
Decrease in deferred tax liability	-395,504.13	-876,470.83
Increase in inventories	-58,323,467.69	-22,569,241.13
(Increase)/Decrease of operating receivables	-274,350,095.43	249,001,673.64
Decrease of operational payables	-834,509,112.20	-1,686,589,825.10
Net cash outflows from operating activities	-862,869,252.88	-1,040,075,318.68

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.60 Supplementary information on cash flow statement (Continued)****(1) Supplementary information on cash flow statement (Continued)**

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022 (Restated)
2. Material investing and financing activities not requiring the use of cash:		
Conversion of debt into capital	-	-
Convertible bonds due within one year	-	-
New right-of-use assets in the current period	-	-
3. Net changes in cash and cash equivalents:		
Closing balance of cash	3,120,916,141.33	7,508,729,277.34
Less: Opening balance of cash	6,857,364,048.62	6,746,419,077.70
Add: Closing balance of cash equivalents	-	-
Less: Opening balance of cash equivalents	-	-
Net increase/decrease in cash and cash equivalents	-3,736,447,907.29	762,310,199.64

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.60 Supplementary information on cash flow statement (Continued)****(2) Details of cash and cash equivalents**

Item	30 June 2023 (Unaudited)	31 December 2022
1. Cash	3,120,916,141.33	6,857,364,048.62
Including: Cash in hand	913,148.73	4,050,614.86
Cash at bank	3,149,427,548.49	6,891,872,032.97
Other monetary funds	724,776,011.22	777,605,770.25
Less: Restricted cash and fixed time deposits with maturity more than 3 months	754,200,567.11	816,164,369.46
2. Cash equivalents	–	–
Including: Bond investments with a maturity of 3 months or less	–	–
3. Cash and cash equivalents as at 30 June 2023	3,120,916,141.33	6,857,364,048.62

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.61 Notes to statement of changes in shareholders' equity****(1) "Others" in the statement of changes in owners' equity for the current period**

1) Capital reserve:

Other capital reserves for the period – other decrease of RMB7,782,087.76, including:

- ① Decrease of RMB6,151,775.00 in the handling fee for the issuance of perpetual bonds originally included in the capital reserve of Chalico Hong Kong Corporation Limited due to the impact of the repayment of perpetual bonds;
- ② Decrease of RMB1,638,050.36 in the equity transfer payment of China Aluminum International Aluminum Application Engineering Co., Ltd. transferred Chinalco Nanlv (Fujian) Aluminum Structure Technology Development Co., Ltd.'s equity;
- ③ The impact of changes in equity of Chinalco Environmental Protection and Ecological Technology (Hunan) Co., Ltd., which is one of joint ventures, increased by RMB7,737.59.

2) Undistributed profits

Other decrease of RMB49,153,611.11 in undistributed profits for the period is the impact of interest payments on perpetual bonds.

5.62 Assets with restricted ownership or use rights

Item	Closing carrying amount	Reason for restriction
Cash and cash equivalents	754,200,567.11	Frozen, pledged
Receivable financing	72,562,939.08	Pledged
Accounts receivable	5,825,818.01	Pledged
Total	832,589,324.20	–

Notes: The pledged bills of the Company's Receivable financing are mainly used for Bill Pool Business.

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.63 Foreign currency translation****(1) Items in foreign currency**

Item	Closing balance in foreign currency	Exchange rate	Closing balance translated into RMB
Cash and cash equivalents			
Including: USD	22,245,357.05	7.2258	160,740,500.99
EUR	4,700.00	7.8771	37,022.37
HKD	394,355.11	0.9220	363,587.52
MYR	2,893,495.13	1.5512	4,488,335.32
SAR	596,572.35	1.9331	1,153,220.21
SGD	5,700.00	5.3442	30,461.94
INR	1,357,045,675.92	0.0880	119,453,280.85
IDR	86,001,154,201.91	0.0005	41,568,741.79
VND	92,259,914,283.00	0.0003	28,010,103.46
Accounts receivable			
Including: USD	118,131,200.52	7.2258	853,592,428.72
EUR	23,809,931.68	1.5512	36,933,518.98
INR	250,173,774.06	0.0880	22,021,423.91
IDR	13,243,542,586.15	0.0005	6,401,279.23
VND	116,681,074,843.00	0.0003	35,424,374.32
Accounts payable			
Including: USD	10,938,562.07	7.2258	79,039,861.83
EUR	34,500.00	7.8771	271,759.95
INR	150,112,746.67	0.0880	13,213,600.99
IDR	27,248,853,955.84	0.0005	13,720,007.14
VND	61,595,409,969.00	0.0003	18,700,366.45

SECTION 10 FINANCIAL REPORT

5. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)**5.63 Foreign currency translation (Continued)****(1) Items in foreign currency (Continued)**

Item	Closing balance in foreign currency	Exchange rate	Closing balance translated into RMB
Prepayments			
Including: USD	1,247,007.86	7.2258	9,010,629.40
INR	285,000.00	0.0880	25,086.99
IDR	24,039,409,144.00	0.0005	11,059,939.42
Other accounts receivable			
Including: USD	36,165,758.09	7.2258	261,326,534.81
MYR	145,707.56	1.5512	226,018.83
INR	208,857,487.11	0.0880	18,384,577.99
IDR	12,611,463,175.14	0.0005	6,095,763.03
VND	18,932,427.00	0.0003	5,747.89
XAF	298,243,078.21	0.0120	3,581,355.46
Other accounts payable			
Including: USD	15,376.20	7.2258	111,105.36
INR	1,062,819.67	0.0880	93,554.18
IDR	2,085,884,242.95	0.0005	983,221.59
VND	7,000,000,000.00	0.0003	2,125,200.00

(2) Foreign operations

Significant foreign entity	Principal place of business	local reporting currency	Selection basis
Chalieco Hong Kong Corporation Limited	Hong Kong, China	USD	Business income

SECTION 10 FINANCIAL REPORT

6. CHANGE OF CONSOLIDATION SCOPE

6.1 Business combinations involving enterprises not under common control

N/A

6.2 Business combinations involving enterprises under common control occurred during the year

Business combinations involving enterprises under common control occurred during the current period:

N/A

The Company incorporated Kunming Engineering & Research Institute of Nonferrous Metallurgy Co., Ltd. into the merger on December 31, 2022, and retroactively adjusted the income statement and cash flow statement items from January to June 2022.

6.3 Counter Purchase

N/A

6.4 Disposal of subsidiaries

N/A

6.5 Others

During the reporting period, Chalieco Supply Chain Management (Shanghai) Co., Ltd. and Shanghai Chalieco Fengyuan Equity Investment Fund Partnership (Limited Partner) have been cancelled and no longer included in the consolidation scope.

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES

7.1 Interests in subsidiaries

(1) Composition of the Company

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
China Nonferrous Metals Processing Technology Co., Ltd.	1	Luoyang, Henan	High-tech Zone, Luoyang City	Technical development and equipment sales	92.35	-	2
Luoyang Jincheng Construction Supervision Co., Ltd.	1	Luoyang, Henan	Jianxi District, Luoyang City	Construction supervision	-	100.00	2
Luoyang Foyang Decoration Engineering Co., Ltd.	1	Luoyang, Henan	High-tech Zone, Luoyang City	Other construction and installation industry	-	51.22	2
Luoyang Kaiying Technology Co., Ltd.	1	Luoyang, Henan	Luolong District, Luoyang City	IT consultancy service	-	100.00	2
Suzhou Doyum Environmental Technology Co., Ltd.	1	Suzhou, Jiangsu	Suzhou High-tech Zone	Environmental protection technology development and sales	-	62.50	1
China Sixth Metallurgical Construction Co., Ltd.	1	Zhengzhou, Henan	Huaihe Road, Zhengzhou City	Construction projects	100.00	-	2
China Nonferrous Metal Industry Liuye Luoyang Co., Ltd.	1	Luoyang, Henan	Jianxi District, Luoyang City	Construction projects	-	100.00	1
China Non-ferrous Metal Industry Liuye Electromechanical Installation Company	1	Luoyang, Henan	Luoyang City	Construction projects	-	100.00	1
Liuye (Zhengzhou) Technology Heavy Industry Co., Ltd	1	Zhengzhou, Henan	Industrial Agglomeration Area, Xinmi City	Engineering machinery manufacturing	-	100.00	1
Henan Liuye Trade Co., Ltd.	1	Zhengzhou, Henan	Zhengzhou Economic and Technological Development Zone	Trading business	-	100.00	1

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)

7.1 Interests in subsidiaries (Continued)

(1) Composition of the Company (Continued)

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
Panzhou Haohong Project Management Co., Ltd.	1	Guiyang, Guizhou	Liupanshui City, Guizhou Province	Construction projects	-	30.00	1
Tongchuan Haotong Construction Co., Ltd.	1	Tongchuan, Shaanxi	Tongchuan City, Shaanxi Province	Construction projects	-	80.00	1
China Aluminium Great Wall Construction Co., Ltd.	1	Henan	Shangjie District, Zhengzhou City	Engineering and Construction contracting	-	100.00	2
Huaian Tongyun Construction Co., Ltd.	1	Jiangsu	Huayin District, Huai'an City	Construction projects	-	100.00	1
Liuye Xinjiang Construction Co., Ltd.	1	Xinjiang	Alar, Xinjiang	Construction projects	-	100.00	1
CINF Engineering Co., Ltd.	1	Changsha, Hunan	Furong District, Changsha City	Survey and design	100.00	-	2
Huachu Intelligent Technology (Hunan) Co., Ltd.	1	Changsha	Changsha High-tech Industrial Development Zone	Software development and technical service	-	100.00	2
Hunan Huachu Project Management Co., Ltd.	1	Hunan	Furong District, Changsha City	Consultancy and supervision service	-	51.00	2
Hunan Changye Construction Drawing Examination Co., Ltd.	1	Hunan	Furong District, Changsha City	Construction drawing examination	-	100.00	2
Huachu Hi Tech (Hunan) Co., Ltd.	1	Xiangtan	Jiuhua Demonstration Zone, Xiangtan	Equipment sales	-	100.00	1
China Aluminium International South Engineering Co., Ltd.	1	Shandong	Nanding Town, Zhangdian, Zibo	Construction and installation	-	100.00	2
Wenzhou Tongrun Construction Co., Ltd.	1	Wenzhou	Lucheng District, Wenzhou City	Construction projects	60.00	40.00	1

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)

7.1 Interests in subsidiaries (Continued)

(1) Composition of the Company (Continued)

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
Wenzhou Tonghui Construction Co., Ltd.	1	Wenzhou	Longwan District, Wenzhou City	Construction projects	90.00	10.00	1
Jiuye Construction Co., Ltd.	1	Xiangyang	Weicheng District, Xiangyang City, Shaanxi Province	Engineering construction	73.17	-	3
Henan Jiuye Construction Co., Ltd.	1	Zhengzhou	Zhengzhou City, Henan Province	Engineering construction	-	100.00	3
Zhengzhou Jiuye Sanwei Chemical Machinery Co., Ltd.	1	Zhengzhou	Zhengzhou City, Henan Province	Equipment manufacturing	-	100.00	3
Hanzhong Jiuye Construction Co., Ltd.	1	Zhengzhou City, Henan Province	Mian County, Shaanxi Province	Engineering construction	-	100.00	3
Ankang Jiuye Changjiali Concrete Co., Ltd.	1	Ankang City, Shaanxi Province	Ankang City, Shaanxi Province	Concrete production	-	100.00	3
Xinjiang Jiuye Construction Co., Ltd.	1	Xinjiang	Changji Prefecture, Xinjiang	Engineering construction	-	100.00	3
Jiuye Steel Structure Co., Ltd.	1	Xiangyang	Xiangyang City, Shaanxi province	Equipment manufacturing	-	100.00	3
Mian County Jiuye Kindergarten	1	Mian County, Shaanxi	Mian County, Shaanxi Province	Pre-school education	-	100.00	3
Jiuye (Shaanxi) Construction Co., Ltd.	1	Hanzhong, Shaanxi	Shaanxi Province	Survey and design	-	100.00	3
Shaanxi Zhongmian Investment Co., Ltd.	1	Shaanxi	Mian County, Shaanxi	Hot spring project development and operations management	-	51.00	1

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)

7.1 Interests in subsidiaries (Continued)

(1) Composition of the Company (Continued)

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
Shenyang Aluminum and Magnesium Engineering and Research Institute Company Limited	1	Shenyang	Heping District, Shenyang City	Engineering survey and design	100.00	-	1
Shenyang Boyu Technology Co., Ltd.	1	Liaoning	Sujiatun District, Shenyang City	Industrial manufacturing	-	100.00	1
Shenyang Aluminum-Magnesium Technology Co., Ltd.	1	Liaoning	Heping District, Shenyang City	Technical service	-	100.00	1
Shenyang Shengxin Construction Engineering Project Management Co., Ltd.	1	Liaoning	Shenyang City	Construction supervision	-	100.00	1
Beijing Autosky Science & Technology Co., Ltd.	1	Beijing	Haidian District, Beijing	Technology research and development	-	60.00	1
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	1	Shanxi	Xinghualing District, Taiyuan City	Construction projects	100.00	-	2
China Nonferrous Metals Industry's 12th Metallurgical Chongqing Energy Saving Technology Co., Ltd.	1	Chongqing	Nanan District, Chongqing City	Contract energy management	-	100.00	1
China Aluminum International 12MCC Construction Co., Ltd.	3	Incheon, South Korea	Incheon, South Korea	Construction and installation industry	-	80.00	1
China Nonferrous Metals Industry's 12th Metallurgical (Indonesia) Co., Ltd	3	Jakarta, Indonesia	Jakarta, Indonesia	Construction installation	-	67.00	1
China Nonferrous Metal Changsha Survey and Design Institute Co., Ltd.	1	Hunan	Furong District, Changsha City	Survey and design	100.00	-	2
Shenzhen Changkan Reconnaissance Design Co., Ltd.	1	Guangdong	Shennan East Road, Shenzhen City	Technical service	-	100.00	2
Changsha Tongxiang Construction Co., Ltd.	1	Changsha	Yuelu District, Changsha City	Construction projects	40.00	60.00	1

