



# 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



ANNUAL  
REPORT  
2019

## IMPORTANT NOTE

- I. The Board of Directors, Board of Supervisors, Directors, Supervisors and senior management of the Company guarantee that the contents of the Annual 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. WUYIGE Certified Public Accountants LLP issued a standard Auditor's Report without qualified opinion for the Company.
- IV. WU Jianqiang, the Company's principal, ZHANG Jian, the accounting principal, and ZHANG Xiuyin, the accounting function's principal (the person in charge of the accounting function) undertake that: the financial report in this Annual 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 Adopted by the Board

As audited by WUYIGE Certified Public Accountants LLP, the 2019 consolidated financial statements prepared by Chalieco under the China Accounting Standards for Business Enterprises show that net profit attributable to shareholders of the listed company was RMB34,852,562.55, and undistributed profit of the parent company was RMB19,930,329.36. On the basis of a total share capital of 2,959,066,667 shares, the Company plans to distribute cash dividends of RMB0.036 (pretax) per 10 shares, totaling RMB10,652,640.00, and carry forward the remaining undistributed profits of RMB9,277,689.36 into the next year. The proposed total cash dividends account for 30.56% of net profits attributable to shareholders of the listed company as stated in the 2019 consolidated financial statements of Chalieco. The proposal is subject to consideration and approval of the 2019 Annual General Meeting.

### 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.

## IMPORTANT NOTE

VII. Any Funds Occupied by the Controlling Shareholder or its Related Parties for Non-operating Purpose

None

VIII. Any Guarantee Provided for Any Third Party in Violation of Required Decision Procedures

None

IX. Material Risk Disclosure

The Company mainly faces epidemic risk, policy risk, price risk, interest rate risk, operational risk, financial risk, overseas operational risk and exchange rate risk. For details, please refer to the section under the heading of “Section 5 Operating Results Discussion and Analysis” – “III. Discussion and Analysis of Future Development of the Company” – “(IV) Potential Risks” of this Report. Investor attention is drawn thereto.

X. Other Note

Applicable Not applicable

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

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## SECTION 1 INTERPRETATIONS

### I. INTERPRETATIONS

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

#### Glossary of Terms

the “Company”, “Company”, “Chalieco”, “we”, “us” or “our”	means	China Aluminum International Engineering Corporation Limited (中鋁國際工程股份有限公司)
“Group”	means	the Company and its subsidiaries
“Chinalco”	means	Aluminum Corporation of China (中國鋁業集團有限公司), our controlling shareholder
“Luoyang Institute”	means	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
“State Council”	means	the State Council of the People’s Republic of China
“MIIT”	means	the Ministry of Industry and Information Technology of the PRC
“Ministry of Finance”	means	the Ministry of Finance of the PRC
“SASAC”	means	the State-owned Assets Supervision and Administration Commission of the State Council
“CSRC”	means	the China Securities Regulatory Commission
“SSE”	means	the Shanghai Stock Exchange
“Stock Exchange”	means	the Stock Exchange of Hong Kong Limited
“SSE Listing Rules”	mean	the Rules Governing the Listing of Stocks on SSE
“Listing Rules of the Stock Exchange” or “Listing Rules”	mean	the Rules Governing the Listing of Securities on the Stock Exchange
“Board”	means	the board of directors of the Company
“Board of Supervisors”	means	the board of supervisors of the Company
“Audit Committee”	means	the audit committee of the Board
“Remuneration Committee”	means	the remuneration committee of the Board
“Risk Management Committee”	means	the risk management committee of the Board
“Strategy Committee”	means	the strategy committee of the Board
“Nomination Committee”	means	the nomination committee of the Board
“Chalco”	means	Aluminum Corporation of China Limited (中國鋁業股份有限公司), listed on New York Stock Exchange (stock code: ACH), SSE (stock code: 601600) and the Stock Exchange (stock code: 2600) and a subsidiary of Chinalco
“Chinalco Finance”	means	Chinalco Finance Company Limited (中鋁財務有限責任公司)
“SAMI”	means	Shenyang Aluminum & Magnesium Engineering & Research Institute Co., Ltd. (瀋陽鋁鎂設計研究院有限公司), a wholly-owned subsidiary of the Company
“GAMI”	means	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

## SECTION 1 INTERPRETATIONS

“Changsha Institute”	means	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
“CNPT”	means	China Nonferrous Metals Processing Technology Co., Ltd. (中色科技股份有限公司), a subsidiary owned as to 73.5% by the Company
“Changkan Institute”	means	China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd. (中國有色金屬長沙勘察設計研究院有限公司), a wholly-owned subsidiary of our Company
“Kunming Survey and Design Institute”	means	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
“Sixth Metallurgical Company”	means	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
“Chinalco Southwest Construction”	means	Chinalco Southwest Construction Investment Co., Ltd. (中鋁西南建設投資有限公司)
“Ninth Metallurgical Company”	means	Ninth Metallurgical Construction Co., Ltd., a subsidiary as to 62.5% owned by the Company
“Twelfth Metallurgical Company”	means	China Nonferrous Metals Industry’s 12th Metallurgical Construction Co., Ltd. (中色十二冶金建設有限公司), a company incorporated in the PRC with limited liability and a wholly-owned subsidiary of the Company
“Shandong Engineering”	means	Chalco Shandong Engineering Technology Co., Ltd. (中鋁山東工程技術有限公司), a subsidiary as to 60% owned by the Company
“China Aluminum Equipment”	means	China Aluminum International Engineering Equipment Co., Ltd. (中鋁國際工程設備有限公司), a wholly-owned subsidiary of the Company
“China Aluminum Technology”	means	China Aluminum International Technology Development Co., Ltd. (中鋁國際技術發展有限公司), a wholly-owned subsidiary of the Company
“Miyu Company”	means	Yunnan Miyu Expressway Investment and Development Co., Ltd. (雲南彌玉高速公路投資開發有限公司)
“4+1” business directions	mean	nonferrous metallurgy project general contracting, municipal and civil work general contracting, aluminum for engineering construction, engineering consultancy service + overseas business
“3531” market deployment	means	in over 5 years or so, identifying 30 key cities for market exploration, signing contracts valuing RMB5 billion per city per year, and achieving the goal of operating revenue of RMB3 billion and profit of RMB100 million
“Dual systems”	means	project manager accountability system and project cost responsibility system
“A core business plus a sideline business”	means	A core business and a sideline business
“Renminbi” or “RMB”	means	the lawful currency of the PRC
“HK\$”	means	Hong Kong dollars, the lawful currency of Hong Kong

## 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	WU Jianqiang

### II. CONTACTS AND CONTACT INFORMATION

	<b>Secretary to the Board</b>	<b>Representative for Securities Affairs</b>
Name	ZHANG Jian	LI Gang
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

### III. BASIC INFORMATION

Registered address of the Company	Building C, No. 99 Xingshikou Road, Haidian District, Beijing
Postal code for registered address of the Company	100093
Domestic office of the Company	Building C, No. 99 Xingshikou Road, Haidian District, Beijing
Postal code for domestic office of the Company	100093
HK Office of the Company	Room 4501, Far East Finance Centre, 16 Harcourt Road, Admiralty, Hong Kong
Website of the Company	<a href="http://www.chalieco.com.cn">http://www.chalieco.com.cn</a>
E-mail	IR-chalieco@chalieco.com.cn

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

### IV. INFORMATION DISCLOSURE AND PLACE AT WHICH THE REPORT IS AVAILABLE

The Company's designated press media for information disclosure	China Securities Journal, Shanghai Securities News, Securities Times, Securities Daily
CSRC designated website for Annual Report	www.sse.com.cn
Annual Report available at	Board Office of Chalieco at Building C, No. 99 Xingshikou Road, Haidian District, Beijing

### V. STOCK PROFILE

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

### VI. OTHER RELEVANT INFORMATION

Auditor (Domestic)	Name	WUYIGE Certified Public Accountants LLP
	Office address	22F Xueyuan International Tower, No.1 Zhichun Road, Haidian District, Beijing
	Names of accountants who signed the report	XIE Qing, DING Tingting
Sponsor performing continuous supervision duties during the reporting period	Name	China Merchants Securities Co., Ltd.
	Office address	No. 111, Fuhuayuan Road, Futian Sub-district, Futian District, Shenzhen, Guangdong
	Names of the sponsor's representatives who signed the report	SHEN Tao, Wang Zhiwei
	Period of continuous supervision	From 31 August 2018 to 31 December 2020
Legal advisor as to PRC laws	Name	Jia Yuan Law Office
	Office Address	F408, Ocean Plaza, 158 Fuxing Men Nei Street, Xicheng District, Beijing

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

Legal advisor as to Hong Kong laws	Name	Clifford Chance
	Office Address	27th Floor Jardine House One Connaught Place Central Hong Kong
Auditor (International) <sup>(Note)</sup>	Name	None
	Office address	None
	Names of accountants who signed the report	None
A Share Registrar	Name	China Securities Depository and Clearing Co., Ltd. Shanghai Branch
	Office Address	36/F, China Insurance Building, 166 Lujiazui East Road, Pudong New Area, Shanghai
H Share Registrar	Name	Computershare Hong Kong Investor Services Limited
	Office Address	Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai Hong Kong

Note: According to the revision to the Listing Rules of the Stock Exchange and relevant regulations of the Ministry of Finance and the CSRC, as of 15 December 2010, companies incorporated in Mainland China and listed on the Stock Exchange are allowed to prepare their financial statements using PRC Accounting Standards, and PRC accounting firms approved by the Ministry of Finance and the CSRC are allowed to provide relevant services to these companies using China auditing standards. In view of this, upon the approval at the fourth extraordinary general meeting on 30 December, 2019 on which the same was adopted at fourth extraordinary general meeting, the Company appoints only one accounting firm as its external auditor every year, regardless of whether it acts as domestic or overseas auditor.

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

## VII. KEY ACCOUNTING FIGURES AND FINANCIAL INDICATORS FOR RECENT THREE YEARS

## (I) Key Accounting Figures

Unit: '0000 Yuan Currency: RMB

Key Accounting Figures	2019	2018		YoY Change (%)	2017	
		Adjusted	Unadjusted		Adjusted	Unadjusted
Revenue	<b>3,105,979.16</b>	3,363,485.12	3,357,211.13	-7.66	3,611,217.91	3,606,534.58
Net profit attributable to shareholders of the listed company	<b>3,485.26</b>	30,610.38	30,568.70	-88.61	59,148.46	59,120.89
Net profit attributable to shareholders of the listed company net of non-recurring gain or loss	<b>-3,882.83</b>	21,963.9	21,932.59	-117.68	32,028.97	32,040.26
Net cash flow from operating activities	<b>109,597.68</b>	56,488.63	57,096.58	94.02	164,292.64	164,011.67
<b>As at the end of 2019</b>	<b>As at the end of 2019</b>	2018		YoY Change (%)	2017	
		Adjusted	Unadjusted		Adjusted	Unadjusted
Net assets attributable to shareholders of the listed company	<b>1,132,205.99</b>	1,015,869.44	1,015,869.44	11.45	918,644.06	917,823.00
Total assets	<b>5,599,946.31</b>	4,906,900.14	4,903,098.34	14.12	4,542,145.34	4,537,378.98



## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

### (II) Key Financial Indicators

Key Financial Indicators	2019	2018		YoY Change (%)	2017	
		Adjusted	Unadjusted		Adjusted	Unadjusted
Basic earnings per share (RMB/share)	<b>-0.02</b>	0.08	0.08	-125	0.21	0.21
Dilute earnings per share (RMB/share)						
Basic earnings per share net of non-recurring gain or loss (RMB/share)	<b>-0.04</b>	0.04	0.04	-200	0.11	0.11
Weighted average return on net assets (%)	<b>-0.66</b>	2.84	2.84	decreased by 3.5 percentage point	7.56	7.56
Weighted average rate of return on net assets net of non-recurring gain or loss (%)	<b>-1.53</b>	1.67	1.67	decreased by 3.2 percentage point	4.1	4.1

**Explanation of key accounting figures and financial indicators of the Company as at the end of the reporting period.**

Applicable Not applicable

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

### (I) Differences in net profit and in net assets attributable to shareholders of the listed company in financial reports disclosed under International Accounting Standards and under PRC Accounting Standards

Applicable Not applicable

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

### (II) Differences in net profit and in net assets attributable to shareholders of the listed company in financial reports disclosed under overseas accounting standards and under China Accounting Standards

Applicable Not applicable

### (III) Explanation of differences between PRC Accounting Standards and International Accounting Standards:

Applicable Not applicable

## IX. KEY FINANCIAL FIGURES BY QUARTER IN 2019

Unit: '0000 Yuan Currency: RMB

	Q1 (Jan-Mar)	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct-Dec)
Operating revenue	615,032.58	736,617.30	745,417.88	1,008,911.39
Net profit attributable to shareholders of the listed company	5,252.72	-4,246.59	1,198.90	1,280.23
Net profit attributable to shareholders of the listed company net of non-recurring gain or loss	4,144.57	-4,059.35	1,140.93	-5,108.98
Net cash flow from operating activities	-118,884.40	10,199.29	28,080.10	190,202.69

### Description of differences between quarterly figures and those disclosed in regular reports.

Applicable Not applicable

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

### X. ITEMS AND AMOUNTS OF NON-RECURRING GAIN OR LOSS

✓Applicable    □Not applicable

Unit: Yuan Currency: RMB

<b>Non-recurring Gain or Loss</b>	<b>Amounts in 2019</b>	Amounts in 2018	Amounts in 2017
Gain or loss on disposal of non-current assets	<b>-5,477,862.75</b>	126,446,167.81	19,499,510.23
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)	<b>10,236,127.37</b>	25,022,557.94	42,505,474.06
Financing fee income from non-financial enterprises recorded in P&L	<b>16,293,877.06</b>	6,469,586.46	161,485,584.78
Gain arising from the acquisition of interests in a subsidiary, associate or joint ventures at an investment cost below the share in the fair value of net identifiable assets of the investee at the time of acquisition			133,962.25
Gain or loss on non-monetary asset exchange	<b>41,952,015.53</b>		
Gain or loss on assets under discretionary investment or management			
Asset impairment provisions arising from force majeure factors such as natural disasters			
Gains or losses on debt restructuring	<b>-3,012,041.8</b>	-464,247.12	-4,780,402.82
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	<b>1,057,684.02</b>		12,274,575.12
Gains or losses on contingencies not related to usual operations of the Company			

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

<b>Non-recurring Gain or Loss</b>	<b>Amounts in 2019</b>	Amounts in 2018	Amounts in 2017
Gain or loss on changes in fair value arising from holding held-for trading financial assets and held-for trading financial liabilities, and gain on investment from disposal of held-for trading financial assets, held-for trading financial liabilities and available-for-sale financial assets, except for the effective portion of hedging related to usual operations of the Company			22,140,214.04
Gain or loss on changes in fair value arising from holding held-for trading financial assets, derivative financial assets, held-for trading financial liabilities and derivative financial liabilities, as well as gain on investment from disposal of held-for trading financial assets, derivative financial assets, held-for trading financial liabilities, derivative financial liabilities and other debt investments, except for the effective portion of hedging related to usual operations of the Company		11,745,615.62	
Reversal of impairment provisions on receivables tested for impairment individually	<b>15,941,582.21</b>		44,807,749.89
Reversal of impairment provisions on receivables and contract assets tested for impairment individually		19,847,201.44	
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	<b>10,372,058.59</b>	-66,808,712.70	31,359,397.70
Other items falling within the definition of non-recurring gain or loss			
Impact of non-controlling interests	<b>3,544,429.16</b>	-16,253,023.96	-9,806,951.48
Impact of income tax	<b>-17,227,022.52</b>	-19,540,286.57	-48,424,208.83
Total	<b>73,680,846.87</b>	86,464,858.82	271,194,904.94

## SECTION 2 COMPANY PROFILE AND KEY FINANCIAL INDICATORS

### XI. ITEMS MEASURED AT FAIR VALUE

Applicable   Not applicable

Unit: Yuan Currency: RMB

Item	Opening Balance	Ending Balance	Change in the Period	Impact on Profit for the Year
Other equity instrument investments	207,654,873.93	45,422,963.86	-162,231,910.07	2,780,255.19

### XII. OTHER INFORMATION

Applicable   Not applicable

## SECTION 3 CHAIRMAN'S STATEMENT

Dear shareholders,

In 2019, the year connecting the past and the future, Chalieceo took reform as a common goal, and further confirmed the vision to “build itself into a world-class non-ferrous metal engineering technology enterprise” and the “4+1” business direction and positioning. The Company proposed the requirement of “one principal business and one expansion” to realize the “return to rational” of its development. While further improving its corporate governance, the Company was honored as the “The Listed Company With The Best Corporate Governance” of the China Securities Golden Bauhinia Awards, which marked five consecutive years for the Company of winning China Securities Golden Bauhinia Awards. Regarding safety as the lifeblood of corporate development and the prerequisite for smooth production of engineering enterprises, throughout 2019, the Company recorded zero significant incident related to quality, safety, or environmental protection, with wise policies, all-out efforts and excellent implementation, which provided the Company with favorable conditions Company well for future development. In addition, mechanisms were improved to unleash the potential for development and the vigor of innovation and business start-up. The Company won China Construction Engineering Luban Award for its Vietnam Nhan Co 650kt/a alumina Project, Pulang Copper Mine Grinding-floatation Project Phase I, and West Yunnan University of Applied Sciences Headquarters Construction Project. Mr. LIU Wenlian was honored as China’s Engineering Survey and Design Master, and YANG Honglei Skill Studio in Xiong’an New District was entitled National-Level Studio of Skill Master.

In 2020, the year to see the success in building a moderately prosperous society and the completion of the 13th Five-Year Plan, the Group will be at a critical stage of sustainable, healthy development. Believing that corporations thrive on solid efforts and that actions speak louder than words, we will vitalize the impetus for high-quality development with solidarity to create new splendid achievement for Chalieceo and open up the fresh progress of building a world-class non-ferrous metal engineering technology enterprise.

*Chairman*  
**WU Jianqiang**



The background of the page is a collage of industrial scenes, including a large factory interior with complex machinery and structural elements. The image is overlaid with large, stylized geometric shapes in shades of blue and white, creating a modern, technical aesthetic. The text 'MANAGEMENT DISCUSSION AND ANALYSIS' is prominently displayed in the center in a bold, white, sans-serif font.