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)

7.1 Interests in subsidiaries (Continued)

(1) Composition of the Company (Continued)

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
Chaleco Trading Co., Ltd.	1	Beijing	Haidian District, Beijing	Equipment sales	100.00	-	1
Chaleco Shandong Trading Co., Ltd.	1	Shandong	Zibo High-tech Zone	Equipment sales	-	100.00	1
Chaleco Hong Kong Corporation Limited	3	Hong Kong	Queen's Road East, Wan Chai	Investment	100.00	-	1
Chaleco Malaysia Sdn. Bhd.	3	Malaysia	Other overseas regions	Engineering survey and design	-	100.00	1
China Aluminum International Investment Management (Shanghai) Co., Ltd.	1	Shanghai	China (Shanghai) Pilot Free Trade Zone	Engineering survey and design	100.00	-	1
China Aluminum International (Tianjin) Construction Co., Ltd.	1	Tianjin	Tianjin Airport Economic Area	Engineering construction	100.00	-	2
China Aluminum International Technology Development Corporation Limited	1	Beijing	Haidian District, Beijing	Technology research and development	100.00	-	1
China Aluminum International Engineering (India) Private Limited	3	India	West Bengal, India	Construction projects	99.99	0.01	1
China Aluminum International Yunnan Aluminum Application Engineering Co., Ltd.	1	Beijing	Haidian District, Beijing	Investment consultancy	100.00	-	1
Duyun Development Zone Tongda Construction Co., Ltd.	1	Guizhou	Duyun Economic Development Zone	Engineering construction	50.00	50.00	1
Guiyang Aluminum Magnesium Design & Research Institute Co., Ltd.	1	Guizhou	Guanshanhu District, Guiyang City	Design consultancy	100.00	-	1

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)

7.1 Interests in subsidiaries (Continued)

(1) Composition of the Company (Continued)

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
Guiyang Aluminum Magnesium Design & Research Institute Engineering Contracting Co., Ltd.	1	Guizhou	Guanshanhu District, Guiyang City	Engineering construction	-	100.00	1
Guiyang Zhenxing Al-Mg Science & Technology Industry Development Corp., Ltd.	1	Guizhou	Guiyang High-Tech Business Incubator	Technology development	-	100.00	1
Guizhou Chuangxin Light Metal Process & Equipment Engineering Research Center Co., Ltd.	1	Guizhou	Guiyang National High-tech Industrial Development Zone	and software design	-	100.00	1
Guiyang Xinyu Construction Supervision Co., Ltd.	1	Guizhou	Jinyang New District, Guiyang City, Guizhou Province	Engineering supervision and consultancy	-	100.00	1
Guizhou Yundu Real Estate Co., Ltd.	1	Guizhou	Duyun Economic Development Zone	Real estate development and engineering construction	-	100.00	1
Guizhou Shunan Electro-mechanical Equipment Co., Ltd.	1	Guizhou	Pingba County, Anshun City	Equipment manufacturing	-	100.00	3
Guangxi Tongrui Investment Construction Co., Ltd.	1	Guangxi	Liangging District, Nanning City	Building construction	100.00	-	1
China Aluminum International Aluminum Application Engineering Co., Ltd.	1	Beijing	Haidian District, Beijing	Trading and technical service	100.00	-	1
Shanxi Nonferrous Metal 12th Metallurgical Advanced Materials Co., Ltd.	1	Shanxi	Jiancaoping District, Taiyuan City	Scientific research and technical service industry	-	66.00	1

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)

7.1 Interests in subsidiaries (Continued)

(1) Composition of the Company (Continued)

Name	Business Type	Principal place of business	Place of incorporation	Business nature	Shareholding %		Acquisition method
					Direct	Indirect	
Qingdao Xinfu Gongchuang Asset Management Co., Ltd.	1	Shandong	Shinan District, Qingdao City	Commercial development and operations	90.00	-	3
China Aluminum Shandong Engineering Technology Corporation Limited	1	Shandong	Zhangdian District, Zibo City	Other construction and installation industry	60.00	-	2
Chalco Wancheng Shandong Construction Co., Ltd.	1	Shandong	Zhangdian District, Zibo City	Other construction and installation industry	-	96.57	2
Kunming Prospecting Design Institute Of China Nonferrous Metals Industry Co., Ltd	1	Kunming	Panlong District, Kunming City	Engineering survey and design	100.00	-	2
Kunming Prospecting Institute Technology Development Company	1	Kunming	Panlong District, Kunming City	Other construction and installation industry	-	100.00	2
China Nonferrous Metals Kunming Prospecting Design Institute African Congo (Kinshasa) Company	3	The Democratic Republic of the Congo	The Democratic Republic of the Congo	Technological services for geological survey	-	100.00	1
Chinalco Southwest Construction Investment Co., Ltd.	1	Kunming	Xishan District, Kunming City	Project investments	100.00	-	1
Kunming Engineering & Research Institute of Nonferrous Metallurgy Co., Ltd.	1	Kunming	Panlong District, Kunming City	Engineering survey and design	67.00	-	2
Kunming Kehui Electric Co., Ltd.	1	Kunming	Wuhua District, Kunming City	Electrical equipment business	-	100.00	2
China Nonferrous Metals Industry Huakun Engineering Construction Co., Ltd.	1	Kunming	Panlong District, Kunming City	Engineering contracting services	-	100.00	2
Yunnan Jijian Construction Consulting Supervision Co., Ltd.	1	Kunming	Panlong District, Kunming City	Engineering supervision service	-	56.26	2

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.1 Interests in subsidiaries (Continued)****(1) Composition of the Company (Continued)**

Note:

- 1) Business type: 1. Domestic non-financial subsidiaries; 2. Domestic financial subsidiaries; 3. Overseas subsidiaries; 4 public institutions, and 5 infrastructure units.
- 2) Means of acquisition: 1. Incorporation; 2. Business combination under common control; 3. Business combination not under common control; 4. Others.
- 3) China Aluminum International (India) Private Limited, a subsidiary incorporated in India, needs to follow local foreign exchange management policies, pursuant to which these subsidiaries must obtain prior approval from the local foreign exchange administration to pay cash dividends to the Company and other investors.
- 4) Panzhou Haohong Project Management Co., Ltd. (hereinafter referred to as "Panxian Haohong") was jointly established by Sixth Metallurgical Construction Co, Ltd. (hereinafter referred to as "Sixth Metallurgical Company", a wholly-owned subsidiary of the Company, and another shareholder, Panxian Panzhou Ancient City Development and Management Co, Ltd. (hereinafter referred to as "Panzhou Ancient City Development"), which was held as to 30% and 70% by Sixth Metallurgical Company and Panzhou Ancient City Development, respectively. The articles of association of Panxian Haohong stipulates that the resolutions of the shareholders meeting to amend the articles of association, the increase or decrease in the registered capital, and merging, splitting, dissolving or changing of the form of the company must be approved by shareholders representing more than two-thirds of the voting rights. For resolutions regarding other matters, they must be approved by shareholders representing more than half of the voting rights. Sixth Metallurgical Company has 70% of the voting rights in the shareholders' meeting, and Panzhou Ancient City Development has 30% of the voting rights. Resolutions of the board of directors must be passed by more than two-thirds of all directors. Panxian Haohong has 3 board members, including 2 directors appointed by Sixth Metallurgical Company and 1 director appointed by Panzhou Ancient City Development. Therefore, the Company can control Panxian Haohong, and it was consolidated into the Company's financial statements.

(2) Material non-wholly owned subsidiaries

Name	Percentage of ownership interest held by non-controlling interests %	Profit or loss attributable to non-controlling shareholders during the period	Dividend declared to non-controlling shareholders during the period	Balance of non-controlling interests as at the end of the period
China Nonferrous Metals Processing Technology Co., Ltd.	7.65	-5,456,444.27	-	10,673,465.55
Ninth Metallurgical Construction Co., Ltd.	26.83	-3,532,810.41	-	97,768,121.28
China Aluminum Shandong Engineering Technology Corporation Limited	40.00	-2,141,322.32	-	-5,369,272.08

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.1 Interests in subsidiaries (Continued)****(3) Key financial information about material non-wholly owned subsidiaries:**

Name	As at 30 June 2023					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
China Nonferrous Metals Processing Technology Co., Ltd.	984,419,653.89	1,083,319,001.61	2,067,738,655.50	1,405,414,546.64	67,704,578.71	1,473,119,125.35
Ninth Metallurgical Construction Co., Ltd.	7,791,950,170.12	1,182,260,096.42	8,974,210,266.54	6,081,355,568.77	851,012,000.00	6,932,367,568.77
China Aluminum Shandong Engineering Technology Corporation Limited	746,635,774.86	160,093,856.75	906,729,631.61	802,066,207.78	16,000,000.00	818,066,207.78

Name	As at 31 December 2022					
	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities
China Nonferrous Metals Processing Technology Co., Ltd.	1,104,736,981.59	1,089,942,038.62	2,194,679,020.21	1,526,556,701.22	69,244,040.49	1,595,800,741.71
Ninth Metallurgical Construction Co., Ltd.	8,467,088,300.73	1,173,144,197.38	9,640,232,498.11	7,181,415,725.52	261,658,718.50	7,443,074,444.02
China Aluminum Shandong Engineering Technology Corporation Limited	841,011,764.71	148,248,409.62	989,260,174.33	821,460,775.09	16,000,000.00	837,460,775.09

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.1 Interests in subsidiaries (Continued)****(3) Key financial information about material non-wholly owned subsidiaries: (Continued)**

Name	For the six months ended 30 June 2023			Cash flows from operating activities
	Operating revenue	Net profit	Total comprehensive income	
China Nonferrous Metals Processing Technology Co.,Ltd.	551,636,636.42	-4,116,971.37	-4,126,321.37	56,236,881.55
Ninth Metallurgical Construction Co., Ltd.	2,040,749,140.16	-89,803,673.10	-89,803,673.10	-289,489,874.78
China Aluminum Shandong Engineering Technology Corporation Limited	242,427,316.64	-61,536,747.82	-61,536,747.82	15,358,655.96

Name	For the six months ended 30 June 2022			Cash flows from operating activities
	Operating revenue	Net profit	Total comprehensive income	
China Nonferrous Metals Processing Technology Co.,Ltd.	476,034,175.45	3,808,189.12	3,798,839.12	49,751,409.12
Ninth Metallurgical Construction Co., Ltd.	2,239,613,353.18	31,345,929.16	31,486,573.15	-213,722,060.86
China Aluminum Shandong Engineering Technology Corporation Limited	255,522,886.39	-37,035,640.01	-37,035,640.01	32,166,112.75

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.2 Interests in joint ventures or associates****(1) Material joint ventures or associates**

Name	Principal place of business	Registration place	Business nature	Shareholding (%)		Accounting treatment of investments in joint ventures or associates
				Direct	Indirect	
① Joint ventures						
Shanghai Fengtong Equity Investment Fund Partnership (Limited Partnership)	Shanghai	Shanghai	Investment company	40.00	–	Equity method
Zhongji Sunward Technology Co., Ltd.	Hunan	Hunan	Metallurgical equipment manufacturing	–	49.00	Equity method
② Associates						
Sichuan Chuannan Rail Transit Operation Co., Ltd.	Sichuan	Yibin city	Road transport industry	–	10.00	Equity method
Guizhou Tongye Construction Development Co., Ltd.	Guizhou	Guiyang city	Construction and installation industry	–	45.00	Equity method

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.2 Interests in joint ventures or associates (Continued)****(2) Key financial information of material joint ventures**

Item	Shanghai Fengtong Equity Investment Fund Partnership (Limited Partnership)		Zhongji Sunward Technology Co., Ltd.	
	As at 30 June 2023	As at 31 December 2022	As at 30 June 2023	As at 31 December 2022
Current assets	70,099,100.81	70,244,559.10	261,984,784.44	269,774,396.93
Including: cash and cash equivalents	2,932,963.85	19,078,422.14	45,466,433.99	75,234,104.44
Non-current assets	465.97	465.97	10,544,222.94	11,533,791.05
Total assets	70,099,566.78	70,245,025.07	272,529,007.38	281,308,187.98
Current liabilities	10,588,453.66	11,511,035.51	158,288,589.35	171,060,686.40
Non-current liabilities	-	-	-	-
Total liabilities	10,588,453.66	11,511,035.51	158,288,589.35	171,060,686.40
Non-controlling interests	1,000,000.00	1,000,000.00	-	-
Equity attributable to owners of the parent	58,511,113.12	58,733,989.56	114,240,418.03	110,247,2501.58
Net asset share calculated based on shareholding ratio	8,862,285.05	8,862,285.05	55,977,804.83	54,021,2375.77
Adjustment:	-	-	-	-36.00
Including: Goodwill	-	-	-	-
Unrealized profit of internal transactions	-	-	-	-
Impairment provision	-	-	-	-
Others	-	-	-	-
Carrying amount of equity investment in joint ventures	8,862,285.05	8,862,285.05	55,638,239.78	54,021,239.78
Fair value of equity investments with publicly quoted prices	-	-	-	-

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.2 Interests in joint ventures or associates (Continued)****(2) Key financial information of material joint ventures (Continued)**

Item	Shanghai Fengtong Equity Investment Fund Partnership (Limited Partnership)		Zhongji Sunward Technology Co., Ltd.	
	For the six months ended	For the six months ended	For the six months ended	For the six months ended
	30 June 2023	30 June 2022	30 June 2023	30 June 2022
Operating revenue	-	-	86,360,610.60	137,953,067.37
Finance expenses	-15,784.28	-3,698.33	-122,774.82	89,179.87
Income tax expenses	-	-	-282,302.14	-
Net profit	-222,876.44	-187,277.15	3,926,324.24	4,133,758.98
Total comprehensive income	-222,876.44	-187,277.15	3,926,324.24	4,133,758.98
Dividends received from joint ventures during the year	-	-	-	-

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.2 Interests in joint ventures or associates (Continued)****(3) Key financial information of material associates**

Item	Sichuan Chuannan Rail Transit Operation Co., Ltd.		Guizhou Tongye Construction Development Co., Ltd.	
	As at 30 June 2023	As at 31 December 2022	As at 30 June 2023	As at 31 December 2022
Current assets	220,237,675.37	278,176,960.74	1,230,526,017.48	1,215,151,267.79
Non-current assets	756,142,383.82	717,809,051.74	77,487.85	77,487.85
Total assets	976,380,059.19	995,986,012.48	1,230,603,505.33	1,215,228,755.64
Current liabilities	134,807,169.30	132,678,079.61	114,049,842.52	111,991,109.94
Non-current liabilities	519,326,100.00	540,852,565.10	1,060,999,458.59	1,062,499,458.59
Total liabilities	654,133,269.30	673,530,644.71	1,175,049,301.11	1,174,490,568.53
Net assets	322,246,789.89	322,455,367.77	55,554,204.22	40,738,187.11
Company's share of net assets	32,224,678.99	32,245,536.78	24,999,391.90	18,332,184.20
Adjustments	-	-	-	-
Including: Goodwill	-	-	-	-
Elimination of unrealized profit or loss on intra-group transactions	-	-	-	-
Impairment provision	-	-	-	-
Others	-	-	-	-
Carrying amount of interests in associates	32,245,536.78	32,245,536.78	18,030,168.63	18,332,184.20
Fair value of investments in associates which have quoted market price	-	-	-	-

SECTION 10 FINANCIAL REPORT

7. INTEREST IN OTHER ENTITIES (Continued)**7.2 Interests in joint ventures or associates (Continued)****(3) Key financial information of material associates (Continued)**

Item	Sichuan Chuannan Rail Transit Operation Co., Ltd.		Guizhou Tongye Construction Development Co., Ltd.	
	For the six months ended	For the six months ended	For the six months ended	For the six months ended
	30 June 2023	30 June 2022	30 June 2023	30 June 2022
Operating revenue	48,993,428.31	46,291,512.23	-	-
Net profit	-4,593.67	83,504.09	-137,700.43	-1,135,096.31
Net profit from discontinued operations	-	-	-	-
Total comprehensive income	-4,593.67	83,504.09	-137,700.43	-1,135,096.31
Dividends received from associates during this period	-	-	-	-

(4) Summarised financial information of immaterial joint ventures and associates

Item	As at/Period ended 30 June 2023	As at/Year ended 31 December 2022
Associates:		
Aggregate carrying amount of investments	626,784,641.32	584,206,755.99
The total amount of the following items calculated based on shareholding ratio		
Net profit	2,098,243.40	5,358,216.27
Total comprehensive income	2,098,243.40	5,358,216.27

SECTION 10 FINANCIAL REPORT

8. RISKS RELATED TO FINANCIAL INSTRUMENTS

The Company's major financial instruments include various equity investments, debt investments, derivative financial instruments, long-term and short-term borrowings, receivables and payables. See relevant sections of this report for details on financial instruments. Risks associated with the above financial instruments and risk management policies adopted by the Company to reduce these risks are set out below. Management manages and monitors these risk exposures to ensure that the above risks are controlled within the prescribed range.

8.1 Risk management objectives and policies

Main risks associated with the Company's financial instruments include credit risk, liquidity risk and market risk (including foreign exchange risk, interest rate risk and other price risks).

(1) Credit risk

Credit risk refers to the risk that one party to a financial instrument fails to perform its obligation, causing financial losses to the other party.

The Company's credit risk mainly involves receivables. Specific measures to control this risk are as follows:

The Company's accounts receivable are mainly generated from the engineering construction business. The Company's internal control system requires that the Company perform credit assessment on each client before submitting a bid and if the construction lasts over one year, reperform the credit assessment on a regular basis. Based on its contract review system, the project management department, the financial department, the legal department and other departments jointly review the contract to determine reasonable payment terms so as to minimize our advance risk. Operating cash flows linked performance indicators are in place to urge subsidiaries to speed up collection of receivables. The Company reviews the collection of receivables on an individual basis on the balance sheet date and requires additional guarantee in respect of key accounts associated with potential structural risks to ensure adequate impairment of credit losses for unrecoverable receivables. See Notes 3.10 above for expected credit loss policies.

SECTION 10 FINANCIAL REPORT

8. RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)**8.1 Risk management objectives and policies (Continued)****(2) Liquidity risk**

Liquidity risk refers to the risk that the Company is short of funds when performing its settlement obligations by delivery of cash or other financial assets.

The financial department continuously monitors the Company's short-term and long-term fund requirements to maintain adequate cash reserve. The Company utilizes multiple financing means including notes, bank borrowings and entrusted loans to maintain the balance between sustainability and flexibility of financing. The Company has obtained credit lines from several commercial banks with higher credit ratings to meet its demand for working capital and capital expenditure. Management monitors the use of bank borrowings and ensures compliance with loan agreements.

The Company raises working capital through funds generated from business operations and bank and other borrowings. As of 30 June 2023, the Company has a bank loan limit of 15,200,000,000.00 yuan that has not been used.

As of 30 June 2023, the Company's non-derivative financial liabilities to be paid on a net basis by relevant maturity groups during the remaining period from the balance sheet date to the contract maturity date as follows. (Unit: RMB'000)

Item	30 June 2023				Total
	Within 1 year	1 to 2 years	2 to 5 years	More than 5 years	
Loans (including interest payable)	6,530,270.66	3,097,267.87	1,464,555.78	563,800.00	11,655,894.31
Trade and other payables (excluding non-financial liabilities)	22,214,655.78	1,419.61	-	-	22,216,075.39
Dividend payables	-	-	-	-	-
Maximum amount guaranteed by the issued financial guarantee	-	-	40,850.00	8,052,965.40	8,093,815.40

SECTION 10 FINANCIAL REPORT

8. RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)**8.1 Risk management objectives and policies (Continued)****(2) Liquidity risk (Continued)**

At the end of the previous year, the Company's non-derivative financial liabilities to be paid on a net basis by relevant maturity groups during the remaining period from the balance sheet date to the contract maturity date as follows. (Unit: RMB'000)

Item	31 December 2022				Total
	Within 1 year	1 to 2 years	2 to 5 years	More than 5 years	
Loans (including interest payable)	7,312,377.05	2,233,920.00	2,450,780.00	572,300.00	12,569,377.05
Trade and other payables (excluding non-financial liabilities)	23,441,213.83	1,479.61	-	-	23,442,693.44
Dividend payables	-	-	-	-	-
Maximum amount guaranteed by the issued financial guarantee	4,500.00	-	-	487,695.20	492,195.20

It may differ from the carrying amount in the balance sheet because the amount disclosed in the table is the undiscounted contract cash flow.

The maximum guarantee amount of a signed guarantee contract may not necessarily be the amount to be paid.

SECTION 10 FINANCIAL REPORT

8. RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)

8.1 Risk management objectives and policies (Continued)

(3) Market risk

Market risk refers to the risk that the fair value or future cash flow of financial instruments fluctuate as market prices changes, including exchange rate risk, interest rate risk and other price risks.

a. Interest rate risk

Interest rate risk refers to the risk that the fair value or future cash flow of financial instruments fluctuate due to changes in market interest rates. The Company's interest rate risk mainly comes from recognized interest-bearing financial instruments

The Company pays close attention to the impact of interest rate changes on the Company's Interest rate risk.

b. Exchange rate risk

Exchange rate risk refers to the risk that the fair value or future cash flow of financial instruments fluctuate due to changes in foreign exchange rates. The Company's exchange rate risk mainly comes from financial instruments denominated in foreign currencies other than the functional currency.

The Company pays close attention to the impact of exchange rate changes on the Company's Foreign exchange risk.

c. Other price risks

Other price risks refer to the risk of fluctuations caused by changes in market prices other than exchange rate risks and interest rate risks, whether arising from factors related to a single financial instrument or its issuer, or from factors related to all similar financial instruments traded on the market.

SECTION 10 FINANCIAL REPORT

8. RISKS RELATED TO FINANCIAL INSTRUMENTS (Continued)**8.2 Capital management**

The capital management policies of the Company are made to ensure the continuous operation of the Company, in order to provide returns to shareholders and benefits to other stakeholders and to maintain the optimum capital structure for minimizing capital costs.

In order to maintain or adjust the capital structure, the Company may adjust dividends paid to shareholders, return capital to shareholders, issue new shares or dispose of assets to reduce its debts.

The Company manages its capital structure on the basis of gearing ratio. This ratio is calculated as net debt divided by total capital. Net debts are calculated as the total borrowings and other liabilities (including Short-term loans, Long-term loans due within one year and Bond payable due within one year, Bonds payable and Long-term loans) less cash and cash equivalents listed in Cash Flow Statement. Total capital includes shareholders' equity attributable to the parent company and non-controlling interest.

The Company monitors capital management by using the gearing ratio which is shown as follows:

Unit: RMB'000

Item	30 June 2023	31 December 2022
Short-term loans	3,622,608.33	4,184,225.13
Long-term loans due within one year	2,907,662.33	3,128,151.92
Long-term loans	5,125,623.65	5,257,000.00
Less: Cash and cash equivalents listed in Cash Flow Statement	3,120,916.14	6,857,364.05
Net debts	8,534,978.17	5,712,013.00
Total equity attributable to equity owners of the Company	7,055,555.70	10,455,057.26
Total capital	15,590,533.87	16,167,070.26
Gearing ratio	54.74%	35.33%

SECTION 10 FINANCIAL REPORT

9. FAIR VALUE

The level in which fair value measurement is categorised is determined by the level of the fair value hierarchy of the lowest level input that is significant to the entire fair value measurement. The levels are defined as follows:

Level 1 inputs: unadjusted quoted prices in active markets that are observable at the measurement date for identical assets or liabilities.

Level 2 inputs: inputs other than Level 1 inputs that are either directly or indirectly observable for underlying assets or liabilities.

Level 3 inputs: inputs that are unobservable for underlying assets or liabilities.

1. Items and amounts measured at fair value

As at 30 June 2023, the assets and liabilities measured at fair value are listed as follows according to the above three levels:

Item	Level 1 fair value measurement	Level 2 fair value measurement	Level 3 fair value measurement	Total
I. Recurring fair value measurement	–	446,769,913.34	51,159,750.62	497,929,663.96
1. Financial assets classified				
FVTOCI	–	446,769,913.34	51,159,750.62	497,929,663.96
(1) Debt instrument				
investments	–	446,769,913.34	–	446,769,913.34
(2) Equity instrument				
investments	–	–	51,159,750.62	51,159,750.62

At the end of the reporting period, the Company's financial instruments measured at fair value were its subordinated shares in ABS and equity investments in small-scale entities, which do not have observable market quotations. The Company valuate such investments based on their future cash inflows. Under limited circumstances, if insufficient recent information is available to determine the fair value, or possible estimated amount of the fair value is widely distributed, and the cost represents the best estimate of the fair value within the range of distribution, the cost may represent an appropriate estimate of the fair value within the distribution range.

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS**10.1 Information about the parent of the Company**

Name	Registration place	Business nature	Registered capital (RMB0,000)	Shareholding percentage %	Percentage of voting rights %
Aluminum Corporation of China	PRC	Mineral resources (excluding oil and natural gas) development, nonferrous metal smelting and processing, related trading and engineering and technical services	2,520,000.00	76.50	76.50

The ultimate controlling party of the Company is Aluminum Corporation of China (which is owned and controlled by SASAC). On 31 December 2020, China Aluminum Group directly held 73.56% equity interest in the Company and indirectly held 2.94% equity interest in the Company through its subsidiary, Luoyang Institute. China Aluminum Group held in aggregate a 76.50% equity interest in the Company.

10.2 Information about the subsidiaries of the Company

For details about the subsidiaries of the Company, refer to Note 6.1.

10.3 Information about joint ventures and associates of the Company

For details about the joint ventures and associates of the Company, refer to Note 6.2.