**MANAGEMENT  
DISCUSSION  
AND ANALYSIS**

## SECTION 4 BUSINESS REVIEW

### I. DESCRIPTION OF PRINCIPAL BUSINESS AND OPERATION MODES OF THE COMPANY AND INDUSTRY OVERVIEW FOR THE REPORTING PERIOD

#### (I) Principal business and operation modes

The Group is a leading technology, engineering service and equipment provider in the nonferrous metals industry in China, capable of providing full business-chain integrated engineering solutions for various stages in nonferrous metals industry chain and other industries. The Group's businesses mainly include engineering design and consultancy, engineering and construction contracting, equipment manufacturing and equipment trading. According to Engineering News-Record Magazine of the United States, we were ranked 80th out of the "Top 150 Global Engineering Design Firms (全球工程設計公司150強)" in terms of operating revenue during 2019, and ranked 104th out of the "Top 225 International Engineering Design Firms (國際工程設計公司225強)" in terms of overseas revenue. Both rankings improved by 19 places as compared with last year.

#### 1. Engineering design and consultancy business

Engineering design and consultancy is 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 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.

## SECTION 4 BUSINESS REVIEW



### 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, EP, PC and project management contract. Meanwhile, the Company is exploring other engineering contracting modes such as PPP. With its technology and experience, the Company has established a leading position in China's non-ferrous metal industry, particularly in the aluminum contracting industry. In recent years, the Company has undertaken many large-scale EPC projects at home and abroad.

### 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. The Company is a leading manufacturer of non-ferrous metal rolling mills in China.

## SECTION 4 BUSINESS REVIEW



### 4. Trading business

Since 2013, under the guidance of relevant diversification strategy, in order to strengthen cost and risk control, the Company has adopted a centralized procurement approach, while appropriately adjusting and broadening its business scope. In establishing the centralized procurement platform, the Company has expanded the equipment and raw material trading business related to its principal operations, which is managed largely by China Aluminum Equipment.

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

The Company has long being engaged 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, trade and other fields, and has established a business model covering full industrial chain of “investment and financing-planning-design-engineering construction-asset operation/industrial service”. Among them, the engineering and construction contracting business covers metallurgical industry, housing construction, highways and other fields, and adopts various business modes such as construction contracting and general engineering contracting (including EPC, EP, PC, etc.), of which the traditional construction contracting business, as a main business mode, accounts for 76% and 11% in EPC; By financing mode, investment, finance and construction accounts for 14%.

## SECTION 4 BUSINESS REVIEW

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 service 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. This business segment does not involve financing.
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), and investment-finance-build (including PPP) , etc. Risks: Under the traditional contracting mode, the Company acts as a contractor and is responsible for project construction and equipment installation; Under 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 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 preparing the bid. Specifically, based on onsite visit as well as technical conditions, commercial conditions and other bidding regulations, the Company calculates the cost of items in the bill of quantities, and then adds proposed gross profit at a certain percentage to get 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.



## SECTION 4 BUSINESS REVIEW

3. According to the direction of national policies, the Company has chosen to undertake some PPP investment-finance-build projects. Risks: Under PPP mode, the Company, as the general contractor and non-government equity investor of the project, mainly undertakes engineering construction and shares operational risks of the project with the government, while the government mainly bears compliance risk and land acquisition and relocation risks. Finance: Under PPP mode, in addition to capital injected by all equity investors, project loans represent a major source of funds for the project. Payment collection: Under PPP mode, the Company, as the general contractor and non-government equity investor of the project, has different sources of income during the construction period and the operation period. During the construction period, income mainly comes from progress payments made by the project company, while during the operation period, income mainly comes from fees paid by users and feasibility gap subsidy from the government. Pricing: Under PPP mode, the pricing is mainly to determine the rate of return on non-governmental investment (including financing), including the annual discount rate and reasonable profit margin, and the government determines the non-governmental investor through public tender. Profit: under PPP mode, the Company, as both an investor and a project contractor, mainly generates profits from construction during the construction period, and from feasibility gap subsidy from the government during the operation period. Rights and obligations: Under PPP mode, the Company has the right of construction during the construction period, and the right to collect fees from users and feasibility gap subsidies from the government as agreed in the contract during the operation period, and the obligation to ensure successful completion and usual operation of the project.

### (III) Industry Overview

According to the statistics from MIIT, in 2019, the output of ten non-ferrous metals reached 58.42 million tons, representing an increase of 3.5% year on year, 2.5 ppts lower than the previous year. The added value of non-ferrous metal industry increased by 8.2%, 2.5 ppts higher than the industrial average. Investment in fixed assets in the non-ferrous industry reversed the sharp declining trend since the first quarter. Total investment for the year climbed by 2.1%, and specifically, mine investment went up by 6.8% year on year and investments in smelting and processing sector by 1.2% year on year. Investment in energy-saving and emission-reduction technological renovation and high-end materials continued to accelerate.

China's alumina output was 69.59 million tons, up by 1% year on year, electrolytic aluminum output was 35.04 million tons, down by 2.2% year on year, and aluminum output was 46.13 million tons, up by 5.98% year on year. Copper output was 17.74 million tons, up by 10.69% year on year. Lead output was 5.19 million tons, up by 16.59% year on year. Zinc output was 5.69 million tons, up by 9.01% year on year. Non-ferrous enterprises recorded operating revenue of RMB6,004.2 billion, up 7.1% year on year, 2.6 ppts higher than the industrial average. Total profit stood at RMB157.8 billion, down 6.5% year on year. Specifically, profit of the mining sector was RMB30.1 billion, down 28.4% year on year; profit of the smelting sector and the processing sector reached RMB64.7 billion and RMB63.0 billion respectively, up 0.6% and 1.4% year on year respectively. Lead and zinc mining, tungsten and molybdenum smelting, gold and silver smelting saw a RMB7.5 billion, RMB6.5 billion and RMB4.5 billion decline in profit year on year respectively, becoming the main drag on declining profit of the whole industry.



## SECTION 4 BUSINESS REVIEW

In 2019, the production value of China's construction industry was RMB24.8 trillion, and the added value of construction industry was RMB7.1 trillion yuan, up by 5.7% year on year. The housing construction area nationwide was 14.42 billion square meters, up by 2.3% year on year. Infrastructure investment completed in the year amounted to RMB12.9 trillion, up by 3.44% year on year. Infrastructure investment increased by 3.8% and real estate development investment increased by 9.9%. Energy, transport and high-technology industries gradually turned to be the key areas of domestic investment. The amount of new contracts signed by the construction industry grew by 4.38% on a year-on-year basis, hitting a three-year low.

### (IV) Contracts

During 2019, the Company entered into 6,589 contracts in total, the total amount of which was RMB47.577 billion. Details are as followings:

Type of Contracts	January to December in 2019	
	Number	Amount (RMB100 million)
Engineering survey, design and consultancy	4,842	25.86
Engineering construction	816	154.11
Industrial projects	310	125.72
Civil buildings	53	149.6
Highways and municipal works	568	20.48
Equipment manufacturing		
<b>Total</b>	<b>6,589</b>	<b>475.77</b>

As at 31 December 2019, the amount of uncompleted contracts of the Company was RMB63.871 billion in aggregate, details of which are as followings:

Type of Contracts	As at 31 December 2019	
	Number	Amount (RMB100 million)
Engineering survey, design and consultancy	3,251	23.63
Engineering construction	768	143.44
Industrial projects	423	227.81
Civil buildings	118	219.13
Highways and municipal works	442	24.7
Equipment manufacturing		
<b>Total</b>	<b>5,002</b>	<b>638.71</b>

## SECTION 4 BUSINESS REVIEW

### (V) Completed and Uncompleted Projects

The number, amount, location and major risks of completed and uncompleted projects for the reporting period are set forth below by business model:

#### 1. Uncompleted

Business model	Number of uncompleted contracts	Revenue (RMB100 million)	Location
Traditional construction contracting	1,215	135.35	Henan, Shanxi, Sichuan, etc.
EPC	35	20.30	Guangxi, Guizhou, Mongolia, etc.
Investment-finance-build	20	28.49	Yunan, Tongzhou, Xi'an, Henan, etc.
Total	1,270	184.14	–

#### 2. Completed

Business model	Number of completed contracts	Revenue (RMB100 million)	Location
Traditional construction contracting	1,452	23.81	Fujian, Gansu, Guangxi, Guangdong, etc.
EPC	24	1.95	Shandong, Yunnan, Guizhou, etc.
Investment-finance-build	–	–	–
Total	1,476	25.76	–

Completed projects of the Company mainly involves payment risk. Among uncompleted projects, the traditional construction contracting business mainly carries the risks of delayed settlement and delayed payment, EPC mode mainly involves procurement risk, while investment-finance-building mode mainly entails financing risk, the risk of the proprietor failing to buy back on schedule and operational risks associated with the operation period.

## SECTION 4 BUSINESS REVIEW

### II. MATERIAL CHANGES IN MAJOR ASSETS OF THE COMPANY DURING THE REPORTING PERIOD

Applicable     Not applicable

### III. ANALYSIS OF CORE COMPETITIVENESS FOR THE REPORTING PERIOD

Applicable     Not applicable

#### (I) Strong technological and R&D strength

The Company can provide its clients with full nonferrous metal industrial-chain technological support and service, having four out of the eight nonferrous metal designing institutes of the former Ministry of Metallurgy Industry as its subsidiaries, including SAMI, Guiyang Institute, Changsha Institute, and CNPT that took over Luoyang Institute's assets and business. The Company also owns two renowned survey and design institutes, namely Changkan Institute and Kunming Survey and Design Institute. In 2019, the Company centered its technology innovation around its strategic deployment on reforms and development, and aggressively advanced the establishment of a technology innovation system and the improvement of capacity. Its innovation advantage based on the integration of scientific research and engineering enabled the Company to play out its leading role in technology innovation, offering new driving force for corporate transformation and upgrades.

#### 1. Further enhanced technology innovation platforms

The National & Local United Engineering Research Center in Energy-saving and Environment-friendly Technology was inaugurated, which was established by Shenyang Institute, a subsidiary of the Company. The fourth provincial-level technology innovation platform of Changsha Institute was approved as an innovation platform of the Hunan Provincial Corporate Technology Center. The Hunan Research Center on Intelligent Monitoring Technology and Equipment Engineering Technology for Mine Safety submitted by Changkan Institute secured the approval from the Hunan Provincial Bureau of Science and Technology. As at 31 December 2019, the Company has 6 national-level innovation research platforms, 16 provincial-level innovation platform and engineering labs, and 2 national-level corporate post-doctoral scientific research stations.

## SECTION 4 BUSINESS REVIEW

### 2. Glorious accomplishments in technology innovation

In 2019, the Company consistently intensified and improved the management of intellectual property rights by striving to improve the proportion of invention patents and patent quality and to establish a protective system that supports its core business. In 2019, the Company had totally 313 domestic patent applications (among which 138 are invention patents), 176 domestic authorized patents and 9 international authorized patents. 17 national and industrial standards or regulations had been officially issued, which were wholly or partly formulated by the Company. As at 31 December 2019, the Company had up to 7,243 domestic patent applications, 5,292 domestic authorized patents, and 166 international authorized patents. In 2019, five achievements won the first and second prizes of S&T Progress Awards in Guizhou, Hunan, Shanxi and Liaoning Provinces respectively, and one result got the Excellent Prize of the 21st China Patent Award. Besides, eight results respectively won the first prize, second prize and third prizes of Scientific and Technology Award of Nonferrous Metal, two results were awarded the second prize of science and technology for engineering construction from the Industry Association and 33 results were recognized as provincial-level construction methods. In addition, 11 significant technology results of the Company were regarded by the Industry Association as internationally leading and advanced ones.

The “500kA, 600kA Ultra-Large Highly-Efficient Aluminum Electrolyzing Technology” developed by SAMI was applied in electrolytic aluminum projects at home and abroad. Guiyang Institute became the first to invent the “new process for safe and uninterrupted production and maintenance for electrolytic aluminum”, which tackled technological pain points for the industry and therefore was exported to countries such as India. Changsha Institute made a great breakthrough in its Study of Pressure Leaching Copper Smelting with Copper Sulfide Concentrate and Comprehensive Utilization in Mongolia, which was listed as a specific project for international cooperation in the significant R&D plan of the Ministry of Science and Technology. Shandong Engineering has become a core facility supplier with cutting-edge molecular sieve technology in China. The new Bayer-process two-component red mud sintering technology dominated by China Aluminum Technology was applied within the Group.

### 3. Science and Technology Talents

As of 31 December 2019, the Company had three national survey and design masters in engineering field and 47 provincial survey and design masters in nonferrous metals industry in total. The Company had a total of 34 doctors, 1,286 masters and 1,281 high-level technical talents. In addition, a total of 19 employees of the Company had been granted government subsidy by the State Council.

## SECTION 4 BUSINESS REVIEW

### **(II) The Company can provide the proprietors in the non-ferrous metal industry with complete engineering solutions**

With strong technology as a link, and supported by refined management, the Company can provide customers with all-round professional services of engineering design and consultancy, engineering construction and specialized equipment manufacturing, solving customers' routine problems as well as high-tech, deep, difficult and specific problems.

### **(III) The Company has a strong customer network and good customer relations**

The Company has business contacts with many large non-ferrous metal companies in China, and has accumulated good reputation in historical cooperation, which makes it one of preferred choices for major non-ferrous metal engineering projects. At the same time, the Company has actively expanded its overseas business in recent years. As a general contractor, the Company has participated in many projects of Vietnam Coal Mine Group, Venezuela CVG Group and India Vendanta Company, PT Borneo Alumina Indonesia, and Italian Vesme Port Electrolytic Aluminum Plant and has established good cooperative relations with non-ferrous metal enterprises overseas, especially in emerging markets.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### I. OPERATING RESULTS DISCUSSION AND ANALYSIS

#### 2019 operating results

In 2019, the Company realized operating income of RMB31,059.7916 million, a decrease of 7.66%; The net profit attributable to owners of the parent company was RMB34.8526 million, a decrease of 88.61%. As at the end of 2019, the Company's total assets were RMB55,999.4631 million, an increase of 14.12%; owners' equity was RMB15,395.38 million, an increase of 16.62%, and the asset-liability ratio was 72.51%, down 0.6 percentage point from the beginning of the year.

2019 represented a rather difficult year in the Company's history, but the new management led the staff to rise to daunting challenges, adhering to reforms and expanding markets while keeping a close eye on project risks, to offer a solid foundation for the sustainable and healthy development in the future. The Company expects RMB50 billion of new contracts for 2019, while actual new contracts amounted to RMB47.577 billion. In addition, the Company was awarded the contract for Indonesian project in 2019, and the general contracting agreement was signed at the beginning of 2020 (the value of contract to be performed is about RMB3.694 billion). For details, please refer to Announcement Pro No.2020-006 issued by the Company on the designated media for information disclosure on 15 January 2020.

#### (I) Speeding up in-depth reforms

**First, accelerated internal reforms.** To reverse the frustrating trend toward profit slides, the new management, right after taking office, conducted an in-depth investigation in the basic level and the frontline of production and engaged in the survey on multiple issues and top-tier designs of reforms. Concentrating on development strategies, market exploration, science and technology research and development, mechanism innovation, and resource integration, the Company pushed forward internal reforms by devising an overall plan through concerted efforts, collective wisdom, and useful ideas.

**Secondly, made the corporate positioning more definite.** The Company proposed the "4+1" business directions, urging member companies to focus on core business, play up strengths, and avoid weaknesses. Meanwhile, the Company announced a clear-cut core business position for itself and encouraged its member companies to a core business plus a sideline business, instructing its member companies to spotlight their core business, pursue differentiated development, and enhance their competitiveness in niche markets.

**Thirdly, fully implemented the "technology + internationalization" strategy.** In 2019, the Company inclined to "technology + internationalization" strategy during its assessment on its member companies, inspiring them to improve R&D investment and talent cultivation. Based on related incentive policies, the Company adopted specific incentives to energize technology innovation



## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (II) Consistently improving marketing structure

**First, kept expanding the nonferrous metal market.** The Company and its member companies went deeply into the nonferrous metal market and cement its leading position in the industry with unique patented technologies and industrial chain advantages. Persistent with major customers philosophy, Changsha Institute undertook the upgrade project for green disposal of zinc slag in the Danxia Smelting Plant of Shenzhen Zhongjin Lingnan Nonfermet Co., Ltd with a contract value of RMB 778 million. In addition, the Company undertook multiple engineering projects including CHINALCO's Huasheng alumina project, Wenshan electrolytic aluminum project, and Guinea project, further enlarged the influence of the Company in the nonferrous metal industry.

**Secondly, the civil market showed continuous expansion.** Great attention paid to municipal infrastructure, the Company captured more and more shares in the civil market. In 2019, the Company saw the work commencement of an array of important projects like the Pu'er Healthcare Town with the Overseas Chinese Town (Yunnan) Group, and the Yibin ART with Sichuan Railway Investment Group Co. Ltd. By advancing engineering aluminum business with integrated internal and external premium resources, the Company won the bids for the contract for construction of 6 aluminum bridges in Chifeng City.

**Thirdly, the regional layout proved initially effective.** With years of endeavors came initial achievements of the "3531" market deployment. Statistics showed that the Company has achieved contract values of over RMB2 billion respectively in five provinces in China, accounting for 76.64% of the total domestic contract value. Regional operation philosophy has rooted in all member companies-Sixth Metallurgical Company inked RMB20-billion-worth new contracts in 2019 with focus on Yunnan Province and Pan County, Guizhou Province; Ninth Metallurgical Company formulated a marketing system consisting of "one marketing headquarter + N marketing centers" and entered into a contract worth RMB3.138 billion with Qidian Science and Technology Town. Kunming Survey and Design Institute kept deepening its cooperation with premium large-scale real estate businesses and thus maintained high market shares in Yunnan Province.

**Fourthly, the overseas market demonstrated inspiring momentum.** 2019 witnessed great breakthroughs in overseas project contracting, including the electrolytic aluminum project of Portovesme in Italy worth RMB700 million, through which the Company introduced to EU its electrolytic aluminum technology with self-relied intelligent property rights for the very first time, and the contract for pre-stage project of 1 million tons of alumina in Mempawah, Indonesia, whose contract value approaching US\$52 million.

### (III) New peaks in technology innovation

The Company stayed committed to faster technology innovation. In 2019, the Company got numerous prizes with outstanding technology results, produced a series of research results of great significance, and added more science and technology platforms to the current scale.(For details, see "III. Analysis of Core Competitiveness for the Reporting Period" under "Section 4 Business Review" in the Report.)

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (IV) Increasingly standardizing project management

**Firstly, the “dual mechanism” was promoted steadily.** The “dual mechanism” rolled out within the Company, which kindled the initiative and motivation of project managers to be fully involved in cost control.