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.4 Information on other related parties**

Name	Related party relationship
Luoyang Nonferrous Metal Processing Design and Research Institute Co., Ltd	Our shareholder, ultimately controlled by the same parent
China Aluminum Materials Application Research Institute Co., Ltd.	Ultimately controlled by the same parent
Chinalco Innovation Development Investment Co., Ltd.	Ultimately controlled by the same parent
Chinalco Overseas Development Co., Ltd.	Ultimately controlled by the same parent
Beijing Aluminum Energy Fresh Environmental Technology Co., Ltd.	Ultimately controlled by the same parent
Chinalco Environmental Protection and Energy Saving Group Co., Ltd.	Ultimately controlled by the same parent
Henan Jiuli Technology Co., Ltd.	Ultimately controlled by the same parent
Chinalco Intelligent Technology Development Co., Ltd.	Ultimately controlled by the same parent
Aluminum Corporation of China Limited	Ultimately controlled by the same parent
Baotou Aluminium Co., Ltd.	Ultimately controlled by the same parent
Chibi Great Wall Carbon Products Co., Ltd.	Ultimately controlled by the same parent
Fushun Aluminium Co., Ltd.	Ultimately controlled by the same parent
Gansu Hualu Aluminum Industry Co., Ltd.	Ultimately controlled by the same parent
Guangxi Huasheng Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
Guizhou Huajin Aluminum Co., Ltd.	Ultimately controlled by the same parent
Guizhou Huaren Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
Henan Huahui Nonferrous Engineering Design Co., Ltd.	Ultimately controlled by the same parent
Lanzhou Aluminum Co., Ltd	Ultimately controlled by the same parent
Inner Mongolia Huayun Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
Shandong Yixing Carbon New Materials Co., Ltd.	Ultimately controlled by the same parent
Shanxi Huaxing Aluminum Co., Ltd.	Ultimately controlled by the same parent
Shanxi Chinalco Resources Co., Ltd	Ultimately controlled by the same parent
Chalco Hong Kong Limited	Ultimately controlled by the same parent
China Aluminum International Trading Co., Ltd.	Ultimately controlled by the same parent
Chinalco Group Shanxi Jiaokou Xinghua Science and Technology Co., Ltd.	Ultimately controlled by the same parent
China Aluminum Mining Co., Ltd.	Ultimately controlled by the same parent
China Aluminum Ningxia Energy Group Co., Ltd.	Ultimately controlled by the same parent
Chalco Qingdao Light metal Co., Ltd.	Ultimately controlled by the same parent
Chinalco Shandong Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
Chalco Shandong Co., Ltd.	Ultimately controlled by the same parent
Chinalco Shanxi Advanced Materials Co., Ltd.	Ultimately controlled by the same parent

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.4 Information on other related parties (Continued)**

Name	Related party relationship
Chinalco Logistics Group Southeast Asia International Land Port Co., Ltd.	Ultimately controlled by the same parent
Chinalco Logistics Group Co., Ltd.	Ultimately controlled by the same parent
The Middle International Inland Port of China Aluminum Logistics Group Ltd	Ultimately controlled by the same parent
China Aluminum Material Supply and Sales Co., Ltd.	Ultimately controlled by the same parent
Chalco Materials Co., Ltd.	Ultimately controlled by the same parent
China Aluminum Zhengzhou Nonferrous Metals Research Institute Co., Ltd.	Ultimately controlled by the same parent
Chinalco Zhongzhou Mining Co., Ltd.	Ultimately controlled by the same parent
Chinalco Zhongzhou Aluminum Co., Ltd.	Ultimately controlled by the same parent
Chinalco Zhongzhou Advanced Materials Technology Co., Ltd.	Ultimately controlled by the same parent
Zunyi Aluminum Co., Ltd.	Ultimately controlled by the same parent
Northeast Light Alloy Co., Ltd.	Ultimately controlled by the same parent
Harbin Dongqing Special Materials Co., Ltd.	Ultimately controlled by the same parent
Northwest Aluminum Co., Ltd	Ultimately controlled by the same parent
Southwest Aluminum (Group) Co., Ltd.	Ultimately controlled by the same parent
Chongqing Swa Mechanical & Electrical Equipment Engineering Co., Ltd.	Ultimately controlled by the same parent
Chinalco Henan Luoyang Aluminum Foil Co., Ltd.	Ultimately controlled by the same parent
Chinalco Henan Luoyang Aluminum Processing Co., Ltd.	Ultimately controlled by the same parent
Longxi Northwest Aluminum Foil Co., Ltd.	Ultimately controlled by the same parent
Chalco Ruimin Co., Ltd.	Ultimately controlled by the same parent
Chalco Sapa Special Aluminum Materials (Chongqing) Co., Ltd.	Ultimately controlled by the same parent
Chinalco Shenyang Nonferrous Metal Processing Co., Ltd.	Ultimately controlled by the same parent
Chinalco-SWA Co., Ltd.	Ultimately controlled by the same parent
Chifeng Yuntong Nonferrous Metals Co, Ltd	Ultimately controlled by the same parent
Chuxiong Dianzhong Nonferrous Metals Co., Ltd.	Ultimately controlled by the same parent
Heqing Yixin Aluminum Industry Co, Ltd	Ultimately controlled by the same parent
Honghe Yuntong Real Estate Development Co., Ltd.	Ultimately controlled by the same parent
Hulun Buir Chihong Mining Industry Co., Ltd.	Ultimately controlled by the same parent
Liangshan Mining Co, Ltd	Ultimately controlled by the same parent
Qinghai Hongxin Mining Co, Ltd	Ultimately controlled by the same parent
Qujing Yunlv Yuxin Aluminum Co., Ltd	Ultimately controlled by the same parent

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.4 Information on other related parties (Continued)**

Name	Related party relationship
Shangri-la Dingli Mining Co., Ltd.	Ultimately controlled by the same parent
Yimen Copper Co., Ltd.	Ultimately controlled by the same parent
Yuxi Mining Co, Ltd	Ultimately controlled by the same parent
Yunnan Chihong Zinc & Germanium Co., Ltd.	Ultimately controlled by the same parent
Yunnan Chihong Resource Comprehensive Utilization Co., Ltd.	Ultimately controlled by the same parent
Yunnan Chuxiong Mining and Metallurgy Co., Ltd.	Ultimately controlled by the same parent
Yunnan Diqing Mining Development Co., Ltd.	Ultimately controlled by the same parent
Yunnan Diging Nonferrous Metals Co., Ltd.	Ultimately controlled by the same parent
Yunnan Haoxin Aluminum Foil Co., Ltd.	Ultimately controlled by the same parent
Yunnan Jinding Zinc Industry Co., Ltd.	Ultimately controlled by the same parent
Yunnan Aluminium Co., Ltd.	Ultimately controlled by the same parent
Yunnan Copper(Group) Co., Ltd.	Ultimately controlled by the same parent
Yunnan Copper Real Estate Development Co., Ltd.	Ultimately controlled by the same parent
Yunnan Copper Co.,Ltd	Ultimately controlled by the same parent
Yunnan Copper Mineral Resources Exploration and Development Co., Ltd.	Ultimately controlled by the same parent
Yunnan Wenshan Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Metallurgical Kunming Heavy Industry Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Haixin Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Huixin Economic and Trade Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Yongxin Aluminum Industry Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Zexin Aluminum Industry Co, Ltd	Ultimately controlled by the same parent
Yunnan Yuntong Zinc Co., Ltd.	Ultimately controlled by the same parent
Chinalco Luoyang Copper Processing Co., Ltd.	Ultimately controlled by the same parent
Chinalco Luoyang Copper Co., Ltd.	Ultimately controlled by the same parent
Mineral Chalco Peru	Ultimately controlled by the same parent
China Copper Southeast Copper Co., Ltd.	Ultimately controlled by the same parent
Baotou Aluminum (Group) Co., Ltd.	Ultimately controlled by the same parent
Chinalco Science and Technology Research Institute Co., Ltd.	Ultimately controlled by the same parent
Guizhou Guilv Huayi Real Estate Development Co., Ltd.	Ultimately controlled by the same parent
Henan Changlv Industrial Service Co.,Ltd	Ultimately controlled by the same parent
Henan Changxing Industrial Co., Ltd.	Ultimately controlled by the same parent
Henan Chinalco Construction Engineering Co., Ltd.	Ultimately controlled by the same parent
Henan Chinalco Equipment Co., Ltd.	Ultimately controlled by the same parent

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.4 Information on other related parties (Continued)**

Name	Related party relationship
Pingguo Aluminum Co., Ltd.	Ultimately controlled by the same parent
Shandong Aluminum Industry Co., Ltd.	Ultimately controlled by the same parent
Shandong Shanlv Environmental Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
Shanxi Chalco Industry Service Co., Ltd.	Ultimately controlled by the same parent
Suzhou Xinchangguang Thermal Energy Technology Co., Ltd.	Ultimately controlled by the same parent
Suzhou Nonferrous Metals Research Institute Co., Ltd.	Ultimately controlled by the same parent
Zhengzhou Chinalco Construction and Development Co., Ltd.	Ultimately controlled by the same parent
China Great Wall Aluminum Industry Co., Ltd.	Ultimately controlled by the same parent
Chinalco Investment Development Co., Ltd.	Ultimately controlled by the same parent
Zibo Dadi Real Estate Development Co., Ltd.	Ultimately controlled by the same parent
Zibo Dongshan Industrial Co., Ltd.	Ultimately controlled by the same parent
Yunnan Metallurgical Group Co., Ltd.	Ultimately controlled by the same parent
China Copper Mineral Resources Co., Ltd.	Ultimately controlled by the same parent
Daxing'anling Jinxin Mining Co., Ltd.	Ultimately controlled by the same parent
China Copper Industry Co., Ltd.	Ultimately controlled by the same parent
Chinalco Qinghai Aluminum and Electricity Co., Ltd.	Ultimately controlled by the same parent
Shanxi Huasheng Aluminum Industry Co., Ltd.	Ultimately controlled by the same parent
Chinalco Aluminium Foil Co., Ltd.	Ultimately controlled by the same parent
China Aluminum Group High-end Manufacturing Co., Ltd.	Ultimately controlled by the same parent
Ningxia Fenghao Power Distribution Co., Ltd.	Ultimately controlled by the same parent
Chinalco Henan Aluminum Co., Ltd.	Ultimately controlled by the same parent
Chinalco Shanxi Aluminum Co., Ltd.	Ultimately controlled by the same parent
Chinalco Capital Holdings Limited	Ultimately controlled by the same parent
Yunnan Defu Environmental Protection Co., Ltd.	Ultimately controlled by the same parent
China Aluminum Insurance Brokerage (Beijing) Co., Ltd.	Ultimately controlled by the same parent
China Copper Asset Management Co., Ltd.	Ultimately controlled by the same parent
Chinalco Asset Management Co., Ltd.	Ultimately controlled by the same parent
China Copper Huazhong Copper Co., Ltd.	Ultimately controlled by the same parent
Chinalco Mining Corporation International	Ultimately controlled by the same parent
China Copper (Shanghai) Copper Industry Co., Ltd.	Ultimately controlled by the same parent
Zhongzhou Branch of Aluminum Corporation of China Limited	Ultimately controlled by the same parent

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.4 Information on other related parties (Continued)**

Name	Related party relationship
China Aluminum Advanced Materials Co., Ltd	Ultimately controlled by the same parent
Chalco (Shanghai) Carbon Co., Ltd.	Ultimately controlled by the same parent
Guiyang Lvmei Asset Management Co., Ltd.	Ultimately controlled by the same parent
Shanxi 12th Metallurgical Asset Management Co.,Ltd.	Ultimately controlled by the same parent
Hunan Changkan Trade and Commercial Development Co., Ltd.	Ultimately controlled by the same parent
Taiyuan China Nonferrous Metal Industry and 12th Metallurgical Real Estate Development Co., Ltd.	An associate of our parent
Yunnan Sotong Yunnan Aluminum Carbon Material Co., Ltd.	An associate of our parent
Sichuan Liwu Copper Mining Co., Ltd.	An associate of our parent
Yunnan Tianye Chemical Co., Ltd	An associate of our parent
Yunnan Simao Shanshui Copper Company Limited	An associate of our parent
Peking University Medical Zibo Hospital Co., Ltd.	An associate of our parent
Baotou Sendu Carbon Co., Ltd.	An associate of our parent
Maguan Yunnan Copper and Zinc Industry Co., Ltd.	An associate of our parent
Yunnan Yunchuang Tender Co., Ltd.	An associate of our parent
Chalco Guizhou Industrial Service Co., Ltd.	An associate of our parent
Qinghai Haiyuan Aluminum Co., Ltd.	An associate of our parent
Henan Changcheng Logistics Co., Ltd.	An associate of our parent
China Rare Earth Group Co., Ltd.	An associate of our parent
Guangxi Hualei Advanced Materials Co., Ltd.	An associate of our parent
Chalco Zibo International Trading Co., Ltd.	An associate of our parent
Chongqing Shangjiangchen Real Estate Co., Ltd.	An associate of our parent
Guangxi Huayin Aluminum Industry Co., Ltd.	An associate of our parent
Chinalco Industrial Service Technology Co., Ltd.	An associate of our parent

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.5 Transactions with related parties****(1) Purchases/sales**

① Purchase of goods/receiving of services

Related party	Nature of transaction	For the six months ended 30 June 2023	For the six months ended 30 June 2022
A subsidiary of China Aluminum Group	Provide engineering, construction and supervision services	7,297,852.95	20,139,881.42
A subsidiary of China Aluminum Group	Procurement of main materials and auxiliary materials	3,650,695.14	12,168,557.61
A subsidiary of China Aluminum Group	Back-up service and other business	3,121,225.46	4,664,339.36

Note: The pricing of related party transactions negotiated between the parties by reference to market price.

② Sales of goods/rendering of services

Related party	Nature of transaction	For the six months ended 30 June 2023	For the six months ended 30 June 2022
A subsidiary of China Aluminum Group	Provide engineering construction services	594,653,941.99	735,241,757.92
A subsidiary of China Aluminum Group	Provide engineering design services	147,700,982.00	46,773,455.47
A subsidiary of China Aluminum Group	Provide equipment manufacturing and sales	133,925,474.46	68,253,892.68
A subsidiary of China Aluminum Group	Back-up service and other business	5,130,978.09	12,821,605.81
An associate of the Company	Provide engineering design services	–	697,944.18

Note: The pricing of related party transactions negotiated between the parties by reference to market price.

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.5 Transactions with related parties (Continued)****(2) Leases**

① As the lessor

Name of lessee	Name of lessor	Type of assets leased	Lease income recognized for the current period	Lease income recognized in the previous period
China Aluminum Great Wall Construction Co.,Ltd.	China Aluminum Mining Co., Ltd.	Land	423,209.15	423,209.15

Note: The pricing of related party transactions negotiated between the parties by reference to market price.

② As the lessee

Name of lessor	Name of lessee	Type of assets leased	Lease expenses recognized for the current period	Lease expenses recognized in the previous period
Chinalco (Shanghai) Co., Ltd.	Chalieco trading Co.,Ltd	Buildings	-	39,622.64
China Aluminum Shandong Co., Ltd	China Aluminum Shandong Engineering Technology Corporation Limited	Buildings	55,108.26	17,331.48
Luoyang Nonferrous Metal Processing Design and Research Institute Co., Ltd	China Nonferrous Metals Processing Technology Co., Ltd.	Buildings	434,294.52	434,294.52
Suzhou Nonferrous Metal Design and Research Institute Co., Ltd	China Nonferrous Metals Processing Technology Co., Ltd.	Buildings	174,790.31	174,790.31

Note: The pricing of related party transactions negotiated between the parties by reference to market price.

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.5 Transactions with related parties (Continued)****(2) Leases (Continued)**

② As the lessee (Continued)

The Company, as the lessee, bears the interest expense of lease liabilities in the current period:

Name of lessor	Types of assets leased	Interest expense of current period	Interest expense of previous period
Luoyang Nonferrous Metal Processing Design and Research Institute Co., Ltd	Buildings	42,207.55	61,886.97
Suzhou Nonferrous Metal Design and Research Institute Co., Ltd	Buildings	57,698.05	15,491.06

(3) Guarantee

① As the guarantor

Guarantee holder	Amount of guarantee	Inception date of guarantee	Maturity date of guarantee	Guarantee expired (Y/N)
Yunnan Ningyong Expressway Co. Ltd	3,694,103,400.00	23 Dec 2019	23 Dec 2053	No
Yunnan Linyun Expressway Co. Ltd	2,507,310,000.00	23 Dec 2019	23 Dec 2053	No
Yunnan Linshuang Expressway Co. Ltd	1,851,552,000.00	6 May 2020	6 May 2054	No
Mian County Urban Rural Infrastructure Construction Co., Ltd	40,850,000.00	20 Oct 2015	19 Oct 2027	No

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.5 Transactions with related parties (Continued)****(4) Funding from related party**

Related party	Amount of funding/deposit	Inception date	Maturity date	Interest rate	Interest expense/ interest income	Remarks
Funds received:						
Chinalco Finance Company Limited	3,960,900,000.00	2 Mar 2022 to 20 Jun 2023	24 Jul 2023 to 18 Jun 2026	2.60-4.35	47,400,684.69	Credit loan
Provide deposit service:						
Chinalco Finance Company Limited	1,451,656,250.66	-	-	0.525-1.755	11,326,917.19	Deposits at banks

(5) Remuneration of key management personnel

The Company has 8 key management personnel as of 30 June 2023. Details about remuneration is as follows:

Item	For the six months ended 30 June	For the six months ended 30 June 2022
Remuneration of key management personnel	2,064,272.72	1,877,951.86

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.6 Receivables from and payables to related parties****(1) Receivables from related parties**

Item	Related party	As at 30 June 2023		As at 31 December 2022	
		Gross carrying amount	Impairment of credit losses	Gross carrying amount	Impairment of credit losses
Accounts receivable	A subsidiary of China Aluminum Group	1,428,872,886.34	252,174,529.20	1,330,437,056.61	195,203,958.80
Accounts receivable	A joint venture of China Aluminum Group	90,342,954.11	1,874,877.51	116,172,952.13	3,221,107.17
Accounts receivable	An associate of China Aluminum Group	154,367.47	12,741.84	24,098,411.75	349,523.12
Accounts receivable	An associate of the Company	286,593,784.48	16,003,679.41	859,761,165.21	20,674,759.27
Other receivables	A subsidiary of China Aluminum Group	131,275,476.86	23,635,947.44	108,177,978.96	20,099,983.18
Other receivables	A joint venture of China Aluminum Group	952,179.75	152,760.90	800,000.00	144,540.00
Other receivables	An associate of China Aluminum Group	-	-	1,499,366.63	468,819.40
Other receivables	An associate of the Company	583,423.62	146,932.62	11,052,947.95	539,802.00
Prepayments	A subsidiary of China Aluminum Group	9,656,887.97	-	2,710,988.62	-
Prepayments	A joint venture of the Company	1,680,000.00	-	1,809,000.00	-
Prepayments	An associate of the Company	14,000,000.39	-	14,024,713.49	-

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.6 Receivables from and payables to related parties (Continued)****(2) Payables to related parties**

Item	Related party	As at 30 June 2023	As at 31 December 2022
Accounts payable	A subsidiary of China Aluminum Group	98,879,415.89	61,976,866.82
Accounts payable	A joint venture of China Aluminum Group	13,548,253.00	–
Accounts payable	An associate of China Aluminum Group	2,954,073.93	–
Accounts payable	A joint venture of the Company	20,969,965.81	23,354,118.88
Accounts payable	An associate of the Company	21,795,919.71	14,980,519.82
Other payables	A subsidiary of China Aluminum Group	25,991,538.07	26,449,026.42
Other payables	A joint venture of China Aluminum Group	131,152.00	50,000.00
Other payables	An associate of China Aluminum Group	12,000.00	1,400.00
Other payables	An associate of the Company	1,574,000.00	1,518,698.00
Short-term loans	A subsidiary of China Aluminum Group	35,000,000.00	1,607,488.37
Non-current liabilities due within one year	A subsidiary of China Aluminum Group	–	1,163,272.57

SECTION 10 FINANCIAL REPORT

10. RELATED PARTIES AND RELATED PARTY TRANSACTIONS (Continued)**10.7 Contract assets and contract liabilities of related parties****(1) Contract assets**

Related party	As at 30 June 2023		As at 31 December 2022	
	Gross carrying amount	Impairment of credit losses	Gross carrying amount	Impairment of credit losses
A subsidiary of China				
Aluminum Group	692,879,248.17	150,068,461.93	786,219,813.46	40,965,728.35
A joint venture of China				
Aluminum Group	6,371,989.32	230,341.28	5,237,722.89	1,759,669.09
An associate of China				
Aluminum Group	-	-	161,237.53	806.19
An associate of the Company	982,131,297.07	7,828,558.52	849,473,850.69	4,241,037.78

(2) Contract liabilities

Related party	As at 30 June 2023	As at 31 December 2022
A subsidiary of China Aluminum Group	507,026,245.90	378,242,565.21
A joint venture of China Aluminum Group	24,097,324.73	12,948,804.20
An associate of China Aluminum Group	-	1,837,002.71
An associate of the Company	20,617,635.09	222,790,673.22

SECTION 10 FINANCIAL REPORT

11. COMMITMENTS AND CONTINGENCIES

11.1 Significant commitments

The Company and Yunnan Transportation Investment Construction Group Co., Ltd. (“Yunnan Transportation Investment”) jointly formed a non-government equity investor to work together with the local governments to invest in and establish three project companies, namely Yunnan Ningyong Expressway Co., Ltd. (“Ningyong Expressway”), Yunnan Linyun Expressway Co., Ltd. (“Linyun Expressway”) and Yunnan Linshuang Expressway Co., Ltd. (“Linshuang Expressway”), for the construction and operation of the said expressways under PPP mode. The shareholding of the Company, Yunnan Transportation Investment and the investment vehicle designated by the local governments in the three PPP project companies was 30%, 40% and 30% respectively.

The capital structure of each project company is as follow:

The investment vehicle designated by local government contributed 30% of total project investment (of which RMB30 million is the registered capital and the rest is capital reserve). The Company and Yunnan Transportation Investment respectively contributed RMB30 million and RMB40 million as paid-in registered capital.

Meanwhile, the Company and Yunnan Transportation Investment provide credit enhancement for the difference between the total investment and the capital contribution in proportion to their relative shareholding (3:4), and are liable for the financing for the operation period on a 42.86%:57.14% basis. Each shareholder is liable for the financing for the operation period of the project company according to their shareholding proportion.

According to the relevant agreements, the Company is required to provide credit enhancement up to RMB4.559 billion, RMB3.19 billion and RMB2.086 billion (up to RMB9.835 billion in total) for investment loans granted to Ningyong Expressway, Linyun Expressway and Linshuang Expressway respectively, and issue a letter of undertaking for deficiency. The letter of undertaking for deficiency should be signed up to the above amounts respectively after negotiation with relevant creditors.

As of the date of approval of this report, the Company has actually issued the letter of undertaking and provided credit enhancement as follows:

Ningyong Expressway was granted a credit line of RMB11 billion by the bank, and the Company has issued a letter of undertaking for deficiency as to RMB9.347 billion or 42.86% of the credit line. The bank has actually granted a loan of RMB8.619 billion, and the Company has provided credit enhancement for RMB3.694 billion of the loan.

SECTION 10 FINANCIAL REPORT

11. COMMITMENTS AND CONTINGENCIES (Continued)**11.1 Significant commitments (Continued)**

Linyun Expressway was granted a credit line of RMB10.1 billion by the bank, and the Company has issued a letter of undertaking for deficiency as to RMB6.0 billion or 42.86% of the credit line. The bank has actually granted a loan of RMB5.85 billion, and the Company has provided credit enhancement for RMB2.507 billion of the loan.

Linshuang Expressway was granted a credit line of RMB9.9 billion by the bank, and the Company has issued a letter of undertaking for deficiency as to RMB4.32 billion or 42.86% of the credit line. The bank has actually granted a loan of RMB4.32 billion, and the Company has provided credit enhancement for RMB1.852 billion of the loan.

11.2 Contingencies**(1) Contingent liabilities arising from pending arbitration and pending litigation and related financial impact**

- ① The Company as the plaintiff

Plaintiff	Defendant	Cause	Amount claimed (RMB ten thousand)	Progress of the case
China Aluminum International Engineering Corporation Limited	Qingdao Xinfu Gongchuang Asset Management Co., Ltd., Shandong Real Estate Development Group Qingdao Company, LIANG Yongjian, WANG Xiaoning, Qingdao Liangyou Catering Co., Ltd.	Other disputes	90,921.54	Arbitration suspended
China Sixth Metallurgical Construction Co., Ltd.	Xincal Development Investment Co., Ltd.	Construction project contract disputes	50,667.33	The case is in the early stages of appraisal
Jiuye Construction Co., Ltd.	Fujian Zhongnuo Anju Car Rental Co., Ltd.	Construction project contract disputes	37,340.16	In January 2023, Jiuye applied to the court for engineering cost appraisal. At present, the preliminary appraisal draft has been confirmed, and the cross examination will be conducted after the appraisal institution issues a formal report

SECTION 10 FINANCIAL REPORT

11. COMMITMENTS AND CONTINGENCIES (Continued)**11.2 Contingencies (Continued)****(1) Contingent liabilities arising from pending arbitration and pending litigation and related financial impact (Continued)**

① The Company as the plaintiff (Continued)

Plaintiff	Defendant	Cause	Amount claimed (RMB ten thousand)	Progress of the case
Jiuye Construction Co., Ltd.	Shaanxi Weida Real Estate Development Co., Ltd.	Construction project contract disputes	26,113.60	Trial of first instance
China Nonferrous Metal Changsha Survey and Design Institute Co., Ltd.	Changsha Evergrande Children's World Theme Park Tourism Development Co., Ltd., Evergrande Children's World Group Co., Ltd, Shenzhen Kunxing No. 6 Investment Partnership	Construction project contract disputes	12,334.72	Trial of first instance
China Sixth Metallurgical Construction Co., Ltd.	Inner Mongolia Xinwang Renewable Resources Co., Ltd.	Construction project contract disputes	10,337.57	The case is in the cost appraisal process
Duyun Development Zone Tongda Construction Co., Ltd.	Duyun Industrial Cluster Capital Operation Co., Ltd., Management Committee of Duyun Economic Development Zone, Qiannan State Investment Co., Ltd., People's Government of Qiannan Buyi and Miao Autonomous Prefecture, Finance Bureau of Qiannan Buyi and Miao Autonomous Prefecture, Duyun Economic Development Zone Finance Bureau	Construction project contract disputes	9,929.75	The case has been appealed by Duyun Tongda