**Secondly, contracts of key projects were well fulfilled.** The Company went to all lengths to ensure contract fulfillment of key projects. As a result, the Chifeng Copper Project produced the first batch of cathode copper ahead of schedule, living up to the commitment to be up and running within one month. The Huasheng Project has been ready for equipment installation, which would guarantee on-time production. Yunnan expressway cluster projects were moving ahead with stability.

**Thirdly, efforts to create prominent brands well paid off.** The Company won China Construction Engineering Luban Award for its Vietnam Nhan Co Project, Pulang Copper Mine grinding-floatation project phase I (undertaken by Sixth Metallurgical Company), and West Yunnan University of Applied Sciences headquarters construction project (partially undertaken by Kunming Survey and Design Institute). This set a new record of winning three Luban Awards within one year and the Vietnam Nhan Co Project won the Company’s first Luban Award as an overseas project. Mr. LIU Wenlian from the Kunming Survey and Design Institute was the first industrial master in the southwest area for ten years to be honored as China’s Engineering Survey and Design Master, and YANG Honglei Skill Studio in Xiong’an New District was entitled National-Level Studio of Skill Master. Also, the Company had 7 of its programs recognized as national-level premium projects, and 18 as provincial-level premium projects.

**Fourthly, the Company had come a long way in three tough fights.** With workplace safety, environmental protection, and product quality as the core, the Company put all related requirements into full practice, attaching importance to corporate safety management and laying emphasis on “basic level, foundation, skills”. For the first time in history, the Company realized zero accidents concerning workplace safety, environmental protection, and production quality.

### (V) Effective cost control

**First, the financing capacity continued to improve.** As part of the endeavors to broaden financing channels, the Company established harmonious partnerships with multiple banks and securities brokers and enhanced its communication with investors to keep bringing down the overall financing cost;

**Secondly, continued to improve financing structure.** By upgrading the liability structure, intensifying risk control, and taking project demand into full consideration, the Company elevated the proportion of medium- and long-term liability from 38% in early 2019 to 46%, further rationalizing its financing structure.

**Thirdly, evident progress was made in the control of accounts receivable and inventory.** To strengthen the control over receivables and contract assets from the origin, the Company adopted lifecycle control over project contracting, contract signing, project execution, and settlement to reduce the capital occupied by receivables and contract assets. At the end of 2019, the balance of accounts receivable and inventory grew slightly from the beginning of the year, with the growth rate much slower than prior years.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (VI) Consistently deepening corporate management

**First, internal management focused on key points.** The Company paid great attention to the institutional establishment and mechanism innovation, revised methods for assessment and awards related to marketing, aluminum application expansion, the recovery of accounts receivable and inventory, and project management. A series of incentive measures ignited the impetus for development, enhanced the collaboration among member companies, and maintained orderly market exploration.

**Secondly, fundamental management got strengthened.** With progress made in corporate governance, the Company was honored as the “The Listed Company With The Best Corporate Governance”, which marked five consecutive years for the Company of winning China Securities Golden Bauhinia Awards. Moreover, the Company was listed in the Central-SOEs Technological Innovation Index Constituents List, standing out among over 300 listed state-owned enterprises.

### (VII) Improving risk control

**First, certain risky projects saw breakthroughs.** Thanks to concerted efforts of multiple parties, the Company put an end to cruxes that remained unsolved for years, which can serve as a valuable reference for the settlement of key projects. The Company won the lawsuit on the Yinjiaxiang Project in Nanchang City and got the repayment of RMB150 million of principals and interests in full amount. The Company also won the lawsuit on the project in Huainan City and the defendant was required to pay RMB440 million for the project. At the same time, with the victory in the lawsuit concerning the hydraulic power station in western Qinghai Province, the Company’s claim for RMB300 million was upheld by the court.

**Secondly, the risk control system took an initial shape.** The general legal counsel was in place. The Company gradually set up a corporate system for law-based management and risk control by establishing the leading team and office of legal affairs and risk control, launched the Three-Year Action Plan on Legal Affairs and Risk Control of Chalieco, the Measures for Management of International Legal Disputes of Chalieco, the Measures for Management of Legal Counsel of Chalieco and revised numerous regulations such as the Measures for Contract management.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### II. OPERATING OVERVIEW FOR THE REPORTING PERIOD

For 2019, the Company realized operating revenue of RMB31,059.7916 million, a decrease of 7.66% year on year, realized total profit of RMB344.7733 million, down by 47.6% year on year, and realized net profit attributable to the parent company of RMB34.8526 million, down by 88.61% year on year.

#### (I) Principal Business Analysis

##### 1. Analysis of changes in relevant items on income statement and cash flow statement

Unit: '0000 Yuan Currency: RMB

Item	Amount for the current period	Amount for the corresponding period of last year	Change in Percentage (%)
Operating revenue	3,105,979.16	3,363,485.12	-7.66
Operating cost	2,777,968.75	3,036,019.37	-8.50
Sales expense	12,544.75	9,905.85	26.64
Administrative expense	106,694.42	97,829.30	9.06
R&D expense	52,431.67	48,299.82	8.55
Financial expense	57,311.96	51,396.06	11.51
Net cash flow from operating activities	109,597.68	56,488.63	94.02
Net cash flow from investing activities	-97,926.28	19,008.61	N/A
Net cash flow from financing activities	319,127.93	-125,372.61	N/A
Free cash flow	31,012.77	-17,613.84	N/A
Net profit	22,252.48	51,130.87	-56.48

Results for 2019 dropped significantly from 2018 mainly because:

1. The Company had a significant balance of receivables, and increased its loss allowance by RMB164 million from the previous year pursuant to its loss allowance policy.
2. Finance expense rose by RMB60 million due largely to increasing financing.
3. R&D expense rose by RMB40 million as the Company maintained R&D investment in 2019.
4. Administrative expense rose by RMB89 million on from 2018 mainly because administrative expenses was reduced by changes in past service cost in 2018 due to adjustments to actuarial benefit policies. Administrative expense increased slightly for such changes were insignificant for 2019.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 2. Revenue and cost analysis

For 2019, the Company recorded operating revenue of RMB31,059.7916 million, down 7.66% year on year. The Company's business covers engineering design and consultancy, engineering and construction contracting, equipment manufacturing and trading. In addition to the PRC, the Company also operates in Vietnam, Venezuela, Indonesia, Italy, Saudi Arabia and other countries and regions.

Applicable     Not applicable

(1). *Principal business by sector*

Unit: Yuan Currency: RMB

By sector	Principal business by sector			YoY	YoY	YoY
	Operating revenue	Operating cost	Gross margin (%)	change of operating revenue (%)	change of operating cost (%)	change of gross margin (%)
Engineering design and consultancy	2,351,285,421.01	1,554,605,246.18	33.88	-1.66	-6.57	Up by 3.47 percentage point
Engineering and construction contracting	20,990,448,791.59	18,806,637,473.16	10.40	-3.64	-3.82	Up by 0.17 percentage point
Equipment manufacturing	2,005,054,457.55	1,804,419,689.68	10.01	32.79	34.39	Down by 1.08 percentage point
Trading	5,948,940,966.23	5,835,405,681.32	1.91	-28.32	-28.34	Up by 0.02 percentage point
Inter-segment elimination	-235,938,024.75	-221,380,604.19				
<b>Total</b>	<b>31,059,791,611.63</b>	<b>27,779,687,486.15</b>	<b>10.56</b>	<b>-7.66</b>	<b>-8.50</b>	<b>Up by 0.82 percentage point</b>

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Principal business by region

Unit: Yuan Currency: RMB

By region	Operating revenue	Operating cost	Gross margin (%)	YoY change of operating revenue (%)	YoY change of operating cost (%)	YoY change of gross margin (%)
PRC	30,636,946,774.44	27,485,383,277.01	10.29	-5.35	-7.03	Up by 1.62 percentage point
Other countries and regions	422,844,837.19	294,304,209.14	30.40	-57.62	-62.99	Up by 10.11 percentage point
Total	31,059,791,611.63	27,779,687,486.15	10.56	-7.66	-8.50	Up by 0.82 percentage point

Explanation of principal business by sector

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

Unit: Yuan Currency: RMB

Item	2019	2018	Growth rate (%)
Operating revenue	<b>2,351,285,421.01</b>	2,391,015,871.80	-1.66
Operating cost	<b>1,554,605,246.18</b>	1,663,903,508.03	-6.57
Gross profit	<b>796,680,174.83</b>	727,112,363.77	9.57
Gross margin (%)	<b>33.88</b>	30.41	Up by 3.47 percentage point
Sales expense	<b>67,860,612.38</b>	34,543,909.53	96.45
Administrative and R&D expense	<b>554,226,205.69</b>	498,054,064.31	11.28
Total profit	<b>69,353,396.54</b>	31,480,065.20	120.31

The engineering design and consulting segment recorded revenue of RMB2,351.2854 million, down by 1.66% from 2018, mainly because order quantity shrank slightly as the non-ferrous metal industry remained in the investment adjustment period. Gross margin of this segment was 33.88%, up by 3.47 percentage points from 2018. Gross margin improved mainly because the proportion of survey business decreased while the cost of survey business was dominated by outsourced labor.

For 2019, the engineering design and consultancy segment realized total profit of RMB69.3534 million, an increase of 120.31% over the previous year, mainly due to increasing gross profit.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

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

Unit: Yuan Currency: RMB

Item	2019	2018	Growth rate (%)
Operating revenue	<b>20,990,448,791.59</b>	21,782,437,369.69	-3.64
Operating cost	<b>18,806,637,473.16</b>	19,554,195,260.75	-3.82
Gross profit	<b>2,183,811,318.43</b>	2,228,242,108.94	-1.99
			Up by 0.17
Gross margin (%)	<b>10.40</b>	10.23	percentage point
Sales expense	<b>27,484,816.68</b>	36,323,392.84	-24.33
Administrative and R&D expense	<b>836,906,144.46</b>	816,348,578.5	2.52
Total profit	<b>361,620,327.82</b>	570,894,133.97	-36.66

The Company's revenue from engineering and construction contracting business was RMB20,990.4488 million for 2019, a decrease of 3.64% from 2018. Due to the fierce competition in the construction market, this segment undertook and carried out less projects in 2019, resulting in a decrease in revenue. However, gross margin of this segment was 10.4% for 2019, up by 0.17 percentage point over the previous year. Overall gross margin of this segment improved slightly, mainly because Yunnan Expressway PPP project undertaken this year carried a gross margin higher than that of traditional construction projects.

For 2019, the engineering and construction contracting segment recorded total profit of RMB361.6203 million, a decrease of 36.66% compared with 2018, mainly because gross profit declined as segment revenue went down, and allowance for credit loss for the period was higher than that for 2018.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

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

Unit: Yuan Currency: RMB

Item	2019	2018	Growth rate (%)
Operating revenue	<b>2,005,054,457.55</b>	1,509,978,654.31	32.79
Operating cost	<b>1,804,419,689.68</b>	1,342,628,893.27	34.39
Gross profit	<b>200,634,767.87</b>	167,349,761.04	19.89
Gross margin (%)	<b>10.01</b>	11.08	Down by 1.07 percentage point
Sales expense	<b>19,241,613.52</b>	15,022,291.96	28.09
Administrative and R&D expense	<b>173,564,092.76</b>	129,100,972.25	34.44
Total profit	<b>-37,671,452.44</b>	-30,332,787.66	24.19

The equipment manufacturing segment recorded revenue of RMB2,005.0545 million, an increase of 32.79% over 2018, due largely to a substantial increase in orders for steel structure and aluminum overpass manufacturing in 2019. For 2019 and the revenue increased in level. the segment recorded a gross margin of 10.01%, lower than that of the previous year by 1.07 percentage points mainly due to the increase in purchase price of steel and other raw materials.

For 2019, total profit of the equipment manufacturing segment was RMB-37.6715 million, a decrease of 24.19% from the previous year. This was mainly because 2018 recorded gain on equity transfer which was absent in 2019, and R&D investments increased for this segment in 2019.

### ④ Trading business (before elimination of inter-segment transactions)

Unit: Yuan Currency: RMB

Item	2019	2018	Growth rate (%)
Operating revenue	<b>5,948,940,966.23</b>	8,299,196,423.27	-28.32
Operating cost	<b>5,835,405,681.32</b>	8,142,694,777.25	-28.34
Gross profit	<b>113,535,284.91</b>	156,501,646.02	-27.45
Gross margin (%)	<b>1.91</b>	1.89	Up by 0.02 percentage point
Sales expense	<b>12,149,688.08</b>	13,217,609.75	-8.08
Administrative and R&D expense	<b>39,546,532.72</b>	26,718,760.20	48.01
Total profit	<b>-48,662,032.19</b>	95,485,001.45	-150.96



## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

The Company's trading segment recorded revenue of RMB5,948.941 million for 2019, representing a decrease of 28.32% from 2018. This was mainly because the trading business was in a stage of transition to centralized procurement of internal engineering equipment, and the original business scale shrank. For 2019, this segment realized a gross margin of 1.91%, up 0.02 percentage point, basically on par with the previous year.

For 2019, total profit of the trading segment was RMB-48.662 million, a decrease of 150.96% compared with 2018. This was mainly due to the sharp decrease in gross profit caused by dropping segment revenue, and the increase in credit loss impairment for the year.

(2). *Analysis of production volume and sales volume*

Applicable       Not applicable

(3). *Cost analysis*

Unit: '0000 Yuan

By sector	Cost item	Cost composition	By sector				YoY Change of the amount for the period compared to the corresponding period of last year (%)	Description
			Amount for the current period	Percentage in total cost (%)	Amount for the corresponding period of last year	Percentage in total cost for the corresponding period of last year (%)		
Engineering design and consultancy	Labor, raw materials, etc., and (for survey business) significant outsourced labor cost		155,460.52	5.60	166,390.35	5.48	-6.57	Cost decreased mainly because the proportion of engineering survey business (the cost of which mainly consisted of outsourced labor) was lower for the year.
Engineering and construction contracting	Subcontractor costs, labor costs, raw materials, machinery usage fees, etc.		1,880,663.75	67.70	1,949,757.35	64.22	-3.54	Cost decreased mainly because subcontracting cost and raw material cost decreased as revenue went lower.
Equipment manufacturing	Subcontractor costs, labor costs, raw materials, machinery usage fees, depreciation and amortization, etc.		180,441.97	6.50	139,925.06	4.61	28.96	Cost increased mainly because purchase cost of steel and aluminum went up as revenue expanded.
Trading	Outsourced commodities		583,540.57	21.01	814,269.48	26.82	-28.34	Cost decreased mainly because the cost of outsourced commodities declined as trading business shrank.
Inter-segment elimination			-22,138.06	-0.80	-34,322.87	-1.13		
Total			2,777,968.75	100	3,036,019.37	100	-8.50	Operating cost decreased due largely to declining cost of construction contracting business and trading business.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Other information on cost analysis

None

(4). *Particulars of major customers and major suppliers*

Applicable    Not applicable

Sales to top five customers amounted to RMB4,674.8179 million, representing 15.05% of total sales for the year, among which sales to related parties amounted to RMB1,060.1485 million, representing 3.41% of total sales for the year.

Purchases from top five suppliers amounted to RMB4,439.8403 million, representing 15.98% of total purchases for the year, among which purchases from related parties amounted to RMB0 million, representing 0% of total purchases for the year.

Other particulars

None

### 3. Expense

Applicable    Not applicable

For the reporting period, sales expenses amounted to RMB125.4475 million, up by 26.64% from the previous year, due largely to an increase in the number of sales people and their compensation for the purpose of exploring market.

For the reporting period, administrative expenses amounted to RMB1,066.9442 million, an increase of 9.06% over the previous year. This is mainly because administrative expenses for the previous year were reduced by an adjustment to actuarial cost due to actuarial benefit policy of a subsidiary, and administrative expenses went back to the usual level as such changes were insignificant for 2019.

For the reporting period, research and development cost amounted to RMB524.3167 million, up by 8.55% from the previous year, mainly because the Company, as a leading engineering technology enterprise in the non-ferrous metal industry, continued to increase research and development investment in order to improve its core competitiveness.

For the reporting period, financial expenses amounted to RMB573.1196 million, an increase of 11.51% over the previous year, mainly due to an increase in interest-bearing liabilities and financing costs.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 4. R&D investments

(1) *Particulars of R&D investments*

Applicable       Not applicable

Unit: Yuan Currency: RMB

Expensed R&D investment for the year	859,797,779.45
Capitalised R&D investment for the year	1,214,013.20
Total R&D investment	861,011,792.65
Percentage of total R&D investment in operating revenue (%)	2.77
Number of R&D staff	2,482
Number of R&D staff in total headcount (%)	16.90
Percentage of capitalised R&D investment (%)	0.14

(2) *Explanation*

Applicable       Not applicable

In 2019, the Company improved its R&D efforts and increased R&D investment reasonably. In terms of technological innovation, the Company centered on its strategic deployment of reform and development, and actively improved its innovation system, mechanism and capability. Relying on its innovative advantage of integration of research and engineering covering the whole industrial chain and centering on its principal business, the Company performed research on technologies and key equipment for the mining, dressing, smelting and processing of light and heavy nonferrous metals, big data platforms and intelligent equipment, energy conservation and environmental protection, new energy, advanced materials, disaster prevention and municipal infrastructure. During the year, we have completed formalities for the registration of key scientific research projects of the Company and its subsidiaries, and submitted applications for key projects of the Group. We have carried out in-depth cooperation with domestic enterprises and scientific research institutions, organized national key research and development projects including copper

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

sulfide concentrate pressure leaching for copper smelting and comprehensive utilization, applied for and started major national, provincial and ministerial-level projects including deep metal mine green-mining technology, tailings recycling and environmental restoration technology, carried out research on key programs including new lining materials for aluminum electrolytic cells, comprehensive utilization of red mud from two-component sintering process, intelligent inspection system for cold rolling unit equipment, and vegetation restoration technology for high and cold slopes, completed peer assessment of multiple key achievements including the development and application of large-scale alumina gas suspension roaster system, the development and application of full value chain information integration-based cloud aluminum electrolysis MES system, the intelligent and accurate detection system of underground space robots, the lead, antimony and silver polymetallic smelting and comprehensive recovery technology and equipment, started 10 key scientific research projects at the company level including key technologies for flexible aluminum electrolysis production, and carried out and achieved substantial progress and key results in programs including the development of a cloud data center for safety and environmental protection in the nonferrous industry, the research on development and integrated application of intelligent mines, the public technical service platform for nonferrous metal processing, the research and development of key technologies for zirconium plate hot rolling mills, the remote large data diagnosis center for aluminum electrolysis, the research and development and application of new technologies and equipment for clean production processes in copper smelting. In the future, the Company will continue to maintain research and development investment at a reasonable level, in order to keep its leading position in non-ferrous metal mining, dressing, smelting and processing, environmental monitoring and management, and achieve core technological reserves and breakthroughs in emerging business areas.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 5. Cash flow

Applicable    Not applicable

Cash flow conditions of the Company are set out below:

Unit: '0000 Yuan Currency: RMB

Item	2019	2018	Change
Net cash flow from operating activities	<b>109,597.68</b>	56,488.63	53,109.05
Net cash flow from investing activities	<b>-97,926.28</b>	19,008.61	116,934.89
Net cash flow from financing activities	<b>319,127.93</b>	-125,372.61	444,500.54

For 2019, net cash inflow from operating activities were RMB1,095.9729 million, up RMB531.0866 million year on year. In 2019, the Company further improved process control of projects and endeavored to collect payment in proportion to progress of performance, made more efforts in recovering accounts receivable and inventory, and collected accounts receivable with definite payment term through ABS and other means, achieving positive cash inflows from operating activities.