SECTION 10 FINANCIAL REPORT

11. COMMITMENTS AND CONTINGENCIES (Continued)**11.2 Contingencies (Continued)****(1) Contingent liabilities arising from pending arbitration and pending litigation and related financial impact (Continued)**

① The Company as the plaintiff (Continued)

Plaintiff	Defendant	Cause	Amount claimed (RMB ten thousand)	Progress of the case
China Sixth Metallurgical Construction Co., Ltd.	Management Committee of Hohhot Economic and Technological Development Zone Ruyi District; Hohhot Economic and Technological Development Zone Boyuan Real Estate Development Co., Ltd., Inner Mongolia Jinhang Real Estate Development Co., Ltd., Hohhot Economic and Technological Development Zone Investment Development Group Co., Ltd.	Construction project contract disputes	8,070.32	Trial of first instance
China Aluminum International (Tianjin) Construction Co., Ltd.	Henan Longcheng Venture Development Co., Ltd., Henan Longxing Development Co., Ltd.	Construction project contract disputes	6,544.00	Trial of first instance
China Sixth Metallurgical Construction Co., Ltd.	Chaoyang Engineering and Construction Group Co., Ltd.	Construction project contract disputes	6,142.22	This case is in the engineering quantity appraisal process
China Sixth Metallurgical Construction Co., Ltd.	Inner Mongolia Hengda Real Estate Co., Ltd.	Construction project contract disputes	5,208.36	The case is currently under trial

SECTION 10 FINANCIAL REPORT

11. COMMITMENTS AND CONTINGENCIES (Continued)**11.2 Contingencies (Continued)****(1) Contingent liabilities arising from pending arbitration and pending litigation and related financial impact (Continued)**

② The Company as the defendant

Plaintiff	Defendant	Cause	Amount claimed (RMB ten thousand)	Progress of the case
Zhumadian Development Zone Jiafucheng Real Estate Co., Ltd.	China Sixth Metallurgical Construction Co., Ltd.	Construction project contract disputes	17,612.63	Trial of first instance
Guizhou Huaren Advanced Material Co., Ltd.	Guiyang Branch of China Aluminum International Engineering Corporation Limited	Construction project contract disputes	14,523.36	Waiting for the Guiyang Arbitration Commission to give a ruling
Baoji Hui Feng Construction Engineering Co., Ltd.	Jiuye Construction Co., Ltd.	Construction project contract disputes	13,797.59	Be expected to open a court session in mid July
Mianchi Branch of China Mining Construction Group Co., Ltd.	Chinalco Zhongzhou Mining Co., Ltd., Sanmenxia Branch of China Aluminum Zhongzhou Mining Co., Ltd.	Construction project contract disputes	12,906.00	The case is currently under trial
China No.4 Metallurgical Construction Company of China Limited	CINF Engineering Co., Ltd.	Construction project contract disputes	8,434.06	The second instance trial procedure has been completed and is awaiting the judgment of the case
Xi'an Geotechnical Engineering Co., Ltd. of China Nonferrous Metals Industry	Shenyang Branch of China Aluminum International Engineering Corporation Limited	Construction project contract disputes	7,539.50	The case is in the appraisal process
XU Lin	China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	Construction project contract disputes	5,778.87	Trial of first instance
Zhongai Culture Communication (Tianjin) Co., Ltd.	China Aluminum International (Tianjin) Construction Co., Ltd.	Other disputes	5,106.15	Trial of second instance

SECTION 10 FINANCIAL REPORT

11. COMMITMENTS AND CONTINGENCIES (Continued)**11.2 Contingencies (Continued)****(2) Contingent liabilities arising from guarantee provided to other entities and related financial effects**

As at 30 June 2023, the Company provided guarantees for the following loans:

Name of the guaranteed entity	Guarantee	Amount	Period	Remarks
Mian County Urban Rural Infrastructure Construction Co., Ltd	Loan guarantee	4,085.00	19 Oct 2027	-
Total	-	4,085.00	-	-

(3) Other contingencies (excluding those which are highly unlikely to result in the outflow of economic benefits from the enterprise)

As of 30 June 2023, there is no other contingency to be disclosed.

12. POST BALANCE SHEET DATE EVENTS

12.1 Significant non-adjustment items:

N/A

12.2 Profit distribution after the balance sheet date

N/A

12.3 Sales returns

N/A

12.4 Other events after the balance sheet date

As at 22 August 2023 (the date on which the report is approved by the Board of Directors), the Company has no other events after the balance sheet date to be disclosed.

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS**13.1 Debt restructuring****(1) Disclosure by the debtor**

Debt restructuring method	Carrying amount of debt	Gains from debt restructuring	Increase in shareholders' equity, such as share capital
Debts settled with cash below the carrying amount of the debts	24,774,041.75	1,140,641.43	–

(2) Disclosure by creditors

Debt restructuring method	Carrying amount of debt	Losses from debt restructuring	Increase in long-term equity investments	Proportion of the debtor's equity
Creditor's right recovered with cash below the carrying amount of the creditor's right	7,746,506.77	1,746,506.77	–	–
Recovery of claims with non-cash assets	45,097,390.00	–	–	

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS (Continued)**13.2 Segment reporting****(1) Segment profit or loss, assets and liabilities**

At the end of current period	Engineering Design and Consultancy	Project construction and sub- contracting	Equipment manufacturing	Inter-segment elimination	Total
Operating revenue	1,148,914,919.08	7,388,654,556.45	1,158,959,777.02	-74,473,333.88	9,622,055,918.67
Operating cost	835,864,968.47	6,793,932,392.66	1,023,795,914.76	-76,097,473.73	8,577,495,802.16
Operating profits/(losses)	51,708,222.83	-1,056,899,112.59	62,981,322.79	-	-942,209,566.97
Profit before income tax	51,011,033.76	-1,059,573,305.65	61,840,487.23	-	-946,721,784.66
Income tax expenses	12,007,408.98	-150,001,181.49	6,450,019.09	-	-131,543,753.42
Net profit	39,003,624.78	-909,572,124.16	55,390,468.14	-	-815,178,031.24
Total assets	6,107,111,078.99	34,916,590,239.59	6,785,877,941.17	-5,958,823,280.36	41,850,755,979.39
Total liabilities	3,132,043,683.02	30,998,524,619.84	6,534,360,210.03	-5,869,728,232.21	34,795,200,280.68
Supplementary information:					
1. Depreciation and amortisation	39,886,552.44	55,055,423.85	28,736,243.23	-	123,678,219.52
2. Impairment losses	651,236.31	1,221,539,919.32	-3,141,229.14	-	1,217,747,453.87
3. Credit impairment losses	8,897,590.26	-140,260,136.13	-9,021,487.79	-	-140,384,033.66

For six months ended 30 June 2022/ as at 30 June 2022	Engineering Design and Consultancy	Project construction and sub- contracting	Equipment manufacturing	Inter-segment elimination	Total
Operating revenue	1,113,603,866.62	8,517,033,195.36	1,028,761,885.04	-142,307,818.51	10,517,091,128.51
Operating cost	817,946,413.16	7,840,059,884.19	909,958,673.77	-138,617,349.35	9,429,347,621.77
Operating profits	101,320,280.87	153,573,830.46	22,409,943.87	-	277,304,055.20
Profit before income tax	102,481,406.06	119,732,533.40	22,443,664.26	-	244,657,603.72
Income tax expenses	15,238,753.57	42,797,865.91	2,988,580.54	-	61,025,200.02
Net profit	87,242,652.49	76,934,667.49	19,455,083.72	-	183,632,403.70
Total assets	22,303,381,654.98	38,697,376,212.81	3,564,233,053.75	-3,290,911,243.18	61,274,079,678.36
Total liabilities	12,394,867,390.93	32,252,014,958.51	2,605,772,470.31	-5,634,848,698.00	41,617,806,121.75
Supplementary information:					
1. Depreciation and amortisation	39,780,271.22	88,800,128.82	8,876,769.50	-	137,457,169.54
2. Impairment losses	43,713.12	-7,050,706.62	1,035,005.46	-	-5,971,988.04
3. Credit impairment losses	-19,427,856.28	-108,475,695.57	4,429,930.79	-	-123,473,621.06

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS (Continued)**13.3 Leases****(1) As lessee**

Item	For the six months ended 30 June 2023
Total cash outflows related to leasing	8,731,624.79
Total	8,731,624.79

Note: Please refer to Note 5. 17 for information related to the Right-of-use assets

(2) As lessor

For operating lease:

Item	For the six months ended 30 June 2023
Rental income	34,349,216.04
Income related to variable lease payments not included in lease payments	-

Year	30 June 2023
The 1st year after the balance sheet date	61,293,546.61
The 2nd year after the balance sheet date	64,755,624.61
The 3rd year after the balance sheet date	55,360,625.61
The 4th year after the balance sheet date	55,305,626.61
The 5th year after the balance sheet date	55,410,627.61
The undiscounted lease receipts to be received annually for five consecutive fiscal years after the balance sheet date	292,126,051.05

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS (Continued)**13.4 Others****(1) Auditor's remuneration**

Auditor's remuneration	For the six months ended 30 June 2023	For the six months ended 30 June 2022
Total	1,000,000.00	1,170,000.00

(2) Directors', supervisors' and employees' emoluments

① Directors' and supervisors' emoluments

Director/supervisor	For the six months ended 30 June 2023	For the six months ended 30 June 2022
Salaries, bonuses, and allowances	1,086,450.68	1,044,235.68
Social insurance and Housing provident fund	352,293.00	245,369.72
Retirement pension	-	-
Total	1,438,743.68	1,289,605.40

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS (Continued)**13.4 Others (Continued)****(2) Directors', supervisors' and employees' emoluments (Continued)**

① Directors' and supervisors' emoluments (Continued)

For the six months ended 30 June 2023:

Director/supervisor	Fee	Salaries, bonuses, and allowances			Social insurance and Housing provident fund	Retirement pension	Others	Total
		Basic salary	Subsidy, allowance	Bonus				
Directors								
LI Yihua	-	179,400.00	-	-	78,843.00	-	-	258,243.00
LIU Jing	-	179,400.00	60,000.00	-	78,843.00	-	-	318,243.00
LIU Ruiping	-	179,400.00	7,740.00	-	78,843.00	-	-	265,983.00
ZHANG Jian	-	76,050.00	3,900.00	-	36,921.00	-	-	116,871.00
WU Jianqiang	-	-	-	-	-	-	-	-
HU Zhenjie	-	-	-	-	-	-	-	-
ZHOU Xinzhe	-	-	-	-	-	-	-	-
ZHANG Wenjun	-	-	-	-	-	-	-	-
GUI Weihua	-	71,428.56	-	-	-	-	-	71,428.56
ZHANG Hongguang	-	-	-	-	-	-	-	-
FU Jun	-	-	-	-	-	-	-	-
XIAO Zhixiong	-	71,428.56	-	-	-	-	-	71,428.56
TONG Pengfang	-	71,428.56	-	-	-	-	-	71,428.56
Subtotal	-	828,535.68	71,640.00	-	273,450.00	-	-	1,173,625.68
Supervisors								
FAN Guangsheng	-	179,400.00	6,875.00	-	78,843.00	-	-	265,118.00
HE Wenjian	-	-	-	-	-	-	-	-
LIN Ni	-	-	-	-	-	-	-	-
OU Xiaowu	-	-	-	-	-	-	-	-
LI Wei	-	-	-	-	-	-	-	-
Subtotal	-	179,400.00	6,875.00	-	78,843.00	-	-	265,118.00
Total	-	1,007,935.68	78,515.00	-	352,293.00	-	-	1,438,743.68

Note:

- A. The Company has not established Director's fees system;
- B. ZHANG Wenjun resigned as a director of the Company and a member of the Audit Committee of the Board of Directors on 11 April 2023 due to job change, and did not hold any position in the Company.