For 2019, net cash outflow from investing activities were RMB979.2628 million, representing an increase of RMB1,169.3489 million from the previously year, mainly because the Company started the construction of Miyu Expressway PPP project in 2019 and all investments in the project during the construction period were recorded in cash outflows from investing activities.

For 2019, net cash inflow from financing activities were RMB3,191.2793 million, up RMB4,445.0054 year on year, mainly because the Company issued USD350 million perpetual bonds and increased borrowings from financial institutions for the construction of Miyu PPP project in 2019.

### (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 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 1. Assets and liabilities

Unit: '0000 Yuan Currency: RMB

Item	Percentage in total assets		Percentage in total assets		YoY change (%)	Remarks
	As at 31 Dec 2019	as at 31 Dec 2019 (%)	As at 31 Dec 2018	as at 31 Dec 2018 (%)		
Monetary fund	1,002,592.54	17.90	681,103.64	13.88	47.20	Mainly because the Company received more project payment and saw higher operating cash flows; in addition, the Company issued US\$350 million senior perpetual bonds at end of the year, further increasing its cash.
Prepayments	37,606.55	0.67	115,444.40	2.35	-67.42	Mainly because the Company dramatically decreased prepayments during the year in order to improve settlement with sub-contractors.
Current portion of non-current assets	40,540.34	0.72	104,973.67	2.14	-61.38	Mainly because the Company received payment for Guangxi Wuxiang Business Street BT project.
Long-term equity investment	77,030.67	1.38	48,052.30	0.98	60.31	Given that the Company assigned an independent director to Zhuzhou Tianqiao Crane Co., Ltd. on 30 October 2019, taking into consideration its shareholding percentage, the Company has had a significant impact on production and operations of Zhuzhou Tianqiao Crane Co., Ltd. As such, the Company now presents this equity investment as "long-term equity investment" instead of "other equity instrument investment".
Other equity instrument investment	4,542.30	0.08	20,765.49	0.42	-78.13	Given that the Company assigned an independent director to Zhuzhou Tianqiao Crane Co., Ltd. on 30 October 2019, taking into consideration its shareholding percentage, the Company has had a significant impact on production and operations of Zhuzhou Tianqiao Crane Co., Ltd. As such, the Company now presents this equity investment as "long-term equity investment" instead of "other equity instrument investment".

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Item	Percentage in total assets		Percentage in total assets		YoY change (%)	Remarks
	As at 31 Dec 2019	as at 31 Dec 2019 (%)	As at 31 Dec 2018	as at 31 Dec 2018 (%)		
Investment property	47,810.27	0.85	21,244.86	0.43	125.04	Mainly because our subsidiary Luoyang Kaiying Company managed its plants leased to external parties on a long-term basis as investment property.
Right of use	2,698.64	0.05	-	-	100.00	Pursuant to the Ministry of Finance's Notice on Revising and Issuing Accounting Standards for Business Enterprises No.21-Lease (Cai kuai [2018] No.35) issued by the Ministry of Finance, the Company has measured and reported leased assets including housings and equipment since 2019.
Other non-current assets	344,537.95	6.15	103,943.60	2.12	231.47	Due largely to significant increase in contract assets arising from the Company's construction of Miju Expressway project.
Notes payable	95,726.62	1.71	75,242.60	1.53	27.22	Mainly because the Company issued more notes payable to sub-contractors in order to ensure project progress.
Other payables	497,914.09	8.89	169,458.75	3.45	193.83	Mainly because reclassification of US\$350 million senior perpetual bonds issued in 2016 and declared to be redeemed at end of 2019.
Current portion of non-current liabilities	87,294.61	1.56	135,359.75	2.76	-35.51	Mainly because the Company repaid long-term borrowings due within one year during the year.
Other current liabilities	259,656.26	4.64	134,439.97	2.74	93.14	Mainly because the Company issued SCP.
Long-term borrowings	466,649.82	8.33	222,300.00	4.53	109.92	Mainly because the Company increased long-term borrowings from financial institutions during the year.
Lease obligations	1,390.94	0.02	-	-	100.00	Pursuant to the Ministry of Finance's Notice on Revising and Issuing Accounting Standards for Business Enterprises No.21-Lease (Cai kuai [2018] No.35) issued by the Ministry of Finance, the Company has measured and reported the obligations under operating lease at the time value of money since 2019.
Deferred income	5,303.64	0.09	4,081.37	0.08	29.95	Mainly because the Company received government subsidies for future benefited period.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

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

Applicable    Not applicable

Unit: Yuan Currency: RMB

Restricted assets	Book value at end of the year	Reasons for restriction
Cash	<b>905,429,914.91</b>	Frozen, acceptant bills and deposit for guarantees
Notes receivable	<b>22,183,705.80</b>	Pledged
Accounts receivable	<b>1,048,124,169.87</b>	Pledged for borrowings
Fixed assets	<b>256,302,620.33</b>	Secured for borrowings
Investment properties	<b>43,764,357.85</b>	Secured for borrowings
<b>Total</b>	<b>2,275,804,768.76</b>	

### 3. Other explanations

Applicable    Not applicable

#### (1) Borrowing

Details of interest-bearing liabilities of the Company are set out below:

Unit: '0000 Yuan Currency: RMB

Item	2019	2018	Change
Borrowings from banks and financial institutions	<b>1,273,773.96</b>	1,191,064.41	82,709.55
SCPs	<b>101,691.67</b>		101,691.67
Current portion of debentures payable		71,799.75	-71,799.75
USD perpetual bonds declared to be redeemed	<b>251,125.76</b>	-	251,125.76
Total interest-bearing liabilities	<b>1,626,591.38</b>	1,262,864.16	363,727.22
Less: cash and cash equivalents (excluding restricted cash)	<b>912,049.55</b>	583,217.95	328,831.59
Net interest-bearing liabilities	<b>714,541.84</b>	679,646.21	34,895.63



## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

As of 31 December 2019, the Group had outstanding borrowings of RMB16,265.9138 million (among which the borrowings from banks and other financial institutions are RMB12,737.7396 million, and SCPs are RMB1,016.9167 million and USD350 million perpetual bonds declared to be redeemed are about RMB2,511.2576 million), representing an increase of RMB3,637.2722 million from RMB12,628.6416 million as at 31 December 2018. As at the end of 2019, net interest-bearing liabilities (interest-bearing liabilities less cash and cash equivalents) amounted to RMB7,145.4184 million, representing an increase of RMB348.9563 million from RMB6,796.4621 million of 2018.

The Company's asset-liability ratio was 72.51% at the end of 2019, representing a decrease of 0.6 percentage point as compared to 73.11% at the end of 2018. The Company's asset-liability ratio is calculated based on the ratio of total liabilities to total assets.

### (2) *Pledge of assets*

As of 31 December 2019, the Group pledged property, plant and equipment of RMB256.3026 million, investment properties of RMB43.7644 million, trade and notes receivable of RMB1,070.3079 million and restricted bank deposits of RMB570.5265 million to secure the short-term borrowing of RMB850.5175 million, long-term borrowing of RMB42.7184 million, and bills payable of RMB957.2662 million.

### (3) *Contingent liabilities*

As of 31 December 2019, the Group did not have any material contingent liabilities.

## (IV) Industry operating information analysis

Applicable     Not applicable

The Group's business mainly covers engineering design and consultancy, engineering and construction contracting, equipment manufacturing and trading. Based on the CSRC Guidelines for Classification of Listed Companies by Industry (2012 Amendment) the result of classification of listed companies by industry released by the CSRC, the Group operates in the construction industry. Analysis of operating information by sector is set out below:

Analysis of operating information on the construction industry

### 1. *Projects completed and accepted during the reporting period*

Applicable     Not applicable

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Unit: '0000 Yuan Currency: RMB

Segment	Survey, design and consultancy	Industrial projects	Civil buildings	Highways and municipal work	Equipment manufacturing	Total
Number of projects	2,534	215	141	14	174	3,078
Total amount	130,276	241,841	213,059	36,820	58,646	680,642

Applicable    Not applicable

Unit: '0000 Yuan Currency: RMB

Project location	Home	Abroad	Total
Number of projects	3,054	24	3,078
Total amount	669,540	11,102	680,642

Other explanation

Applicable    Not applicable

2. *Projects in progress during the reporting period*

Applicable    Not applicable

(1) Overview

Unit: '0000 Yuan Currency: RMB

Segment	Survey, design and consultancy	Industrial projects	Civil buildings	Highways and municipal work	Equipment manufacturing	Total
Number of projects	2,781	683	395	108	431	4,398
Total amount	366,639	3,273,276	4,518,836	2,916,138	191,171	11,266,060

Applicable    Not applicable

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Unit: '0000 Yuan Currency: RMB

Project location	Home	Abroad	Total
Number of projects	4,330	68	4,398
Total amount	10,934,438	331,622	11,266,060

## (2) Suspended or terminated projections

During the reporting period, the Company's projects were basically performed normally. However, due to problems such as insufficient funds from investors and insufficient performance of contracts, there were a total of 82 partially suspended or terminated projects, involving a total amount of RMB3.519 billion, of which 15 were engineering construction projects involving a total amount of RMB3.265 billion, 64 were engineering survey, design and consultancy projects involving a total of RMB236 million, and three were equipment manufacturer projects involving RMB17 million.

Unit: '0000 Yuan Currency: RMB

No.	Project name	Contract type	Contract value	Contract status	Reason
1	Anshun Aluminum EPC Project	Engineering construction	125,160	Suspended	Not funded by the proprietor
2	Saudi SCPC Calcined Coke EPC Project	Engineering construction	115,600	Suspended	Not funded by the proprietor
3	Anshun Huada Project	Engineering construction	61,818	Suspended	In legal proceedings
4	Zong Lv He Wan Project	Engineering construction	15,000	Suspended	Default by the proprietor. In legal proceedings.
5	Guangxi Pinguo Baikuang Aluminum Alloy Processing Project	Survey, design and consultancy	9,200	Suspended	Suspended due to reason from the proprietor
6	Ao Hai Yi Villa Project Pile Foundation Project	Engineering construction	3,920	Suspended	Suspended as notified by the proprietor
7	Others (76)	–	21,182	Terminated or suspended	Not funded by the proprietor
Total		–	351,880	–	–

Note: contracts are classified into survey, design and consultancy, engineering construction, and equipment manufacturing

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 3. Particulars of major projects in progress

Applicable    Not applicable

Unit: '0000 Yuan Currency: RMB

Project name	Business model	Project amount	Construction period	Percentage of completion	Revenue recognized for the year	Accumulated revenue recognized	Cost recognized for the year	Accumulated cost recognized
Miyu project	PPP	1,064,763	43	4.48%	41,827.03	43,764.49	32,776.65	34,480.08
Ningyong project	PPP	411,178	48	36.36%	100,765.64	138,959.11	66,043.25	97,743.84
Qidian Science and Technology Town	EPC	313,755	48	6.51%	21,027.06	23,085.52	18,355.89	20,414.95

Other explanation

Applicable    Not applicable

### 4. Particulars of overseas projects during the reporting period

Applicable    Not applicable

Unit: '0000 Yuan Currency: RMB

Project location	Number of projects	Total amount
Southeast Asia	23	86,055
Middle East	6	146,899
Oceania	3	372
Africa	42	68,442
America	2	127
Europe	6	80,604
Other regions	13	2,721
Total	95	385,220

Other explanation

Applicable    Not applicable

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 5. New projects accumulative signed within the reporting period

Applicable    Not applicable

During the reporting period, the Company had 6,589 new orders on hand, totaling RMB47.577 billion.

### 6. Summarized information on completed but unsettled inventory

Applicable    Not applicable

Unit: '0000 Yuan Currency: RMB

Project	Accumulated cost incurred	Accumulated gross profit recognized	Estimated loss	Settled amount	Completed but unsettled balance
Amount	12,213,979.96	1,261,541.11	24,687.02	12,630,152.42	1,325,540.91

Note: The Company has adopted the new accounting standards for revenue. The completed but unsettled balance refers to the balance of contract assets.

### 7. Other explanation

Applicable    Not applicable

(1) Particulars of PPP Project Production Safety Management Department.

Amounts in RMB100 million

No.	Project name	Total investment	Shareholding percentage (Note 1)	Investment for the year (Note 2)	Accumulated investment of the project (Note 2)	Progress
1	Yunan Miyu Highway Project	230.51	53.8%	24.7	39.49	Normal

Note 1: As required for the construction of the Yunan Miyu Highway Project, the Company and its subsidiaries Chinalco Southwest Construction, Sixth Metallurgical Company, Kunming Survey and Design Institute and other consortium members will make investment Miyu Company, a project company, by way of incremental capital injection, with the total investment not exceeding RMB2.765 billion. Upon completion of the investment, the Company and its subsidiaries Chinalco Southwest Construction, Sixth Metallurgical Company, Kunming Survey and Design Institute jointly hold a 53.8% equity in Miyu Company. So far, the Company and its subsidiaries have made the initial investment of RMB692 million as agreed.

Note 2: Investment for the year and accumulated investment of the project refer to the construction and other investment made by the project company Miyu Company during 2019 and as at the end of 2019.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (2) Qualifications obtained during the reporting period

During the reporting period, Chalieco had a total of 224 qualifications, covering all major sectors such as survey, design, construction, costing and supervision. There are 3 Grade A comprehensive survey qualifications, 4 single qualifications in the design sector, 32 professional A qualification, 3 Top qualifications for general construction contracting and 34 Grade A qualification. All qualifications are in normal use, and the conditions for maintaining qualifications remain stable. Two new qualifications obtained in 2019 are set out below:

Company	Certificate	Content of Qualification	Certificate Number	Expiry Date	Issue date
Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	Engineering Cost Certificate	Engineering cost consultancies are not restricted to administrative regions in the lawful operation of engineering cost consulting work. A-class engineering cost consultancies cover engineering cost consulting business of all kinds of construction projects.	A190143330238	1 Dec 2021	1 Jan 2019
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	Construction Enterprise Qualification Certificate	Second level of professional contracting of construction and architectural decoration projects	D341038728	13 Feb 2024	13 Feb 2019

### (3) Analysis of the percentage of construction project revenue in total revenue of the Company for the recent three years Financial Department.

For details, refer to analysis of composition of construction project revenue in Section 5 “Principal business by sector” of this report.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

- (4) Composition analysis of construction project cost for the recent three years

Major cost components of the engineering and construction contracting segment for past three years are set forth below:

Unit: '0000 Yuan Currency: RMB

Cost composition	2019		2018		2017	
	Amount	Proportion (%)	Amount	Proportion (%)	Amount	Proportion (%)
Subcontractor cost	1,038,429.55	55.22	1,063,413.58	55.24	1,075,330.57	51.08
Material and equipment cost	703,907.63	37.43	751,993.48	37.78	886,973.38	42.14
Labor cost	32,109.85	1.71	30,226.92	1.57	49,804.66	2.37
Others	106,216.71	5.65	104,123.37	5.41	92,965.74	4.42
Total	1,880,663.75	100	1,949,757.35	100	2,105,074.35	100

Changes in the cost of the engineering and construction contracting segment of the Company over the past three years:

- (1) Subcontractor cost, and material and equipment cost accounts for about 90% in aggregate and remains relatively stable. As subcontractor cost and material and equipment cost are highly replaceable for each other, the Company makes overall arrangement for contracting based on available resources and profit margin of sub-projects. The Company continuously summarizes management experience and strengthens cost management to improve the margin on contract work.
- (2) Other expenses include machinery usage fees, and accrued production safety fees, which account for a relatively low proportion of the total cost.

The Company's subcontractors are divided into engineering subcontractors and labor service subcontractors. Depending on specific conditions, the Company may subcontract non-main part of the project to engineering subcontractors or labor service subcontractors. On the one hand, subcontracting improves the Company's ability to undertake large-scale projects and the flexibility in contract performance. On the other hand, the ability to manage subcontractors and control subcontractor costs also affects the Company's ability to perform contracts. The Company usually subcontracts about 50% of business of this segment. All large-scale engineering projects involve subcontractors. The overall gross margin of profit rate of the company's engineering construction projects was 9.43%, 10.23% and 10.4% for 2017, 2018 and 2019 respectively.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

The Company strictly prohibits subcontracting by subcontractors and illegal subcontracting, and has carried out special inspections to ensure no subcontracting by subcontractors. In order to strengthen subcontractor quality management, the Company has established a relatively sound internal control system for subcontractor selection, and has adopted an admission mechanism to select subcontractors on a merit basis. Subcontractors are required to establish an effective quality management system and strictly implement the “Three Inspections” system, and adopt various measures such as grading inspection, special inspection and quality assessment to impose overall quality supervision and control over subcontracted projects. During the reporting period, the Company’s engineering construction quality was generally under control and no quality incident at critical level or above occurred.

Through process control, the Company supervises subcontractors’ performance in various aspects including progress, quality and safety, and timely completes the rectification of defects, sorts out completion documents, and on this basis ensures smooth completion acceptance. In terms of settlement with subcontractors, subcontractors are required to submit applications and relevant settlement data as agreed in the contract. Relevant timely confirms relevant data and conditions of the project and makes payment to subcontractors in strict accordance with prescribed procedures. During the reporting period, the project completion acceptance and settlement proceeded normally as agreed in the contract.

### (5) Particulars of financing arrangements

At the end of the reporting period, the balance of financing through debt and equity instruments stood at RMB21.717 billion, including RMB13.755 billion in debt financing and RMB7.962 billion in equity financing (including US\$350 million senior perpetual bonds issued in 2016 of which the Company has declared redemption). Total financing amount increased by RMB4.877 billion or 28.96% compared with the end of 2018, mainly because the Company needed to prepare relevant capital contribution to start investment in and construction of Yunnan Miyu Expressway project.

In terms of debt financing, the Company issued US\$350 million senior perpetual bonds for a term of 3.5+N years at a coupon rate of 5% in Hong Kong in November 2019, mainly for the purpose of repayment of US\$350 million senior perpetual bonds issued by the Company in 2016 and declared to be redeemed in January 2020; the Company issued RMB1.5 billion renewable corporate bonds for a term of 3+N years at a coupon rate of 5.29% on SSE in October 2019; the Company issued RMB1.0 billion super & short-term paper “2019 SCP001” for a term of 270 days at a coupon rate of 3.5% in the inter-bank market in July 2019; the Company redeemed RMB1.208 billion renewable corporate bonds “2016 Zhong Gong Y1” in October 2019.



## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

- (6) Particulars of major suppliers and major customers

For details, refer to “particulars of major suppliers and major customers” in Section 5 of this report.

- (7) Quality control system, execution standards, control measures, and overall evaluation

The Company attached great importance to quality work. In 2019, with the Company’s quality control system functioning normally and engineering quality generally under control, there was no major or above quality incident all year round. The Company strictly implemented the national, industrial and local quality standards at all levels, and continuously improved its quality management through strengthening on-site quality management, creating benchmark projects, and promoting engineering excellence, to ensure the stability and order of the Company’s quality work.

- (8) Operation of workplace safety system

In 2019, the Company earnestly implemented the strategic plan of the CPC Central Committee on safe production and ecological civilization construction, and deeply fought the battles for safety, environmental protection, and quality, based on the principle of “strengthening the foundation, focusing on key points, and making up for weak links”. By carrying out programs such as positive incentives and leadership assurance, the Company effectively took on and fully fulfilled its responsibilities for workplace safety; the Company continuously facilitated the construction and effective operation of the CAHSE system and the hierarchical risk management and control system, furthering refined safety management; through comprehensive safety training and stronger safety supervision and inspection, the Company continuously strengthened personnel capacity building and risk control. In 2019, the Company enjoyed effectively operating workplace safety systems and stable production safety, with no production safety incidents occurring all year round.

- (9) Accounting policies including revenue recognition method, and payment settlement

For details, refer to description of the policy of specific revenue recognition on different types of engineering business in paragraph d of Note 3.26 to the financial report accompanying this report.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (V) Investment Analysis

#### 1. Overall analysis of equity investments

Applicable    Not applicable

On 31 December 2019, the balance (original value) of long-term equity investment of the Company was RMB781.44 million, an increase of RMB292.2517 million or 59.74% from beginning of the year, of which the provision for impairment of long-term equity investment was RMB11.1332 million, an increase of RMB2.4679 million over RMB8.6653 million at the beginning of the year.

##### (1) Major equity investments

Applicable    Not applicable

On 8 May 2019, as required for the construction of the Yunan Miyu Highway Project, the Company and its subsidiaries Chinalco Southwest Construction, Sixth Metallurgical Company, Kunming Survey and Design Institute and other consortium members will make investment in Miyu Company, a project company, by way of incremental capital injection, with the total investment not exceeding RMB2.765 billion. Upon completion of the investment, the Company and its subsidiaries Chinalco Southwest Construction, Sixth Metallurgical Company, Kunming Survey and Design Institute jointly hold a 53.8% equity in Miyu Company. For details, refer to the Company's announcement disclosed on the website of SSE ([www.sse.com.cn](http://www.sse.com.cn), Announcement Numbers: Pro2019-035) on 9 May 2019. So far, the Company and its subsidiaries have made the initial investment of RMB692 million as agreed.

##### (2) Significant non-equity investments

Applicable    Not applicable

##### (3) Financial assets measured at fair value

Applicable    Not applicable

Unit: Yuan Currency: RMB

Item	Closing Balance	Opening Balance
Investment in Zhuzhou Tianqiao Crane Co., Ltd.	–	158,907,452.35
Investment in Guizhou Aerospace Wujiang Electromechanical Equipment Co., Ltd.	14,067,464.80	14,781,358.91
Others	31,355,499.06	33,966,062.67
<b>Total</b>	<b>45,422,963.86</b>	<b>207,654,873.93</b>

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (VI) Disposal of significant assets and equity

Applicable     Not applicable

### (VII) Analysis of significant subsidiaries, associates and joint ventures

Applicable     Not applicable

#### 1. Subsidiaries

Details of any subsidiary which represents 10% or more of net profit of the Company are set out below:

Unit: '0000 Yuan Currency: RMB

Subsidiary	Business scope	Total assets	Net assets	Revenue	Net profit
Shenyang Aluminum & Magnesium Engineering & Research Institute Co., Ltd.	Engineering survey and design	132,916.27	62,778.40	76,754.79	4,792.35
Guiyang Aluminum & Magnesium Design Institute Co., Ltd.	Engineering survey and design	219,443.06	72,589.69	58,883.02	-3,887.70
Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	Engineering survey and design	296,211.92	101,057.96	221,196.10	4,573.37
China Nonferrous Metals Processing Technology Co., Ltd.	Engineering design and equipment manufacturing	197,972.45	12,102.16	80,723.40	-8,368.27
China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	Engineering survey and design	114,864.08	40,349.49	105,694.53	6,193.81
Kunming Survey and Design Institute Co., Ltd. of China Nonferrous Metals Industry	Engineering survey and design	105,603.56	36,513.32	114,756.06	4,725.89
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	Building and construction	1,228,985.29	292,392.88	755,544.98	44,130.57
Ninth Metallurgical Construction Co., Ltd.	Building and construction	978,257.72	110,487.23	565,651.45	14,549.73
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	Building and construction	528,298.02	96,657.38	243,464.22	-16,072.25
Chalieco (Tianjin) Construction Co., Ltd.	Building and construction	184,470.86	23,316.84	74,692.59	-5,116.54
China Aluminum International Engineering Equipment Co., Ltd.	Trading and equipment procurement	207,453.88	23,244.17	591,420.40	-6,816.68

Note: The above net profit is the net profit attributable to owners of the parent.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 2. Major Companies invested

For details of major Companies invested, refer to Note 7.2 “interest in joint ventures or associates” to the financial report attached to this report.

### (VIII) Particulars of structured entities controlled by the Company

Applicable    Not applicable

## III. DISCUSSION AND ANALYSIS OF FUTURE DEVELOPMENT OF THE COMPANY

### (I) Industry landscape and trend

Applicable    Not applicable

The outbreak of COVID-19 put off the operation resumption of most copper and aluminum processing enterprises as well as downstream corporations, dampening the expected demand. Smelting enterprises of copper, aluminum, lead, and zinc, however, were unscathed from the epidemic disturbance, maintaining normal production. It's still a prominent problem that the short-term electrolytic aluminum stock remains high and that aluminum prices linger low. Alumina showed gradual price upsurges but ore shortage will be ameliorated by steps along with the recovery of logistics and operation.

In early 2020, the construction sector suffered slowdowns in production and operation, business activity index and new order index in February respectively declining by 33.1 and 30 percentage points on a month-on-month basis to 26.6% and 23.8%. The anticipated business activity index in February reached 41.8%, down by 22.6 percentage points from the expectation in January. Among others, the anticipated business index expectation of the civil engineering industry was 51.8%, remaining above the critical point, revealing the confidence of related enterprises in industrial recovery and development.

Driven by an array of favorable policies by the government to boost the economy and reduce tax and costs during epidemic containment, the nonferrous metal and construction industry will see considerable growth in business since April, and the economy throughout the year will depict a fall-rise pattern. The Company will make pre-arrangements, seize opportunities, and optimize structures for high-quality development.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (II) Corporate development strategy

Applicable    Not applicable

Led by high-quality development and technologies, and based on engineering construction, the Company provides full industrial-chain service for the nonferrous metal industry; driven by innovation, the Company will make full use of the technologies of intelligent manufacturing and intelligent construction, serves the nonferrous metal industry and gradually expand the ferrous metal business, while ensuring its technological advantages in the nonferrous metal industry; being market-oriented, the Company will consolidate and focus on its market-leading edge in the traditional nonferrous metal industry while improving the profit and scale of emerging business and overseas business; taking green development as the keynote, the Company will vigorously promote the aluminum application in engineering, actively expands energy-saving and ecological industries for new drivers of profit growth; taking capital operation as the link, the Company will form closer relations with local governments, and actively participate in the national and local urban infrastructure construction; the Company will stick to the Belt and Road Initiative, go further in overseas market exploration, and promote its international competitiveness and brand awareness.

### (III) Operational Plan

Applicable    Not applicable

Business outlook on 2020

2020 marks the final year of the Company's 13th Five-Year Plan and the key year for recovery and progress in business performance. The Company will adhere to the guidance of President Xi Jinping's thought on socialism with Chinese characteristics in the new era, endeavor to restore production while preventing and controlling epidemic disease, take "preciseness, perfection, and competitiveness" as the guideline of work, benchmark against leading peers, and continue to deepen reform for vigorous systems and mechanisms; the Company will continue to enhance marketing efforts, strengthen fine management of projects, continuously increase investment in scientific researches, and strengthen talent teams; efforts will be made to reinforce risk management and control and disposal to facilitate the Company's healthy development. The value of new contracts are expected to reach RMB55 billion in 2020.

#### 1. Benchmark against leading peers all-dimensionally

The Company will carry out the benchmarking work, keeping deep in mind the meaning of "benchmarking against advanced industrial players" in the new era. Rational choices will be made when selecting the target for benchmarking, with industrial characteristics in consideration; the Company will weigh the importance of benchmarking subjects, identify the disparities between the Company and advanced enterprises, and scientifically formulate a plan for benchmarking; the Company will promote the work in a phased and orderly manner to seek continuous improvement, management progress, and top-notch creation.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 2. Promote the quality improvement of business and contracts

- (a) **To change from “shopkeepers (坐商)” into “itinerant merchants (行商)”**. The company should further enhance the awareness of “going out” and “active provision of services”, strengthen the establishment of its marketing system and change from “shopkeepers (坐商)” into “itinerant merchants (行商)”. By actively contacting corporates to schedule an on-site visit, we proactively actively provide technical solutions, and open up markets in a variety of ways, including impressing customers through our technology and services.
- (b) **To establish roots in the industry and region**. In the non-ferrous industry, it is necessary to continuously give full play to the technological advantages and strengthen the management of major customers. The Company has to implement policies based on enterprises, explore project-based carriers, and understand customer needs through various means, so as to create value for customers and attract customers to cooperate. The Company shall achieve cultural resonance by carefully studying the growth history, cultural philosophy, and development vision of each customer, as well as solidify cooperation with customers by resonating with their values. In the civilian industry, it is necessary to deepen regional operations and continue to accelerate the implementation of key tracking projects in the Beijing-Tianjin-Hebei (Xiong’an) region, Yangtze River Delta, Guangdong-Hong Kong-Macao Greater Bay Area, Chengdu-Chongqing areas, and promote the establishment of regional institutions with key projects. Group members should continue to implement the regional market layout, and initiate the realization of fundamental transformation from project marketing to regional marketing. In terms of engineering aluminum, it is necessary to expand the market share of aluminum formwork, aluminum climbing frames, aluminum flyovers and municipal products, aluminum houses, and aluminum alloy structure products through establishing an aluminum application engineering company. The Company shall also step up its effort in promoting the business of aluminum application demonstration cities and build a model city for Chalieceo’s “green aluminum application demonstration cities”.

### 3. Facilitate the leaping development of overseas business

- (a) **Technological guides development**. All design enterprises should shoulder the responsibility as leaders in nonferrous metal technologies, take design as the starting point and the full industrial-chain development as the goal, strive to improve their capacity in design, procurement, contracting, service and financing while enhancing their abilities to allocate international resources and catch up with international standards.
- (b) **To expand overseas business through cooperation**. The Company will follow closely the overseas investment strategies of Chinalco, cooperate with Chinalco’s overseas platforms and speed up “going out”, placing focuses on regions and countries with nonferrous metal industry along the Belt and Road regions. The Company will give full play to its advantages and strengthen the cooperation with various financial institutions, governments, and celebrated enterprises, to transit from receiving projects to creating projects.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

- (c) **To settle in the local market.** The Company should step up efforts to fulfill its social responsibilities, assimilate itself into local cultures and conduct the legal operation to blend into local markets. It is necessary to be involved deeply in the market where the companies are located, actively adapt to local societies, make use of local resources, and pay attention to the value cultivation of brands. By continuous operation and cultivation of regional markets, the Company will achieve sustainable development of overseas business.

### 4. Promote fine management of engineering projects

- (a) **To establish the concept of “serving the clients and give priority to contract fulfillment”.** It is necessary to enhance all the employees’ awareness of contract fulfillment, ensure sufficient resource investment, strengthen process management and control, and improve the clients’ satisfaction by improving contract fulfillment rates. The Company should aim at “preciseness, perfection, and competitiveness”, make efforts to improve work and product quality, and create excessive value for clients. The Company will pursue the acquaintance of myriad friends, the cultivation of talents, the creation of great memory through the construction of every milestone project.
- (b) **To improve a “project-centered” management system.** The Company will establish a modern corporate governance system with projects as the center, capital as the link, and legal person management structures as the symbol. The Company will further strengthen the “iron triangle” team that involves project managers, project chief engineers, and project contract managers for projects, promote system construction through team building, and improve project management through system formulation.
- (c) **To continue three major fights.** The Company should take sheer safety as the goal, focus on special works including projects under construction and production workshops, and pay attention to safety training and education, safety protection, equipment maintenance, safety guards, and the fulfillment of safety responsibility, to ensure the overall stability of safe production environment of the Company. The Company should keep creating projects eligible for national-level quality awards, improve the quality awareness of all employees, strengthen quality management and control in the process, and improve the quality of project design and engineering entity, to provide more high-quality projects for the clients and the society. The Company should start from the design and deliver ecological engineering projects to its clients. The Company should strictly control the emission to meet standards during the construction, and welcome the environmental supervision by state-level departments with accurate environmental management.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 5. Promote innovation and revolution in science and technology

- (a) **To lead the industrial development.** The Company should further the formulation and optimization of its science and technology innovation system, and actively promote innovative recourse integration of the Company. Efforts should be made to holistically construct a research enterprise on innovative engineering technologies, channel innovative resources to forward-looking, strategically-important and essential fields for technology innovation. The Company should be committed to solving major key technological difficulties in the industry, leading technological progress of the industry, and achieve quality development driven by innovation.
- (b) **To unite high-end talents.** Talents are resources or even capital for enterprises. The Company should make the talent capital more valuable and let them create larger amount of values by uniting them, cultivating them and enabling them to make achievements.
- (c) **To serve production and operation.** Science and technology innovation should be market-oriented and targeted on market demand. The Company should transform its scientific research advantages into those in the industry and the development to the greatest extent, and encourage the research team to get results and make profits as soon as possible.
- (d) **To enhance management capability.** The Company will accelerate the construction of an information collaborative management platform for engineering projects. To serve the Company's engineering general contracting business and improving project management, the Company will rapidly improve its overall management level with information technologies to realize the scientific and refined management of the enterprise and projects, to improve management efficiency and quality, to support the whole project life-cycle with IT application, and to ultimately provide users with first-class engineering technological services.

### 6. Facilitate fulfillment of reform tasks

- (a) **To implement the reform plan.** Reform is a major task of the Company in 2020. With market-orientation as direction and specialisation and optimisation of "4+1" business as goal, the Company will strive to facilitate the implementation of reform plan.
- (b) **To strengthen business focus.** Instructed by the "4+1" business direction and the plan for member companies to keep one core business and one sideline business, the Company shall strive to grow as a world-class nonferrous metal engineering technological company by taking the path of "science and technology + internationalization", adopting the project management pattern of "dual systems". All member companies shall strictly cling to the business plan of "one core business and one sideline business", making market-led endeavors to concentrate leading-edge resources in the core and sideline business. With three to five years' hard work, the member companies will stand out with more outstanding core business, more outstanding core business, more prominent professionalism, more brilliant brands, and stronger market competitiveness.



## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

- (c) **To vitalize system and mechanism.** The Company will continue to vigorously promote the incentive mechanism for science and technology, to expand the profits of achievement transformation for scientific researchers. Meanwhile, the Company will constantly improve assessment and incentive methods related to project marketing, for aluminum application expansion, the recovery of accounts receivable and inventory, and project management to ensure thorough implementation.
- (d) **To formulate the 14th Five-Year Plan.** The Company should guide its development with the 14th Five-Year Plan that is practical, targeted, and distinctive.

### 7. Promote the accuracy and refinement of financial management

- (a) **To strengthen financial management.** First, the Company should record accurately and conduct in-depth analysis as the foundation for decision-making. Secondly, the financial management efforts should play a collaborative and promoting role in “protecting the value of enterprises + creating value directly”.
- (b) **To control the growth of liabilities.** Member companies should strengthen their resilience, take steps to get rid of their reliance on financing, control the growth of liabilities and reduce financial risks by curbing account receivable and contract asset impairment provisions and giving a boost to corporate profits.
- (c) **To continuously reduce cost.** First, the Company should establish a management system where small organs handle sizable projects. Secondly, the Company should reduce non-productive expenditures. Thirdly, the Company should control the red line of gross margin of the projects.

### 8. Promote full coverage of risk management and control

- (a) **To accelerate risk response for key projects.** With classification, accurate measure execution, and real-time tracking on key projects, the Company will ramp up efforts to resolve risk and collect payment employing legal action, negotiations, capital disposal, and capital operation.
- (b) **To strengthen compliance management.** The Company will stay committed to operation compliance, set a negative list for production and operation, integrate such supervision resources as laws, auditing, internal control, and regulation, and gradually realize broad compliance; the Company will strengthen the management of contract review, standardize the construction of contract text systems, and strengthen law-based management of subcontracts to play out the constraint power of contracts.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

- (c) **To strengthen supervision by audit.** The Company will give full play to the supervisory role of auditing at all levels of the Company, and further improve its operation and management by discovering shortcomings and corresponding reason through auditing, strengthening control and accountability determination.

### (IV) Potential Risks

Applicable    Not applicable

The Company is primarily exposed to epidemic risk, policy risk, market risk (including price risk, interest rate risk and exchange rate risk), operational risk, financial risk and overseas operational risk in the ordinary course of business.

#### 1. Epidemic risk

With the outbreak and spread of COVID-19 around the world, the Company will not be able to sign awarded contracts and resume some work in progress as schedules. Overseas epidemic continue to have severe impact on our overseas business development.

#### 2. Policy risks

Our business is subject to a certain extent of the policies and investment expenses of the government on infrastructure construction such as highways, municipal works construction and other public transportation. There will be unpredictable impacts on the Company if the government makes any adjustments to the infrastructure construction policy, PPP project policy, monetary policy, foreign exchange management policy, taxation policy and policy relating to real estate industry.