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS (Continued)**13.4 Others (Continued)****(2) Directors', supervisors' and employees' emoluments (Continued)**

① Directors' and supervisors' emoluments (Continued)

For the six months ended 30 June 2022:

Director/supervisor	Fee	Salaries, bonuses, and allowances			Social insurance	Retirement pension	Others	Total
		Basic salary	Subsidy, allowance	Bonus	and Housing provident fund			
Directors								
WU Jianqiang	-	26,000.00	-	-	10,893.79	-	-	36,893.79
LI Yihua	-	145,600.00	-100.00	-	54,468.95	-	-	199,968.95
LIU Jing	-	179,400.00	110,000.00	-	65,362.74	-	-	354,762.74
LIU Ruiping	-	78,000.00	3,900.00	-	21,787.58	-	-	103,687.58
ZHANG Jian	-	76,050.00	3,900.00	-	27,493.92	-	-	107,443.92
HU Zhenjie	-	-	-	-	-	-	-	-
ZHOU Xinzhe	-	-	-	-	-	-	-	-
ZHANG Wenjun	-	-	-	-	-	-	-	-
GUI Weihua	-	71,428.56	-	-	-	-	-	71,428.56
ZHANG Hongguang	-	35,714.28	-	-	-	-	-	35,714.28
FU Jun	-	35,714.28	-	-	-	-	-	35,714.28
XIAO Zhixiong	-	35,714.28	-	-	-	-	-	35,714.28
TONG Pengfang	-	35,714.28	-	-	-	-	-	35,714.28
Subtotal	-	719,335.68	117,700.00	-	180,006.98	-	-	1,017,042.66
Supervisors								
FAN Guangsheng	-	179,400.00	27,800.00	-	65,362.74	-	-	272,562.74
HE Wenjian	-	-	-	-	-	-	-	-
LIN Ni	-	-	-	-	-	-	-	-
OU Xiaowu	-	-	-	-	-	-	-	-
LI Wei	-	-	-	-	-	-	-	-
Subtotal	-	179,400.00	27,800.00	-	65,362.74	-	-	272,562.74
Total	-	898,735.68	145,500.00	-	245,369.72	-	-	1,289,605.40

SECTION 10 FINANCIAL REPORT

13. OTHER SIGNIFICANT MATTERS (Continued)**13.4 Others (Continued)****(2) Directors', supervisors' and employees' emoluments (Continued)**

② Five highest paid individuals

As at 30 June 2023, there are 2 directors and 1 supervisor among the 5 highest paid individuals in the Company. Their emoluments have been reflected in the emoluments of directors and supervisors. The emoluments paid to the remaining 2 persons during the year are as follows:

Item	For six months ended 30 June 2023
Salaries, bonuses, and allowances	373,575.00
Social insurance and Housing provident fund	147,685.68
Retirement pension	–
Total	521,260.68

As of June 30, 2023, the emoluments paid to the above five individuals for the year are all within RMB1,000,000.00.

As at 30 June 2022, there are 1 director and 1 supervisor among the 5 highest paid individuals in the Company. Their emoluments have been reflected in the emoluments of directors and supervisors. The emoluments paid to the remaining 3 persons during the year are as follows:

Item	For six months ended 30 June 2022
Salaries, bonuses, and allowances	516,750.00
Social insurance and Housing provident fund	196,088.22
Retirement pension	–
Total	712,838.22

As of June 30, 2022, the emoluments paid to the above five individuals for the year are all within RMB1,000,000.00.

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS**14.1 Accounts receivable****(1) An aging analysis of trade receivables is listed as follows:**

Aging	30 June 2023 (Unaudited)	31 December 2022
Within 1 year	475,910,211.67	435,728,658.04
1 to 2 years	174,435,539.46	132,266,455.07
2 to 3 years	39,845,215.88	120,337,451.86
3 to 4 years	168,160,992.15	92,069,478.96
4 to 5 years	234,712,354.96	235,474,074.78
More than 5 years	215,811,971.08	451,867,110.38
Subtotal	1,308,876,285.20	1,467,743,229.09
Less: Impairment of credit losses	437,563,918.87	556,957,656.27
Total	871,312,366.33	910,785,572.82

(2) Accounts receivable and impairment of credit losses by category are listed as follows:

Type	Gross carrying amount		30 June 2023 (Unaudited) Impairment of credit losses		Carrying amount
	Amount	Percentage (%)	Amount	Expected credit loss rate (%)	
Impairment of credit losses on an individual basis	548,055,584.42	41.87	348,238,282.80	63.54	199,817,301.62
Impairment of credit losses on group basis	760,820,700.78	58.13	89,325,636.07	11.74	671,495,064.71
Including:					
Expected credit loss group	534,687,217.88	40.85	89,325,636.07	16.71	445,361,581.81
Accounts receivable from subsidiaries	226,133,482.90	17.28	-	-	226,133,482.90
Total	1,308,876,285.20	100.00	437,563,918.87	33.43	871,312,366.33

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.1 Accounts receivable (Continued)

**(2) Accounts receivable and impairment of credit losses by category are listed as follows:
(Continued)**

Type	Gross carrying amount		31 December 2022 Impairment of credit losses		Carrying amount
	Amount	Percentage (%)	Amount	Expected credit loss rate (%)	
Impairment of credit losses on an individual basis	765,189,752.44	52.13	477,817,329.34	62.44	287,372,423.10
Impairment of credit losses on group basis	702,553,476.65	47.87	79,140,326.93	11.26	623,413,149.72
Including:					
Expected credit loss group	500,928,028.04	34.13	79,140,326.93	15.80	421,787,701.11
Accounts receivable from subsidiaries	201,625,448.61	13.74	–	–	201,625,448.61
Total	1,467,743,229.09	100.00	556,957,656.27	37.95	910,785,572.82

Impairment of credit losses on an individual basis:

Name	30 June 2023			Reasons
	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)	
Company 1	499,543,254.06	299,725,952.44	60.00	Not received in the past 3 years
Company 2	33,338,150.36	33,338,150.36	100.00	The company made impairment of credit losses based on the recoverability
Company 3	15,174,180.00	15,174,180.00	100.00	The company made impairment of credit losses based on the recoverability
Total	548,055,584.42	348,238,282.80	–	–

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.1 Accounts receivable (Continued)

(2) **Accounts receivable and impairment of credit losses by category are listed as follows:
(Continued)**

Name	Gross carrying amount	31 December 2022		Reasons
		Impairment of credit losses	Expected credit loss rate (%)	
Company 1	481,762,713.12	289,057,627.88	60.00	The company made impairment of credit losses based on the recoverability
Company 4	236,668,344.63	142,001,006.78	60.00	The company made impairment of credit losses based on the recoverability
Company 2	32,133,034.69	32,133,034.68	100.00	The company made impairment of credit losses based on the recoverability
Company 3	14,625,660.00	14,625,660.00	100.00	The company made impairment of credit losses based on the recoverability
Total	765,189,752.44	477,817,329.34	-	-

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.1 Accounts receivable (Continued)

**(2) Accounts receivable and impairment of credit losses by category are listed as follows:
(Continued)**

Impairment of credit losses on group basis:

Grouped items: Expected credit loss group

	30 June 2023			31 December 2022		
	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)
Within 1 year	298,044,002.20	2,261,439.29	0.50	300,151,023.80	1,500,755.11	0.50
1 to 2 years	68,286,928.86	6,828,692.89	10.00	26,117,844.47	2,611,784.45	10.00
2 to 3 years	14,716,907.82	2,943,381.56	20.00	95,209,143.80	19,041,828.76	20.00
3 to 4 years	105,735,173.83	31,720,552.16	30.00	29,643,660.64	8,893,098.19	30.00
4 to 5 years	4,665,270.00	2,332,635.00	50.00	5,426,989.82	2,713,494.91	50.00
More than 5 years	43,238,935.17	43,238,935.17	100.00	44,379,365.51	44,379,365.51	100.00
Total	534,687,217.88	89,325,636.07	-	500,928,028.04	79,140,326.93	-

Grouped items: Accounts receivable from subsidiaries

	30 June 2023			31 December 2022		
	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)
Accounts receivable from subsidiaries	226,133,482.90	-	-	201,625,448.61	-	-
Total	226,133,482.90	-	-	201,625,448.61	-	-

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.1 Accounts receivable (Continued)

(3) Movements in impairment of credit losses for accounts receivable are listed as follows:

	Impairment of credit losses
Amount as at 1 January 2023	556,957,656.27
Additions	22,627,807.38
Transferred with creditor's rights	10,949,611.63
Recoveries or reversals	142,021,544.78
Others	10,949,611.63
Amount as at 30 June 2023	437,563,918.87

(4) Actual accounts receivable written off during the current period

Nil.

(5) As at 30 June 2023, accounts receivable from the five largest customers are listed as follows:

Entity	Carrying amount	Percentage in total accounts receivable (%)	Impairment of credit losses
Company 1	499,543,254.06	38.17	299,725,952.44
Company 5	245,357,418.65	18.75	5,990,742.72
Company 6	200,269,933.57	15.30	–
Company 7	80,911,684.99	6.18	24,273,505.50
Company 8	61,340,112.97	4.69	2,704,343.76
Total	1,087,422,404.24	83.09	332,694,544.42

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables

Item	30 June 2023 (Unaudited)	31 December 2022
Interests receivable	352,123,602.78	346,630,755.55
Dividends receivable	642,077,598.75	660,029,198.75
Other receivables	5,123,944,102.40	5,719,653,566.94
Less: Impairment of credit losses	20,009,516.19	18,659,828.01
Total	6,098,135,787.74	6,707,653,693.23

(1) Interests receivable

Item	30 June 2023 (Unaudited)	31 December 2022
Entrusted loans	352,123,602.78	346,630,755.55
Less: Impairment of credit losses	–	–
Total	352,123,602.78	346,630,755.55

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(2) Dividends receivable

Investee	30 June 2023 (Unaudited)	31 December 2022
China Sixth Metallurgical Construction Co., Ltd.	169,870,462.40	169,870,462.40
Jiuye Construction Co., Ltd.	144,168,000.00	144,168,000.00
China Nonferrous Metal Changsha Survey and Design Institute Co., Ltd.	10,374,899.93	10,374,899.93
Shenyang Aluminum and Magnesium Engineering and Research Institute Company Limited	109,866,100.00	109,866,100.00
China Aluminium Great Wall Construction Co., Ltd.	21,252,414.21	21,252,414.21
Kunming Prospecting Design Institute Of China Nonferrous Metals Industry Co., Ltd	66,083,600.00	66,083,600.00
CINF Engineering Co., Ltd.	61,026,800.00	61,026,800.00
China Aluminum International Aluminum Application Engineering Co., Ltd.	–	10,311,600.00
Chinalco Southwest Construction Investment Co., Ltd.	4,079,900.00	4,079,900.00
China Aluminum International Investment Management (Shanghai) Co., Ltd.	–	6,000,000.00
China Aluminum International Technology Development Corporation Limited	45,000,000.00	46,640,000.00
Chinalco Tendering Co., Ltd.	8,125,422.21	8,125,422.21
China Aluminum International Yunnan Aluminum Application Engineering Co., Ltd.	2,230,000.00	2,230,000.00
Total	642,077,598.75	660,029,198.75

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(3) Other receivables

① An aging analysis of other receivables is listed as follows:

Aging	30 June 2023 (Unaudited)	31 December 2022
Within 1 year	4,686,435,363.62	5,376,067,911.88
1 to 2 years	263,838,639.80	167,915,375.98
2 to 3 years	98,206,252.64	100,392,861.85
3 to 4 years	68,248,745.11	682,339.32
4 to 5 years	3,187,633.96	2,967,610.64
More than 5 years	4,027,467.27	71,627,467.27
Subtotal	5,123,944,102.40	5,719,653,566.94
Less: impairment of credit losses	20,009,516.19	18,659,828.01
Total	5,103,934,586.21	5,700,993,738.93

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(3) Other receivables (Continued)

- ② As at 30 June 2023 and 31 December 2022, gross carrying amount of other receivables categorized by nature is listed as follows:

Item	Gross carrying amount	30 June 2023 (Unaudited)	
		Impairment of credit losses	Carrying amount
Retention funds or deposits	3,582,454.62	260,537.01	3,321,917.61
Advance	5,062,822,277.96	18,489,379.82	5,044,332,898.14
Equity transfer payment	2,421,000.00	1,210,500.00	1,210,500.00
Reserve fund	1,722,468.98	15,315.61	1,707,153.37
Others	53,395,900.84	33,783.75	53,362,117.09
Total	5,123,944,102.40	20,009,516.19	5,103,934,586.21

Item	31 December 2022		
	Gross carrying amount	Impairment of credit losses	Carrying amount
Retention funds or deposits	465,309.40	47,646.03	417,663.37
Advance	136,272,061.78	14,156,672.32	122,115,389.46
Equity transfer payment	–	–	–
Reserve fund	355,989.56	8,755.99	347,233.57
Others	5,582,560,206.20	4,446,753.67	5,578,113,452.53
Total	5,719,653,566.94	18,659,828.01	5,700,993,738.93

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(3) Other receivables (Continued)

③ Other receivables and impairment of credit losses by category are listed as follows:

Classified by impairment of credit losses method

Type	Gross carrying amount		30 June 2023 (Unaudited) Impairment of credit losses		Carrying amount
	Amount	Percentage (%)	Amount	Expected credit loss rate (%)	
Impairment of credit losses on an individual basis	-	-	-	-	-
Impairment of credit losses on group basis	5,123,944,102.40	100.00	20,009,516.19	0.39	5,103,934,586.21
Including: Aging group	140,932,294.73	2.75	20,009,516.19	14.20	120,922,778.54
Accounts receivable from subsidiaries	4,983,011,807.67	97.25	-	-	4,983,011,807.67
Total	5,123,944,102.40	100.00	20,009,516.19	0.39	5,103,934,586.21

Type	Gross carrying amount		31 December 2022 Impairment of credit losses		Carrying amount
	Amount	Percentage (%)	Amount	Expected credit loss rate (%)	
Impairment of credit losses on an individual basis	-	-	-	-	-
Impairment of credit losses on group basis	5,719,653,566.94	100.00	18,659,828.01	0.33	5,700,993,738.93
Including: Aging group	786,765,095.19	13.76	18,659,828.01	2.37	768,105,267.18
Accounts receivable from subsidiaries	4,932,888,471.75	86.24	-	-	4,932,888,471.75
Total	5,719,653,566.94	100.00	18,659,828.01	0.33	5,700,993,738.93

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(3) Other receivables (Continued)

- ③ Other receivables and impairment of credit losses by category are listed as follows:
(Continued)