#### 3. Price risks

The price and supply of materials, subcontracting and labor may have significant fluctuation according to customers' needs, manufacturers' production capacity, market condition, costs of materials and labor costs in different times; and conditions of price changes of energy (including fuel and electricity or water supply) may also affect our business.

#### 4. Interest rate risks

Currently, we have a larger financing scale. Changes in interest rate policy will affect our finance expenses and economic benefits

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### 5. Operational risks

In recent years, we have rapidly expanded our business scale and involved in more business aspects. As new business models are gradually increasing, project management becomes more difficult and poses challenge to the project safety and quality management, cadre ethics and upholding the stability of the enterprise. We are exposed to certain management operational risks.

### 6. Financial risks

As we have insufficient assessment on the credit status of property owners, delays in construction settlement and payment by the property owners, or deterioration in property owners' financial position resulted in funding pressure, or unable to collect working capital in a timely manner, these could severely affect the capital use efficiency of the Company, resulting in reducing turnover rate of account receivables. In case we are not able to obtain sufficient fund, the Company's expansion plan and development prospects will be affected.

### 7. Overseas operational risks

The Company has selectively tapped into various overseas markets and strategically developed overseas business. The Company will continue to earn considerable income and profits from international projects and other overseas business in the foreseeable future. Any changes in the condition of politics, economics, legal and taxation in the countries where the Company operates as well as other emergency issues would affect the Company in fulfilling its business objectives.

### 8. Exchange rate risks

We conduct our engineering and construction contracting business overseas, and may make significant equity and other investments in overseas projects. Our assets and liabilities denominated in foreign currency are expected to increase significantly as we further expand our overseas business, particularly when undertaking more EPC projects. Changes in the exchange rate could affect our costs denominated in Renminbi, revenues, the prices of our exported products and imported equipment, which in turn would affect our profits.

To guard against the occurrence of various types of risks, the Company has formulated a comprehensive internal control system. We incorporate risk management into each business process. Pursuant to which, we identify the critical control point of business processes, develop specific control measures, prepare documents for critical control points of procedures, identify the responsibilities of various types of risks and critical control point, work closely with the daily management and control, and control risk factors and elements. In addition, the Company strictly supervises the important control aspects of earlier stage of feasibility study, planning, reviewing, approval and decision-making; enhances process control and risk assessment work; and makes measures and contingency plans to deal with risks, aiming to ensure the Company's overall control on various types of risk.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (V) Other Information

Applicable    Not applicable

### IV. FAILURE TO MAKE DISCLOSURE UNDER THE STANDARDS DUE TO THE INAPPLICABILITY OF THE STANDARDS TO THE COMPANY, STATE SECRETS, TRADE SECRETES AND OTHER SPECIAL REASONS

Applicable    Not applicable

### V. OTHER DISCLOSURES (DISCLOSED AS REQUIRED BY THE LISTING RULES OF THE STOCK EXCHANGE)

#### (I) Principal business

The Group is principally engaged in engineering design and consultancy, engineering and construction contracting, equipment manufacturing and trading. Details of major subsidiaries, associates and joint ventures of the Company are set out in Note “7. EQUITY IN OTHER ENTITIES”.

#### (II) Business Review

A review of the Group’s business during the year, potential risks, discussion of future business development and the relationships with employees, customers and suppliers are set out in this section, and the Group’s financial and operating conditions are also analyzed using key financial indicators. Please refer to “Section 6 Key Matters” of this report for details of key events affecting the Group and the corporate social responsibility and environmental protection issued of the Group during the year. For information on compliance with relevant laws and regulations that have a significant impact on the Group, please refer to “Section 10 Corporate Governance (Corporate Governance Report)” of this report.

#### (III) Taxes on dividends

For details of the company’s cash dividend proposal for the reporting period, please refer to “I. Proposal for Profit Distribution to Ordinary Shareholders or for Converting Capital Reserve into Share Capital” under “Section 6 Key Matters” of this Report. If the proposal is adopted, the Company expects the cash dividend to be paid on or before 31 August 2020. After the general meeting is held, the Company will separately announce further details on suspension of record of transfer of H shares in respect of the distribution of cash dividends as well as the expected distribution date.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Pursuant to the “Corporate Income Tax Law of the People’s Republic of China” effective from 1 January 2008, the Company shall withhold corporate income tax at the rate of 10% when distributing cash dividends to non-resident corporate shareholders listed in shareholder register for H shares. Any H shares registered in the name of non-individual shareholders (including HKSCC Nominee Limited, other nominees, agents or trustees, other organizations and groups) are deemed held by non-resident corporate shareholders. Therefore, dividends due to these shareholders are subject to the withholding of corporate income tax. Any H-share shareholder intending to change their shareholder status should inquire about relevant formalities with their agents or trustees. The Company will withhold corporate income tax on relevant shareholders listed in the shareholder register for H shares on the record date for the proposed final dividends for 2016 in strict accordance with laws and regulations or the requirements of relevant government authorities.

The Company will withhold individual income tax at the rate of 10% if an individual shareholder of H shares is a resident of Hong Kong or Macao, or is a resident of other countries that have entered into a 10% tax treaty with PRC on cash dividends distributed to them. If the individual shareholder of H shares is a resident of a country that has entered into a tax agreement with China with a dividend tax rate of less than 10%, the Company will withhold the individual income tax on dividends at a tax rate of 10%. In respect of this, if any relevant individual shareholder of H shares intends to apply for refund of excess tax withheld (“excess amount”), the Company may apply for the agreed preferential tax rate on his/her behalf pursuant to the tax treaty, provided that relevant shareholder shall within the specified time period, submit to the H share register of the Company the certificate set forth in the tax treaty notice, and subject to the audit and approval of the competent tax authority, the Company will offer assistance in the refund of the excess amount. If the individual shareholder of H shares is a resident of a country that has entered into a tax treaty with PRC with a tax rate of more than 10% but less than 20% on dividends, the Company will withhold individual income tax at the actual tax rate specified in the tax treaty. The Company will ultimately withhold individual income tax at 20% if the individual shareholder of H shares is a resident of a country that has entered into a tax treaty with PRC with a 20% tax rate on dividends, or a resident of a country that has not entered into any tax treaty with PRC, or in any other circumstance.

According to the Notice on Issues Concerning the Policy of Differentiated Individual Income Taxes on Dividends and Bonuses of Listed Companies (Cai Shui [2015] No.101), where an individual acquired stocks in a listed company on the public offering and transfer market, dividends income of the individual are fully included in his/her taxable income if he/she has held the stocks within one month (inclusive), are 50% included in his/her taxable income on a provisional basis if he/she has held the stocks for longer than one month and up to one year (individual income tax rate is 20% for the above cases), and are exempted from individual income tax if he/she has held the stocks for longer than one year.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (IV) Explanation on the Major Relationship Between the Company And Its Employees, Customers, Suppliers And Other Parties with Significant Influence on the Company

- 1. The Group and its employees.** The Group upholds the principle of “people-oriented”. The development of the Company is “for people”. The products and services provided by the Company should meet the demand of “people” as possible as they can. The Company will keep on customer-oriented, keep abreast of the changes in market conditions, seek market development opportunities, and vigorously expand service areas and regions. The development of the Company is “dependent on people”. Employees are our most valuable assets and providers of products and services. Through the enhancement of employees’ knowledge, skills and abilities, we can continuously improve the quality of work and work standards and strengthen the overall competitiveness of the Company. The development of the Company is to “achieve success”. On the basis of the Company’s development, individual achieves all-round development, including fair career development opportunities, competitive remuneration system and harmonious interpersonal environment. Based on such an understanding, the Company has long regarded the employees’ education and training as a basic work to continuously improve the overall quality of the employee teams, update the employees’ knowledge, and cultivate professional talents with unremitting determination and strict implementation. In the employee education and training, based on the team building condition of the employees and in accordance with the Company’s strategy, customers’ needs and personal abilities, we aim to improve the employees’ political theory level and business performance ability. By adhering to the strategy of “going out and coming in”, and insisting on the working concept of organic combination of centralized-training and self-improvement, we invest a large amount of human and financial resources to create a training environment for employees and to implement the measures of employee education and training in an effective manner. In 2019, the cumulative number of employees received training reached 15,086, of which 5,033 were operation and management personnel, 8,347 were engineering technicians, 1,377 were production and operation personnel, and 329 were service and other personnel.

The Company vigorously implements employee care projects to provide employees with fair career development opportunities, competitive remuneration system and harmonious interpersonal environment. The Company pursues the harmony between internal and external environments, realizes the win-win situation among stakeholders, embodies the interests of employees and the return of Shareholders, and simultaneously takes into account short-term interests and long-term development. We care for health,safety and environmental affairs, and achieve win-win situation among all kinds of stakeholders. We take better understanding and attention into the production and living conditions of grassroots employees,promote the principle of “lifelong learning, healthy living”, commit to building staff relationships that are “warm as sunshine,open, simple and friendly”, and constantly strengthen the ideological guidance, democratic management and care to let employees feel care and assistance from organizations at all levels.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

2. **The Group and its customers.** The Group takes the provision of satisfactory products and services to its customers and the creation of values for its customers as its corporate faith. As such, we have established a result-oriented executive team to develop an executive culture which takes customer value as its faith. We have been dedicated to continuously upgrading our products and services for maximizing our customers' values, enabling the mutual benefits and mutual development between the Group and its customers.
3. **The Group and its suppliers.** The Group insists on the principle of “selecting the best, retaining the excellence and eliminating the inferiors, cooperating for mutual benefits and mutual development” when managing suppliers through e-commerce procurement platform, which has preliminarily established a database of procurement costs and categorized management on varieties of procurement, built and improved the appraisal system, incentive mechanism and elimination mechanism of suppliers, and promoted the consistent improvement on the supplying capacity of suppliers so as to realize the mutual benefits and mutual development between the Group and its suppliers.
4. **The Group, the governments and large enterprises as business partners.** In respect of the development of the domestic business, the Group focuses on the reinforcement of a profound connection with local governments and well-known enterprises. The Group successively established strategic partnership with local governments and enterprises including Overseas Chinese Town Group, the government of Qujing City in Yunnan on areas such as transport and municipality to launch cooperation.
5. **The Group's donation.**

The Group made charity and other donation totaling RMB0.94 million for the reporting period.

### (V) Material Events after the End of the Financial Year

None

### (VI) Issue of Shares

During the year, the Company did not issue any class of shares.

### (VII) Results

The audited results of the Company and its subsidiaries for the year ended 31 December 2019 are set out in the consolidated income statement in the accompanying financial report. The financial positions of the Company and its subsidiaries as at 31 December 2019 are set out in the consolidated balance sheet in the accompanying financial report. The consolidated cash flows of the Company and its subsidiaries for the year ended 31 December 2019 are set out in the consolidated statement of cash flows in the accompanying financial report. Results performance, discussion and analysis of important factors affecting results and financial position of the Group for the year are set out in Section 5 “Operating Results Discussion and Analysis” of this annual report.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (VIII) Property, Plant and Equipment

Details of movements in property, plant and equipment of the Company and its subsidiaries for the year are set out in Note 5.16 “Fixed assets” under “5. Notes to the Consolidated Financial Statements”.

### (IX) Share Capital

As of 31 December 2019, the total issued share capital of the Company amounted to RMB2,959,066,667, which was divided into 2,959,066,667 shares (comprising 399,476,000 H Shares and 2,559,590,667 A Shares), with a nominal value of RMB1.00 each.

### (X) Taxation

#### Current and deferred income tax

The tax expense during this reporting period comprises current and deferred income tax. Income tax is recognized in the consolidated statement of comprehensive income, except for the taxation relating to items recognized in other comprehensive income or directly in equity, which is recognized in equity. In this case, the income tax is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It makes provision for tax payable based on tax amounts expected to be paid to the tax authorities where applicable.

Deferred income tax is determined using the liability method, and provision for deferred income tax is made on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax liabilities are not recognized if they arise from the initial recognition of goodwill; deferred income tax is not recognized if it arises from the initial recognition of an asset or a liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profits or losses. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the deferred income tax asset is realized or the deferred income tax liability is settled.



## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

Deferred income tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. Deferred income tax is provided on temporary differences arising from the Group's investments in subsidiaries and associates, while the deferred income tax liability is not recognized where there is evidence that the timing of the reversal of the temporary differences is controlled by the Group and it is probable that such temporary differences will not be reversed in the foreseeable future.

Deferred income tax assets and deferred income tax liabilities are shown on a net basis after offsetting when meeting all the following conditions: the Group has the legally enforceable right to settle current income tax assets and current income tax liabilities; and the deferred income tax assets and liabilities relate to the income tax levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

### Value-added taxation

Sales of goods of the Group are subject to VAT. VAT payable is determined by the taxable sales calculated by applying the applicable tax rates on the taxable revenue arising from sales of goods and provision of service after deducting deductible input VAT of the period. The applicable VAT rate for the sales of goods business of the Group is 16%, from 1 January to 31 March 2019, while the VAT rate for sales business is adjusted to 13% from 1 April in 2019. The applicable VAT rate for the modern service industry in 2019, including design, is 6%.

According to the Circular on "Comprehensively Promoting the Pilot Program of the Collection of Value-added Tax in Lieu of Business Tax" (Cai Shui [2016] No.36) jointly released by the Ministry of Finance and the State Administration of Taxation, effective from 1 May 2016, the Group's revenue resulting from providing construction services is subject to a VAT at an applicable tax rate of 10% from 1 January to 31 March 2019, which has adjusted to 9% from 1 April.

### (XI) Reserves

The details of movements in reserves of the Group and the Company during the year are set out in the accompanying notes to the consolidated balance sheet and to the balance sheet of the parent, among which the details of the Company's reserves available for distribution to Shareholders are set out in Note 5.45 "undistributed profit" to the consolidated financial statements.

### (XII) Events after the Balance Sheet Date

There was no other significant subsequent event after 31 December 2019.

### (XIII) Purchase, Redemption or Sale of Listed Securities

Neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2019.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

### (XIV) Use of Proceeds from Fund Raising

1. The total amount of fund raised from the Listing of H Shares of the Company was HK\$1,318.0 million. As of 31 December 2014, our fund raised had been fully utilized. The fund was primarily used in the industrialization of the Company and overseas engineering projects in compliance with the use of fund disclosed in the Prospectus.
2. In order to further explore financing channel, optimize capital structure, meet the capital contribution requirement for enterprise transformation and upgrade, enhance domestic notability of the Company and promote a better enterprise development, and with the approval under 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) (《關於核准中鋁國際工程股份有限公司首次公開發行股票的批覆》(證監許可[2018]934號)) issued by the CSRC on 8 June 2018, the Company issued 295,906,667 ordinary shares in Renminbi (A Shares) to the public. The issue price per share was RMB3.45/share, with the gross proceeds of RMB1,020.878 million. The net proceeds after deducting the issuance fees of approximately RMB41.295 million was RMB979.583 million. For details, please refer to the Company's announcements dated 30 August 2018 in relation to the initial public offering of A Shares and the 2018 interim financial report and the announcement in relation to the completion of the issue of A Shares, which were all published on the websites of SSE and the Stock Exchange.

As of 31 December 2018, the Company had utilized a total amount of RMB904.445 million of the proceeds, and the remaining balance amounted to RMB75.138 million. The Company utilized RMB75.138 million of the proceeds in 2019 for supplementing working capital for the general contracting business and had utilized a total amount of RMB979.583 million of the proceeds as of 31 December 2019. All of the proceeds had been fully utilized.

WUYIGE Certified Public Accountants LLP conducted specific audit work in respect of the use of proceeds of the Company in 2019 and issued an Audit Report on A Shares Proceeds Deposit and Actual Usage of China Aluminum International Engineering Corporation Limited in 2019 (Da Xin Zhuan Shen Zi [2020] No.1-00796) (《中鋁國際工程股份有限公司2019年度A股募集資金存放與實際使用情況的審核報告》(大信專審字[2020]第1-00796號)). It is believed that the preparation of the report on proceeds deposit and actual usage of Chalico is based on the requirements of the Guidelines for the Supervision and Administration on Listed Companies No.2 – Supervision and Administration Requirements for Listed Companies on the Management and Use of Proceeds (Zheng Jian Hui Gong Gao [2012] No.44) (《上市公司監管指引第2號–上市公司募集資金管理和使用的監管要求》(證監會公告[2012]44號)) of CSRC and the Measures of Shanghai Stock Exchange for the Proceeds of Listed Companies (2013 Amendment) (Shang Zheng Gong Zi [2013] No.13) (《上海證券交易所上市公司募集資金管理辦法(2013年修訂)》(上證公字[2013]13號)). The report truly presented, in all material aspects, the deposit and actual use of proceeds of Chalico as of 31 December 2019.

## SECTION 5 OPERATING RESULTS DISCUSSION AND ANALYSIS

China Merchants Securities Co., Ltd., the sponsor, issued a specific audit report in respect of the deposit and actual use of proceeds of the Company in 2019. After the examination, the sponsor considered that the deposit and use of proceeds of Chalico in 2019 were in compliance with the relevant requirements of the Measures for the Administration of the Sponsorship of the Offering and Listing of Securities (《證券發行上市保薦業務管理辦法》), the Guidelines for the Supervision and Administration on Listed Companies No.2 – Supervision and Administration Requirements for Listed Companies on the Management and Use of Proceeds, the Measures of Shanghai Stock Exchange for the Proceeds of Listed Companies (2013 Amendment) and the Measures of the Use of Proceeds of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司募集資金使用管理辦法》). The Company has conducted specific deposit and usage for the proceeds and fulfilled its obligations to disclose relevant information on a timely basis. The particular use of proceeds is consistent with the disclosure made by the Company, and there were no violations regarding the use of proceeds.

### (XV) Bank Borrowings And Other Borrowings

Details of bank borrowings and other borrowings of the Company and its subsidiaries as at 31 December 2019 are set out in Note 5.24 “short-term borrowings” and Note 5.34 “long-term borrowings” to the consolidated financial statements.

### (XVI) Equity-Linked Agreements

During the year ended 31 December 2019, the Group did not enter into any equity-linked agreements that would or could result in the issue of Shares by the Company.

### (XVII) Compliance with OFAC Undertakings

During the Listing of the Company, an undertaking was made to the Stock Exchange by the Company that the Company would not use any proceeds from the Global Offering and any other fund raised through the Stock Exchange for any projects conducted in any sanctioned countries, or for compensation for losses of the Iran company due to the default of relevant Iran contracts, if any, by the Company (the “OFAC Undertakings”). During the reporting period, the Company issued the list of relevant sanctioned countries to business department to forbid the Company from conducting any business with the sanctioned countries, regions or organizations and organized training on relevant legal knowledge. Hence, the Directors of the Company confirmed that the Company complied with the OFAC Undertakings during the reporting period and will continue to comply with the OFAC Undertakings in the normal course of business of the Company in future.

### (XVIII) Management Contracts

During 2019, the Company did not sign or enter into any contract in respect of the management and administration of all or any substantial part of its business.

## SECTION 6 KEY MATTERS

### I. PROPOSAL FOR PROFIT DISTRIBUTION TO ORDINARY SHAREHOLDERS OR FOR CONVERTING CAPITAL RESERVE INTO SHARE CAPITAL

#### (I) Formulation, execution and adjustments to cash dividend policy

Applicable     Not applicable

##### 1. Basic principles for profit distribution

- (1) The Company should fully consider the return to investors and distribute dividends to shareholders every year at the specified percentage of the profit available for distribution for the year.
- (2) The Company should maintain continuity and stability in its profit distribution policy while taking into account the long-term interests of the Company, the overall interests of all shareholders and the sustainable development of the Company.
- (3) The Company gives priority to profit distribution in cash. In accordance with the procedures stipulated in the Articles of Association, after considering a combination of factors, including characteristics of the industry where it operates, development stage, business model of its own, profitability, as well as whether there is any substantial capital expenditure arrangement, the Company shall put forward differentiated cash dividend distribution policies and determine the percentage of cash dividends in profit distribution for the year. Such percentage should comply with laws, administrative regulations, normative documents and relevant regulations of stock exchanges.

##### 2. Specific policies on profit distribution

According to its Articles of Association, the Company may distribute dividends in cash, in shares, or in a combination of both cash and shares, while it gives priority to profit distribution in cash. Subject to the conditions of dividend distribution, the Company shall distribute profits at least once a year, while interim profit distribution may also be made provided that the Company is guaranteed for normal operation and development. The Board of the Company shall put forward differentiated cash dividend distribution policies in accordance with the procedures stipulated in the Articles of Association, after considering a combination of factors, including characteristics of the industry where it operates, development stage, business model of its own, profitability, as well as whether there is any substantial capital expenditure arrangement(s):

- (1) where the Company is at the developed stage with no substantial capital expenditure arrangement, cash dividend shall be not less than 80% of the profit distribution at the time of profit distribution;

## SECTION 6 KEY MATTERS

- (2) where the Company is at the developed stage with substantial capital expenditure arrangement, cash dividend shall be not less than 40% of the profit distribution at the time of profit distribution;
- (3) where the Company is at the development stage with substantial capital expenditure arrangement, cash dividend shall be not less than 20% of the profit distribution at the time of profit distribution;
- (4) where the Company has difficulty in identifying the development stage but there is substantial capital expenditure arrangement, dividend distribution may be made in accordance with the preceding provision.

“Substantial capital expenditure arrangement” means the proposed external investment, asset acquisition or purchase of assets by the Company in the next twelve months in an aggregate expenditure amounting to or exceeding 10% of the latest audited net assets of the Company.

Except for special circumstances, the Company shall give priority to dividend payment in cash out of its posttax profits for the year after the accumulated loss (if any) are made up and legal and discretionary reserves are allocated. The cash distribution shall be no less than 20% of the distributable profits for the year. Actual and reasonable factors such as corporate growth and dilution of net asset value per share should be taken into account when profit is distributed in dividends on shares. The Company may not distribute the cash dividends in the following special circumstances:

- (1) The auditor issues a report other than a standard report without qualified opinion in relation to the annual financial report of the Company.
- (2) The net operating cash flows for the year are negative.
- (3) The Company has major investment plan or significant cash expenditure (except for fund raising projects).

### 3. Profit distribution proposal for 2019

As audited by WUYIGE Certified Public Accountants LLP, the 2019 consolidated financial statements prepared by Chalieco under the China Accounting Standards for Business Enterprises shows that net profit attributable to shareholders of the listed company was RMB34,852,562.55, and undistributed profit of the parent company RMB19,930,329.36. On the basis of a total share capital of 2,959,066,667 shares, the Company plans to distribute cash dividends of RMB0.036 (pretax) per 10 shares, totaling cash dividends are of RMB10,652,640, and carry forward the remaining undistributed profits of RMB9,277,689.36 into the next year. The proposed total cash dividends account for 30.56% of net profits attributable to shareholders of the listed company as stated in the 2019 consolidated financial statements of Chalieco. The proposal is subject to consideration and approval of the 2019 Annual General Meeting.

## SECTION 6 KEY MATTERS

**(II) Plan or proposal for dividend distribution to ordinary shareholders, or plan or proposal for converting capital reserve into share capital of the Company for the recent three years (including reporting period)**

Unit: Yuan Currency: RMB

Year of profit distribution	Bonus shares per 10 shares (share)	Dividends per 10 shares (RMB) (pretax)	Number of shares converted from capital reserve per 10 shares (share)	Amount of cash dividends (pretax)	Net profit attributable to ordinary shareholders of the listed company on the consolidated statement for the year of profit distribution	Percentage in net profit attributable to ordinary shareholders of the listed company on the consolidated statement (%)
2019	-	0.036	-	10,652,640.00	34,852,562.5	30.56%
2018	-	0.31	-	91,706,106.49	305,687,021.63	30.00%
2017	-	-	-	-	591,208,852.19	-

**(III) Share buyback in cash included in cash dividends**

Applicable    Not applicable

**(IV) If the Company has positive profit for the reporting period and the parent has positive profit available for distribution to ordinary shareholders, but the Company does not have a plan for profit distribution in cash to ordinary shares, the Company shall disclose the reasons in detail as well as the purpose and intended use of undistributed profit.**

Applicable    Not applicable

## SECTION 6 KEY MATTERS

## II. PERFORMANCE OF COMMITMENTS

## (I) 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 lock-up and intention of reducing shareholding	Three years from the date of A share listing, and two years from expiration of the lock-up period	Yes	Yes	N/A	N/A
		Luoyang Institute	Commitment on share lock-up and intention of reducing shareholding	Three years from the date of A share listing, and two years from expiration of the lock-up period	Yes	Yes	N/A	N/A
	Others	Chinalco, the Company, and our non-independent directors and senior management	Stock price stabilisation plan	Three years from the date of A share listing	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 between the Company and its controlling shareholder	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	Chalco 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, sponsor, auditor, legal advisor	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) If any profit forecast exists for an asset or project of the Company, and the reporting period falls into the forecast period, the Company should specify whether the asset or project meets the profit forecast and provide reasons**

Realized     Not realized     Not applicable

**(III) Realization of guaranteed performance and its impact on goodwill impairment test**

Applicable     Not applicable

### III. MISAPPROPRIATION OF FUNDS DURING THE REPORTING PERIOD AND DEVELOPMENTS IN RECOVERY

Applicable     Not applicable

### IV. EXPLANATION OF NON-STANDARD AUDITORS OPINIONS FROM THE ACCOUNTING FIRM

Applicable     Not applicable

### V. ANALYSIS OF REASONS OF CHANGES IN ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES OR CORRECTION TO SIGNIFICANT ACCOUNTING ERRORS AND THEIR IMPACT

**(I) Analysis of reasons and impact of changes in accounting policies and accounting estimates of the Company**

Applicable     Not applicable

#### 1. Changes in accounting policies and basis

- (1) On 7 December 2018, the Ministry of Finance issued the Circular on Revising and Issuing the Accounting Standards for Business Enterprises No.21-Lease (Cai Kuai [2018] No.35). The Company has adopted this Accounting Standards from 1 January 2019. Based on transitional provisions of these Accounting Standards, after prudent evaluation of relevant facts and circumstances, the Company retroactively adjusted the financial statements at beginning of this reporting period in respect of relevant matters.



## SECTION 6 KEY MATTERS

- (2) In April 2019, the Ministry of Finance issued the Circular on Revising and Issuing the Format of Financial Statements of General Enterprise for 2019 (Cai Kuai [2019] No.6) (hereinafter referred to as “Format of Financial Statement”), and enterprises adopting the Accounting Standards for Business Enterprises shall prepare financial statements in accordance with the Accounting Standards for Business Enterprises and the requirements of this Circular.

### 2. Impact of changes in accounting policies

- (1) Impact of adopting the revised Accounting Standards for Lease:

Unit: Yuan Currency: RMB

Items on consolidated financial statements	31 December 2018	Impact on amount	1 January 2019
Assets:			
Prepayment	1,154,443,987.85	-307,698.19	1,154,136,289.66
Right-of-use assets	-	28,531,409.02	28,531,409.02
Liabilities:			
Current portion of non-current liabilities	1,353,597,500.02	11,653,295.64	1,365,250,795.66

- (2) Impact of adopting the revised Format of Financial Statements

According to the requirements of the Format of Financial Statements, the Company splits “notes receivable and accounts receivable” into “notes receivable” and “accounts receivable” and splits “notes payable and accounts payable” into “notes payable” and “accounts payable”. The Company retrospectively adjusted financial statements of the comparative period, and such change in accounting policies has no impact on consolidated and Company’s net profit and shareholder’s interest.

### (II) Analysis of reasons for correction to significant accounting errors and its impact

Applicable Not applicable

### (III) Communication with the former auditor

Applicable Not applicable

### (IV) Other information

Applicable Not applicable

## SECTION 6 KEY MATTERS

### VI. APPOINTMENT AND REMOVAL OF AUDITOR

Unit: Yuan Currency: RMB

	Former	Current
Name of domestic auditor	WUYIGE Certified Public Accountants LLP	WUYIGE Certified Public Accountants LLP
Compensation of domestic auditor	4,000,000	4,804,500
Years of service of domestic auditor	4 years	4 years
Name of overseas auditor	PKF Hong Kong Limited	/
Remuneration of overseas auditor	500,000	/
Years of service of overseas auditor	4 years	/
	Name	Remuneration
Internal control auditor	WUYIGE Certified Public Accountants LLP	742,000
Financial advisor	None	/
Sponsor	None	/

#### Explanation of appointment and removal of the auditor

Applicable     Not applicable

As adopted at the fourth extraordinary general meeting of 2019, the Company terminated the appointment the PKF Hong Kong Limited as the international auditor of the Company on 30 December 2019.

## SECTION 6 KEY MATTERS

### Change in auditor during the audited period

Applicable    Not applicable

In view of the fact that Company's A shares got listed on SSE on 31 August 2018, in order to improve the efficiency of information disclosure, save the cost of information disclosure and the cost of financial statements preparation, on 27 November 2019, the Board proposed that the Company prepare the financial report for 2019 and onwards solely under the China Accounting Standards for Business Enterprises and that the Company terminate the appointment of PKF Hong Kong Limited as the international auditor of the Company at the same time. On 30 December 2019, the Company convened an extraordinary general meeting to consider and approve the above matters. For details, please refer to the Announcement on Resolutions of the 28th Meeting of the Board of Directors of the Third Session, the Announcement on Preparing Financial Statements Solely under the China Accounting Standards for Business Enterprises and Terminating Appointment of the International Auditors, and the Announcement on Resolutions of the 4th Extraordinary General Meeting of 2019 (Announcement Numbers: Pro 2019-088, Pro 2019-090, and Pro 2019-103) disclosed by the Company on 28 November 2019 and 31 December 2019.

## VII. POTENTIAL RISK OF SUSPENSION IN LISTING

### (I) Reason giving rise to suspension in listing

Applicable    Not applicable

### (II) Proposed countermeasures

Applicable    Not applicable

## VIII. CIRCUMSTANCE IN WHICH THE COMPANY FACES DE-LISTING AND REASONS

Applicable    Not applicable

## IX. BANKRUPTCY REORGANIZATION RELATED ISSUES

Applicable    Not applicable

## X. MATERIAL LITIGATION AND ARBITRATION

- The Company was involved in any material litigation or arbitration during the year.  
The Company was not involved in any material litigation or arbitration during the year.

## SECTION 6 KEY MATTERS

### (I) Litigation and arbitration disclosed in provisional announcements and without subsequent development Add litigation information prior to the announcement. Whether the date is the announcement date or the date appearing on the website.

Applicable       Not applicable

#### Summary and type of the issue

#### Reference

Dispute arising from engineering construction contract between Ninth Metallurgical Construction Co., Ltd., one of our subsidiaries, and Gree Electric (Zhengzhou) Co., Ltd.

For details, please refer to the Announcement No. Pro 2019-024 and Announcement No. Pro 2020-14 issued by the Company on 17 April 2019 and 11 March 2020 on the designated media for information disclosure.

Lawsuit arising from engineering construction contract between Chang Cheng Construction Co., Ltd., a wholly-owned subsidiary of our subsidiary Sixth Metallurgical Construction Company of China Nonferrous Metals Industry, and Changge Hongji Weiye Real Estate Development Co., Ltd.

For details, please refer to Announcement No. Pro 2019-032 and Announcement No. Pro 2020-005 issued by the Company on the designated media for information disclosure on 8 May 2019 and 11 January 2020.

Disputes arising from engineering construction contract between Sixth Metallurgical Construction Company of China Nonferrous Metals Industry, one of our wholly-owned subsidiaries, and Yingkou Zhongwang Aluminum Co., Ltd.

For details, please refer to the Company's Announcement No. Pro 2019-051 and Announcement No. Pro 2019-054 issued on 17 July 2019 and 2 August 2019 on the designated media for information disclosure.

Disputes arising from the general contracting contract between China Aluminum International Engineering Equipment Co., Ltd., a wholly-owned subsidiary of the Company, and Qinghai Western Hydropower Co., Ltd.

For details, please refer to the Company's Announcement No. Pro 2019-001 and Announcement No. Pro 2019-056 issued on 2 January 2019 and 12 August 2019 on the designated media for information disclosure.

Disputes arising from the installation engineering contract between China Aluminum International Engineering Equipment Co., Ltd., a wholly-owned subsidiary of the Company, and China Metallurgical Tiangong Group Co., Ltd.

For details, please refer to the Company's Announcement No. Pro 2019-062 and Announcement No. Pro 2019-102 issued on 18 September 2019 and 31 December 2019 on the designated media for information disclosure.

## SECTION 6 KEY MATTERS

### Summary and type of the issue

Dispute arising from engineering construction contract between Sixth Metallurgical Construction Company of China Nonferrous Metals Industry, a wholly-owned subsidiary of the Company, and Huimin Advanced Materials Co., Ltd.

Dispute arising from engineering construction contract between Sixth Metallurgical Construction Company of China Nonferrous Metals Industry, a wholly-owned subsidiary of the Company, and Zouping County Huicai Advanced Materials Technology Co., Ltd.

Dispute arising from engineering construction contract between Sixth Metallurgical Construction Company of China Nonferrous Metals Industry, a wholly-owned subsidiary of the Company, and Guizhou Guian Real Estate Investment Co., Ltd.

Dispute arising from the technical consultancy contract between our Guiyang Branch and Qinghai West Hydropower Co., Ltd.

Disputes arising from engineering construction contract between Sixth Metallurgical Construction Company of China Nonferrous Metals Industry, a wholly-owned subsidiary of the Company, and Kaiyang County Ronghe City Development Investment Co., Ltd.

### Reference

For details, please refer to the Company's Announcement No. Pro 2019-091 and Announcement No. Pro 2020-010 issued on the designated media for information disclosure on 29 November 2019 and 23 January 2020.

For details, please refer to the Company's Announcement No. Pro 2019-092 and Announcement No. Pro 2020-010 issued on 29 November 2019 and 23 January 2020 on the designated media for information disclosure.

For details, please refer to the Company's Announcement No. Pro 2019-050, Announcement No. Pro 2019-094 and Announcement No. Pro 2020-011 issued on 16 July 2019, 12 December 2019 and 22 February 2020 on the designated media for information disclosure.

For details, please refer to the Company's Announcement No. Pro 2019-071, Announcement No. Pro 2019-096, Announcement No. Pro 2020-001 and Announcement No. Pro 2020-013 issued on 16 October 2019, 18 December 2019, 4 January 2020 and 10 March 2020 respectively on designated media for information disclosure.

For details, please refer to the Company's Announcement No. Pro 2020-002 issued by the Company on the designated media for information disclosure on 4 January 2020.

## SECTION 6 KEY MATTERS

## Summary and type of the issue

Dispute arising from the engineering general contracting and advance repayment agreement between Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd., a wholly-owned subsidiary of our subsidiary Guiyang Aluminum and Magnesium Design Institute Co., Ltd. and Guizhou Huada Real Estate Development Co., Ltd.

## Reference

For details, please refer to the Company's Announcement No. Pro 2018-028, Announcement No. Pro 2019-055, Announcement No. Pro 2019-061 and Announcement No. Pro 2020-009 issued on 25 December 2018, 13 August 2019, 11 September 2019 and 23 January 2020 respectively on the designated media for information disclosure.