Impairment of credit losses on group basis:

Grouped items: Aging group

	30 June 2023			31 December 2022		
	Gross carrying amount	Expected credit loss rate (%)	Impairment of credit losses	Gross carrying amount	Expected credit loss rate (%)	Impairment of credit losses
Within 1 year	36,280,296.77	0.50	271,315.56	731,070,447.86	0.50	3,655,293.10
1 to 2 years	53,213,016.76	10.00	5,321,301.68	2,820,735.30	10.00	282,073.53
2 to 3 years	44,274,446.42	20.00	8,854,889.29	45,524,614.67	20.00	9,104,922.94
3 to 4 years	169,956.87	30.00	50,987.06	354,219.45	30.00	106,265.84
4 to 5 years	2,967,110.64	50.00	1,483,555.33	2,967,610.64	50.00	1,483,805.33
More than 5 years	4,027,467.27	100.00	4,027,467.27	4,027,467.27	100.00	4,027,467.27
Total	140,932,294.73	-	20,009,516.19	786,765,095.19	-	18,659,828.01

Grouped items: Accounts receivable from subsidiaries

	30 June 2023			31 December 2022		
	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)	Gross carrying amount	Impairment of credit losses	Expected credit loss rate (%)
Accounts receivable from subsidiaries	4,983,011,807.67	-	-	4,932,888,471.75	-	-
Total	4,983,011,807.67	-	-	4,932,888,471.75	-	-

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(3) Other receivables (Continued)

④ Movements in the impairment of credit losses of other receivables are listed as follows:

Impairment of credit losses	Stage I	Stage II	Stage III	Total
	Expected credit losses over the next 12 months	Lifetime expected credit losses (no credit impairment)	Lifetime expected credit losses (credit impaired)	
Balance as at January 1, 2023	3,655,293.10	9,386,996.47	5,617,538.44	18,659,828.01
Balance as at January 1, 2023 in the current period	3,655,293.10	9,386,996.47	5,617,538.44	18,659,828.01
- Transfer to Stage II	-266,060.78	266,060.78	-	-
- Transfer to Stage III	-	-33,991.37	33,991.37	-
- Transfer back to Stage II	-	1,534,542.39	-1,534,542.39	-
Additions	-3,117,916.76	6,555,806.30	1,435,678.75	4,873,568.29
Reversals	-	-	3,523,880.11	3,523,880.11
Balance as at June 30, 2023	271,315.56	17,709,414.57	2,028,786.06	20,009,516.19

⑤ Other receivables actually written off in the current period

Nil.

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.2 Other receivables (Continued)

(3) Other receivables (Continued)

⑥ As at 30 June 2023, other receivables from the five largest customers are listed as follows:

Entity	Nature	Closing balance	Aging	Proportion to total closing balance of other receivables (%)	Balance of impairment of credit losses
Company 1	Principal and interest of entrusted loan	1,622,120,009.73	Within 1 year	31.66	–
Company 2	Principal and interest of entrusted loan	963,482,803.26	Within 1 year	18.80	–
Company 3	Principal and interest of entrusted loan	589,528,801.50	Within 1 year	11.51	–
Company 4	Principal and interest of entrusted loan	419,428,791.68	Within 1 year	8.19	–
Company 5	Principal and interest of entrusted loan	324,391,500.01	Within 1 year	6.33	–
Total	–	3,918,951,906.18	–	76.49	–

14.3 Long-term equity investments

Item	30 June 2023 (Unaudited)			31 December 2022		
	Gross carrying amount	Impairment provision	Carrying amount	Gross carrying amount	Impairment provision	Carrying amount
Investment in subsidiaries	7,741,404,571.91	294,977,001.95	7,446,427,569.96	7,621,404,571.91	294,977,001.95	7,326,427,569.96
Investment in joint ventures	8,862,285.05	–	8,862,285.05	8,862,285.05	–	8,862,285.05
Investment in associates	248,196,309.49	–	248,196,309.49	243,704,894.10	–	243,704,894.10
Total	7,998,463,166.45	294,977,001.95	7,703,486,164.50	7,873,971,751.06	294,977,001.95	7,578,994,749.11

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.3 Long-term equity investments (Continued)

(1) Investment in subsidiaries

Investee	1 January 2023	Additions for the period	Reductions for the period	30 June 2023	Impairment provision in the current period	Impairment provision Closing balance
Guiyang Aluminium Magnesium Design & Research Institute Co., Ltd.	651,766,965.50	-	-	651,766,965.50	-	-
Shenyang Aluminum and Magnesium Engineering and Research Institute Company Limited	332,257,365.81	20,000,000.00	-	352,257,365.81	-	-
CINF Engineering Co., Ltd.	375,612,236.37	-	-	375,612,236.37	-	-
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	1,255,780,969.93	-	-	1,255,780,969.93	-	-
Chalieco Trading Co., Ltd.	200,000,000.00	-	-	200,000,000.00	-	200,000,000.00
China Aluminum International (Tianjin) Construction Co., Ltd.	226,887,383.73	-	-	226,887,383.73	-	-
China Sixth Metallurgical Construction Co., Ltd.	1,203,000,000.00	-	-	1,203,000,000.00	-	-
China Nonferrous Metals Processing Technology Co., Ltd.	720,479,260.67	-	-	720,479,260.67	-	-
Duyun Development Zone Tongda Construction Co., Ltd.	5,000,000.00	-	-	5,000,000.00	-	-
China Aluminum International Technology Development Corporation Limited	60,000,000.00	-	-	60,000,000.00	-	-
Wenzhou Tongrun Construction Co., Ltd.	18,000,000.00	-	-	18,000,000.00	-	-
China Aluminum International Yunnan Aluminum Application Engineering Co., Ltd.	78,000,000.00	-	-	78,000,000.00	-	-
Wenzhou Tonghui Construction Co., Ltd.	27,000,000.00	-	-	27,000,000.00	-	-
China Aluminum International Investment Management (Shanghai) Co., Ltd.	505,738,713.97	-	-	505,738,713.97	-	-
China Nonferrous Metal Changsha Survey and Design Institute Co., Ltd.	189,273,189.34	-	-	189,273,189.34	-	-
Changsha Tongxiang Construction Co., Ltd.	10,000,000.00	-	-	10,000,000.00	-	-

SECTION 10 FINANCIAL REPORT

**14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS
(Continued)****14.3 Long-term equity investments (Continued)****(1) Investment in subsidiaries (Continued)**

Investee	1 January 2023	Additions for the period	Reductions for the period	30 June 2023	Impairment provision in the current period	Impairment provision Closing balance
Chalieco Hong Kong Corporation Limited	65,572,000.00	-	-	65,572,000.00	-	-
China Aluminum International Engineering (India) Private Limited	5,941,804.59	-	-	5,941,804.59	-	-
Guangxi Tongrui Investment Construction Co., Ltd.	250,000,000.00	-	-	250,000,000.00	-	-
Jiuye Construction Co., Ltd.	623,170,000.00	-	-	623,170,000.00	-	-
China Aluminum International Aluminum Application Engineering Co., Ltd.	144,500,000.00	-	-	144,500,000.00	-	-
Qingdao Xinfu Gongchuang Asset Management Co., Ltd.	9,000,000.00	-	-	9,000,000.00	-	-
China Aluminum Shandong Engineering Technology Corporation Limited	187,946,928.49	-	-	187,946,928.49	-	94,977,001.95
Kunming Prospecting Design Institute Of China Nonferrous Metals Industry Co., Ltd	263,457,753.51	100,000,000.00	-	363,457,753.51	-	-
Chinalco Southwest Construction Investment Co., Ltd.	213,020,000.00	-	-	213,020,000.00	-	-
Total	7,621,404,571.91	120,000,000.00	-	7,741,404,571.91	-	294,977,001.95

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.3 Long-term equity investments (Continued)

(2) Investment in joint ventures & associates

Investee	1 January 2023	Increase in investment	Decrease in investment	Movements during the six months ended 30 June 2023				30 June 2023	Closing balance of provision for impairment
				Investment gain or loss recognised under equity method	OCI	Other equity movements	Cash dividends or profits declared		
(1) Associates									
Chinaeco Shituo Intelligent Technology Co., Ltd.	1,518,644.39	-	-	-208,082.44	-	-	-	-	1,310,561.95
Chinaeco Tendering Co., Ltd.	23,137,605.14	-	-	3,736,443.90	-	-	-	-	26,874,049.04
Yunnan Ningyong Expressway Co., Ltd.	12,461,328.11	-	-	-3,472,766.81	-	-	-	-	9,008,561.30
Yunnan Linyun Expressway Co., Ltd.	17,306,488.28	-	-	4,666,496.89	-	-	-	-	21,972,985.17
Yunnan Linshuang Expressway Co., Ltd.	14,722,459.95	-	-	-413,455.60	-	-	-	-	14,309,004.35
Zhuzhou Tianqiao Crane Co., Ltd.	174,538,368.23	-	-	182,779.45	-	-	-	-	174,721,147.68
Subtotal	243,704,894.10	-	-	4,491,415.39	-	-	-	-	248,196,309.49
(2) Joint venture									
Shanghai Fengtong Equity Investment Fund Partnership (Limited Partnership)	8,862,285.05	-	-	-	-	-	-	-	8,862,285.05
Subtotal	8,862,285.05	-	-	-	-	-	-	-	8,862,285.05
Total	252,567,179.15	-	-	4,491,415.39	-	-	-	-	257,068,594.54

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.4 Operating revenue and operating costs

(1) Operating revenue and operating costs

Item	For the six months ended 30 June 2023 (Unaudited)		For the six months ended 30 June 2022	
	Revenue	Costs	Revenue	Costs
Principal activities	473,727,825.08	488,535,289.80	264,667,125.65	256,484,204.88
Other operating activities	13,056,972.87	–	9,508,000.67	–
Total	486,784,797.95	488,535,289.80	274,175,126.32	256,484,204.88

(2) Operating revenue and operating costs by major segments

Major segments	For the six months ended 30 June 2023 (Unaudited)		For the six months ended 30 June 2022	
	Revenue	Costs	Revenue	Costs
Principal activities:				
Engineering contracting	386,023,299.06	447,648,134.69	188,558,890.12	163,936,747.13
Engineering design and consultancy	86,672,353.18	40,816,712.62	76,108,235.53	92,547,457.75
Equipment manufacturing	1,032,172.84	70,442.49	–	–
Subtotal	473,727,825.08	488,535,289.80	264,667,125.65	256,484,204.88
Other operating activities:				
Lease	25,509.68	–	21,627.47	–
Others	13,031,463.19	–	9,486,373.20	–
Subtotal	13,056,972.87	–	9,508,000.67	–
Total	486,784,797.95	488,535,289.80	274,175,126.32	256,484,204.88

SECTION 10 FINANCIAL REPORT

14. NOTES TO THE PARENT COMPANY'S FINANCIAL STATEMENTS (Continued)

14.4 Operating revenue and operating costs (Continued)

(3) Operating revenue for the current period by time of revenue recognition

Revenue recognition time	For the six months ended 30 June 2023 (Unaudited)			Total
	Engineering construction	Design and survey	Equipment manufacturing	
Recognised at a point in time	-	-	-	-
Recognised over a period time	386,023,299.06	86,672,353.18	1,032,172.84	473,727,825.08
Total	386,023,299.06	86,672,353.18	1,032,172.84	473,727,825.08

14.5 Investment income

Item	For the six months ended 30 June 2023 (Unaudited)	For the six months ended 30 June 2022
Gain on long-term equity investment accounted for under the cost method	120,000,000.00	-
Gain on long-term equity investment accounted for under the equity method	4,491,415.39	1,273,432.46
Investment income during the holding period of debt investment	52,297,882.72	-
Investment income during the holding period of other equity instrument investments	-	37,324.04
Investment income from entrusted wealth management products	8,152,083.33	8,152,083.33
Total	184,941,381.44	9,462,839.83

SECTION 10 FINANCIAL REPORT

15. SUPPLEMENTARY INFORMATION**15.1 Breakdown of non-recurring profit and loss for the period**

Item	For the six months ended 30 June 2023	Remarks
Gain or loss on disposal of non-current assets	2,558,475.76	–
Government subsidies recorded in current P&L (except government subsidies closely related to business operations granted continuously in a fixed amount or quota according to the unified national standards)	8,912,293.17	–
Financing fee from non-financial enterprises recorded in profit or loss	9,874,500.05	–
Gains or losses on debt restructuring	–605,865.34	–
Reversal of impairment of credit losses for receivables and contract assets tested for impairment on an individual basis	200,938,502.84	–
Other non-operating income and expenses other than above items	–4,712,217.70	–
Total non-recurring profit and loss	216,965,688.78	–
Less: The impact of income tax	24,450,921.58	–
Net non-recurring profit and loss	192,514,767.20	–
Less: The impact on non-controlling interests	2,637,739.12	–
Non-recurring profit and loss attributable to ordinary shareholders of the company	189,877,028.08	–

15.2 Net asset yield and earnings per share

Profit for the reporting period	Weighted average net assets yield (%)	Earnings per share	
		Basic	Diluted
Net profit attributable to ordinary shareholders	–18.93	–0.30	–
Net profit attributable to ordinary shareholders net of non-recurring gain or loss	–23.02	–0.36	–

Note: As of 30 June 2023, the Company has no diluted potential ordinary shares.