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

Applicable       Not applicable

Unit: '0000 Yuan      Currency: RMB

During the reporting period:

Plaintiff (Applicant)	Defendant (Respondent)	Party with several and joint liability	Litigation or Arbitration	Basic information of litigation (arbitration)	Amount concerning litigation (arbitration)	Whether estimated liability arose from the litigation (arbitration) and amount	Current status of the litigation (arbitration)	Judgment/ award and impact	Enforcement of judgment (award)
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	Huainan Zhongsheng Real Estate Co., Ltd., Zhirongcheng Investment (Beijing) Co., Ltd., Beijing Wuzhou Hengyou International Investment Co., Ltd., Ganzhou Hualong Real Estate Development Co., Ltd., Chen Quanhong	None	Litigation	Dispute over contract	75,199	No	Judgment handed down	Note 1	Under enforcement
China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	Anhui Wante Investment Development Co., Ltd., Anhui Wante Investment Development Co., Ltd. Liu'an Branch	None	Litigation	Dispute over engineering construction contract	21,173	No	Judgment handed down	Note 2	Under enforcement
China Aluminum International Shandong Construction Co., Ltd.	People's Government of Donghu District of Nanchang, Dongjiayao Sub-district Office of Donghu District, Nanchang	None	Litigation	Dispute over contract	18,038	No	Judgment handed down	Note 3	Executed
Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd.	Guizhou Shenzhou Technology Development Co., Ltd.	None	Arbitration	Dispute over construction engineering contract disputes	6,596	No	Judgment handed down	Note 4	Executed

## SECTION 6 KEY MATTERS

During the reporting period:

Plaintiff (Applicant)	Defendant (Respondent)	Party with several and joint liability	Litigation or Arbitration	Basic information of litigation (arbitration)	Amount concerning litigation (arbitration)	Whether estimated liability arose from the litigation (arbitration) and amount	Current status of the litigation (arbitration)	Judgment/ award and impact	Enforcement of judgment (award)
China CITIC Bank Co., Ltd., Dongguan Branch	Dongguan Hengyu Construction Engineering Co., Ltd., Dongguan Yongfeng Construction Engineering Co., Ltd., Guangdong Hengyi Company Ltd., Xie Deqiang, Dongguan Jinda Real Estate Development Co., Ltd., Dongguan Jusheng Industrial Limited, Dongguan Dongyu Plaza Real Estate Development Co., Ltd., Lu Xiu'e	Sixth Metallurgical Construction Company of China Non-ferrous Metals Industry (third party)	Litigation	Dispute over financial loan contract	17,373	No	The plaintiff withdrew the lawsuit	None	None
China CITIC Bank Co., Ltd. Dongguan Branch	Dongguan Hengyu Construction Engineering Co., Ltd., Dongguan Yongfeng Construction Engineering Co., Ltd., Guangdong Hengyi Company Ltd., Xie Deqiang, Dongguan Jinda Real Estate Development Co., Ltd., Dongguan Jusheng Industrial Limited, Dongguan Dongyu Plaza Real Estate Development Co., Ltd., Lu Xiu'e	Sixth Metallurgical Construction Company of China Nonferrous Metals Industry Co., Ltd. (third party)	Litigation	Dispute over financial loan contract	25,122	No	The plaintiff withdrew the lawsuit	None	None
China CITIC Bank Co., Ltd. Dongguan Branch	Dongguan Hengyu Construction Engineering Co., Ltd., Dongguan Yongfeng Construction Engineering Co., Ltd., Guangdong Hengyi Company Ltd., Xie Deqiang, Dongguan Jinda Real Estate Development Co., Ltd., Dongguan Jusheng Industrial Limited, Dongguan Dongyu Plaza Real Estate Development Co., Ltd., Lu Xiu'e	Sixth Metallurgical Construction Company of China Nonferrous Metals Industry (third party)	Litigation	Dispute over financial loan contract	21,645	No	The plaintiff withdrew the lawsuit	None	None
Ninth Metallurgical Construction Co., Ltd.	Shaanxi Huangling Coking Coal Chemical Industry Company Co., Ltd.	None	Litigation	Dispute over construction engineering contract disputes	6,869	No	Judgment handed down	Note 5	Under execution
Ninth Metallurgical Construction Co., Ltd.	Shaanxi Huayuan Real Estate Development Co., Ltd.	None	Litigation	Dispute over construction engineering contract	9,356	No	Judgment handed down	Note 6	Executed
Zhejiang Tianzeng Construction Co., Ltd. Mianchi Branch	China Aluminum Zhongzhou Mining Co., Ltd., China Aluminum Zhongzhou Mining Co., Ltd. Sanmenxia Branch	China Aluminum International Engineering Corporation Limited (third party)	Litigation	Dispute over construction engineering contract	6,100	No	Hearing	None	None
China Mining Construction Group Ltd. Mianchi Branch	China Aluminum Zhongzhou Mining Co., Ltd., China Aluminum Zhongzhou Mining Co., Ltd. Sanmenxia Branch	China Aluminum International Engineering Corporation Limited (third party)	Litigation	Dispute over construction engineering contract	12,900	No	Hearing	None	None
Guizhou Construction Company 7th Construction Engineering Co., Ltd	Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd	None	Litigation	Dispute over construction engineering contract	5,000	No	Judgment handed down	Note 7	Executed
China Metallurgical Tiangong Group Ltd.	China Aluminum International Engineering Equipment Co., Ltd.	None	Litigation	Dispute over construction engineering contract	5,500	No	Judgment handed down	Note 8	Under execution
China 22nd Metallurgical Group Ltd.	China Aluminum International Engineering Equipment Co., Ltd.	None	Litigation	Dispute over construction engineering contract	8,100	No	Judgment handed down	Note 9	Under execution

## SECTION 6 KEY MATTERS

During the reporting period:

Plaintiff (Applicant)	Defendant (Respondent)	Party with several and joint liability	Litigation or Arbitration	Basic information of litigation (arbitration)	Amount concerning litigation (arbitration)	Whether estimated liability arose from the litigation (arbitration) and amount	Current status of the litigation (arbitration)	Judgment/ award and impact	Enforcement of judgment (award)
Shandong Real Estate Development Company Qingdao Company	Qingdao Xinfu Gongchuang Asset Management Company Limited	China Aluminum International Engineering Corporation Limited, Liang Yongjian, Wang Xiaoning (third party)	Litigation	Dispute over contract	35,000	No	Hearing	None	None
Qiu Haijie, Zhang Jun, Guo Zhiming, Zeng Minghai	Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	Boyuan Real Estate Co., Ltd. in Hohhot Economic and Technological Development Zone	Litigation	Dispute over construction engineering construction contract	6,100	No	Hearing	None	None

Note 1: On 14 October 2019, the Supreme Court issued a final judgment of the second instance, ruling that the Government of Tianjia'an District shall pay Zhongsheng RMB443 million. On 24 December 2019, Twelfth Metallurgical Company applied to the Anhui Provincial Superior People's Court for enforcement on behalf of Zhongsheng.

Note 2: In June 2019, Twelfth Metallurgical Company won in the second instance at the Supreme People's Court, receiving support for its claim for RMB128 million. On 30 June 2019, Twelfth Metallurgical Company applied to Anhui Superior People's Court for enforcement and had received a payment of RMB35 million. The remaining payment is under enforcement.

Note 3: Payment of about RMB150 million had been collected by June 2019. The judgment had been executed.

Note 4: Guiyang Municipal Intermediate People's Court ruled that Shenzhou shall offset the underlying debt of RMB82 million against construction in progress "Zhizao Mansion". The ruling had been executed.

Note 5: In March 2019, the two parties reached a settlement that Shaanxi Huangling Coking Coal Chemical Industry Company Co., Ltd. shall pay Ninth Metallurgical Company RMB64 million in installments. Shaanxi Huangling Coking Coal Chemical Industry Company Co., Ltd. has made 10 installment payments totaling RMB45 million according to the mediation agreement.

Note 6: The final judgment is that the other party shall pay Ninth Metallurgical Company RMB39.92 million. The other party had completed the payment and the case was closed.

Note 7: The two parties settled. Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd paid Guizhou Construction Company 7th Construction Engineering Co., Ltd RMB26.72 million. The case was closed.

Note 8: The two parties reached a settlement that China Aluminum Equipment shall pay China Metallurgical Tiangong Group Ltd. RMB59 million. The execution is in progress.

Note 9: The two parties reached a settlement that China Aluminum Equipment shall pay China 22nd Metallurgical Company RMB60 million. The execution is in progress.

### (III) Other information

Applicable       Not applicable



## SECTION 6 KEY MATTERS

### XI. PUNISHMENTS UPON THE LISTED COMPANY AND ITS DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, CONTROLLING SHAREHOLDER, BENEFICIAL OWNER, ACQUIRER AND RECTIFICATIONS

Applicable     Not applicable

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

Applicable     Not applicable

During the reporting period, the Company, and its controlling shareholder and effective controller were in good credit conditions and did not have any bad credit conditions, such as failure to perform any effective judgment of the court and failure to pay any significant amounts of debts when due.

### XIII. 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 information

Applicable     Not applicable

##### Particulars of employee stock option plan

Applicable     Not applicable

##### Other incentive measures

Applicable     Not applicable

## SECTION 6 KEY MATTERS

### XIV. SIGNIFICANT RELATED TRANSACTIONS

Significant related party transactions of the Group during the year ended 31 December 2019 are set out in Note 10 to the financial statements.

Some of the above related party transactions also constitute connected transactions as prescribed in Chapter 14A under the Listing Rules of the Stock Exchange and are subject to reporting, annual review, announcement and the independent shareholders' approval (if necessary) in accordance with the requirements of Chapter 14A under the Listing Rules of the Stock Exchange. The aforementioned related party transactions have complied with the requirements of Chapter 14A under the Listing Rules of the Stock Exchange. Particulars of them are as follow:

#### **(I) Non-exempt one-off connected transactions (disclosed as per requirements of the Listing Rules of the Stock Exchange)**

##### **1. Subscription for incremental capital and acquisition of 51.22% equity of Luoyang Foyang Decoration Engineering Co., Ltd.**

CNPT, one of our subsidiaries, and Luoyang Institute signed an agreement on 28 March 2019, under which CNPT would subscribe for incremental registered capital of and acquire 51.22% equity in Luoyang Foyang Decoration Engineering Co., Ltd. (hereinafter referred to as Foyang Company) for a consideration of RMB12.915 million.

Chinalco, as our controlling shareholder, and its subsidiaries constitute connected persons of the Company under the Listing Rules of the Stock Exchange. Chinalco indirectly holds 100% equity in Luoyang Institute and is the controlling shareholder of Luoyang Institute. Therefore, Luoyang Institute also constitutes a connected person of the Company.

CNPT, through subscribing for incremental capital of and merge with Foyang Company, can give full play to its advantages in engineering design for aluminum processing and research and development. Taking the opportunity of expanding aluminum for engineering construction, CNPT can promote the business development of standard series products such as aluminum electric control cabinet, aluminum folding villa and aluminum alloy pallet on CNPT platform, which will form mass production and realize industrial upgrading. Foyang Company has the Grade-A qualification for professional contracting of architectural decoration engineering and the Class-1 qualification for professional contracting of architectural curtain wall engineering, which is an indispensable link of the industrial chain of engineering construction business. As CNPT is a subsidiary of China Aluminum International, if Foyang Company is controlled by CNPT, it will not only improve the industrial chain of the Company, but also make use of the advantages of the Company's platform to grow bigger. With the development of society, aluminum alloy products are gradually replacing wood, stainless steel, section steel, plastic steel and other

## SECTION 6 KEY MATTERS

materials, and are widely used in construction, decoration, landscape, municipal facilities and furniture industries. They are low-carbon, energy-saving, green and healthy building materials with broad market prospects. The acquisition of Foyang Company will play a positive role in the development of CNPT.

For details, please see our announcement dated 28 March 2019.

### **2. Transfer 70% equity in Suzhou Nonferrous Metals Materials Science and Technical Development Co., Ltd.**

CNPT (one of our subsidiaries) entered into an agreement with Suzhou Nonferrous Metal Design and Research Institute (“Suzhou Institute”) and China Aluminum (Shanghai) on 29 April 2019, pursuant to which CNPT and Suzhou Institute respectively transfer 70% equity and 30% equity in Suzhou Nonferrous Metal Materials to Chalco Shanghai for a consideration of RMB166,180 and RMB71,220 respectively.

Chinalco, as our controlling shareholder, and its subsidiaries constitute connected persons of the Company under the Listing Rules of the Stock Exchange. Chinalco directly or indirectly holds 36.62% equity in Chalco, while Chalco Shanghai is a wholly owned subsidiary of Chalco. Therefore, Chinalco is the controlling shareholders of Chalco Shanghai.

CNPT transferred its equity to Chalco Shanghai in order to optimize the strategic layout and recover CNPT’s creditor’s rights against Suzhou Nonferrous Metal Materials. This transaction can increase the cash flow of the Company and help the Company focus on its main business.

For details, please see our announcement dated 29 April 2019.

## SECTION 6 KEY MATTERS

### (II) Non-exempt continuing connected transactions (disclosed as per requirements of the Listing Rules of the Stock Exchange)

The Group conducted certain connected transactions during the year which constituted non-exempt continuing connected transactions under Chapter 14A of the Listing Rules of the Stock Exchange.

The annual caps and actual transaction amount of such continuing connected transactions for 2019 are set out in the following table:

Events of connected transactions	Connected persons	Annual cap for 2019 (In RMB10,000)	Actual transaction amount for 2019 (In RMB10,000)
1. Provision of engineering services by the Group	Chinalco	600,000	495,112.84
2. Provision of commodities by the Group	Chinalco	80,000	45,176.00
3. Provision of general services to the Group	Chinalco	16,000	6,174.38
4. Provision of commodities to the Group	Chinalco	140,000	16,509.43
5. Provision of financial services-deposit services to the Group	Chinalco Finance	280,000	279,800
6. Provision of factoring facility services to the Group	China Aluminum Business	60,000	43,900

#### 1. Rendering engineering services by the Group

The Company entered into an engineering service general agreement with Chinalco on 20 March 2017, pursuant to which, the Group could provide engineering services, including construction engineering, transfer of technologies (right of use), project supervision, surveying, engineering design, engineering consultation, device agency and sale of device, engineering management and other services related to engineering to Chinalco and/or its associates from time to time.

The initial term of the engineering service general agreement commenced from 1 January 2017 and shall expire on 31 December 2019, unless terminated at any time by either party giving at least three months' prior written notice to the other party with mutual consensus after negotiation.

## SECTION 6 KEY MATTERS

Chinalco is the controlling shareholder of the Company. Pursuant to the Listing Rules of the Stock Exchange, Chinalco and its subsidiaries are the connected persons of the Company. During the reporting period, the annual cap of this continuing connected transaction for 2019 was RMB6,000 million and the actual transaction amount was RMB4,951.1284 million.

Unit: '0000 Yuan Currency: RMB

Related party	Content of connected transaction	Pricing principle	Transaction amount	Percentage in similar transactions (%)
Guangxi Huasheng Advanced Materials Co., Ltd.	Rendering engineering service	Market price	106,014.85	21.41
Chifeng Yuntong Nonferrous Metals Co., Ltd.	Rendering engineering service	Market price	53,464.92	10.80
Zhengzhou High-Tech Industrial Development Zone Construction Corporation	Rendering engineering service	Market price	38,695.16	7.82
Chinalco Southeast Copper Co., Ltd.	Rendering engineering service	Market price	36,630.13	7.40
Shanxi Chinalco Resources Co., Ltd.	Rendering engineering service	Market price	35,134.67	7.10

### 2. Provision of commodities by the Group

The Company entered into a general sale and purchase agreement of commodities with Chinalco on 20 March 2017, pursuant to which, the Group could provide products of the Group to Chinalco and/or its associates from time to time as portion of our equipment manufacturing business. These products mainly include the equipment, raw materials and commodities required for the production and operation of Chinalco.

The initial term of the general sale and purchase agreement of commodities commenced from 1 January 2017 and shall expire on 31 December 2019, unless terminated at any time by either party giving at least three months' prior written notice to the other party with mutual consensus after negotiation. Relevant subsidiaries or Associates of both parties shall enter into a separate contract which states specific terms and conditions based on the principles provided under the general sale and purchase agreement of commodities.

Chinalco is the controlling shareholder of the Company. Pursuant to the Listing Rules of the Stock Exchange, Chinalco and its subsidiaries are the connected persons of the Company. During the reporting period, the annual cap of this continuing connected transaction for 2019 was RMB800 million and the actual transaction amount was RMB451.76 million.

## SECTION 6 KEY MATTERS

### 3. Provision of general services to the Group

The Company entered into a general agreement of general services with Chinalco on 20 March 2017, pursuant to which, Chinalco and/or its Associates could provide certain categories of services to the Group from time to time, mainly including warehousing, transportation and property leasing services and provision of technical services, back-up services, labour services and labour services related to training.

The initial term of the general agreement of general services commenced from 1 January 2017 and shall expire on 31 December 2019, unless terminated at any time by either party giving at least three months' prior written notice to the other party with mutual consensus after negotiation. Relevant subsidiaries or Associates of both parties shall enter into a separate contract which states specific terms and conditions based on the principles provided under the general agreement of general services.

Chinalco is the controlling shareholder of the Company. Pursuant to the Listing Rules of the Stock Exchange, Chinalco and its subsidiaries are the connected persons of the Company. During the reporting period, the annual cap of this continuing connected transaction for 2019 was RMB160 million and the actual transaction amount was RMB61.7438 million.

### 4. Provision of commodities to the Group

The Company entered into a general sale and purchase agreement of commodities with Chinalco on 20 March 2017, pursuant to which, the Group could purchase certain commodities from Chinalco and/or its associates which shall be used in our engineering and construction contracting business. These commodities mainly include materials such as nonferrous products, manufacturing equipment, cement and engineering equipment and component related to nonferrous industry.

The initial term of the general sale and purchase agreement of commodities commenced from 1 January 2017 and shall expire on 31 December 2019, unless terminated at any time by either party giving at least three months' prior written notice to the other party with mutual consensus after negotiation. Relevant subsidiaries or Associates of both parties shall enter into a separate contract which states specific terms and conditions based on the principles provided under the general sale and purchase agreement of commodities.

Chinalco is the controlling shareholder of the Company. Pursuant to the Listing Rules of the Stock Exchange, Chinalco and its subsidiaries are the connected persons of the Company. During the reporting period, the annual cap of this continuing connected transaction for 2019 was RMB1,400 million and the actual transaction amount was RMB165.0943 million.

## SECTION 6 KEY MATTERS

### 5. Provision of financial services to the Group

The Company entered into a financial services agreement with Chinalco Finance on 27 August 2018, pursuant to which, Chinalco Finance shall provide financial services to the Group, including deposit services, settlement services, credit services and other financial services. The term of this financial services agreement commenced from 26 November 2018 to 31 December 2021.

The general terms are as follow:

- Providing financial services for the Group, including deposit services, settlement services, credit services and other financial services;
- The interest rates for deposits on the deposit services to be offered will not be lower than the benchmark interest rate for deposits published uniformly by the People's Bank of China from time to time for the deposits with the same term and type, not lower than the interest rate for deposits offered by major commercial banks in the PRC for deposits with the same type during the same period, and not lower than the interest rate for deposits offered by Chinalco Finance to Chinalco and its group companies for deposits with the same type during the same period;

Providing favourable interest rate for loans, which shall not be higher than the benchmark interest rate for loans published uniformly by the People's Bank of China from time to time for loans with the same type and term, and not higher than the interest rate charged by major commercial banks in the PRC for the loans with the same type during the same period;

- The fees charged for the provision of other financial services will comply with the fee standards prescribed by the People's Bank of China or China Banking and Insurance Regulatory Commission for such type of services, and shall be no higher than the fee rate charged by major commercial banks in the PRC for the same type of financial services;
- During the effective period of this agreement, the daily deposit balance (including any interest accrued thereon) shall not exceed RMB2.8 billion.

## SECTION 6 KEY MATTERS

Chinalco is the controlling shareholder of the Company, and Chinalco Finance is the wholly-owned subsidiary of Chinalco. Pursuant to the Listing Rules of the Stock Exchange, Chinalco Finance is the connected person of the Company. Chinalco Finance undertakes to provide high-quality and efficient financial services to the Company and to timely notify the Company of certain agreed events in order to safeguard the financial assets of the Company and to adopt proper mitigation measures. In respect of the deposit services, the daily deposit balance (including any interest accrued thereon) for the Group with Chinalco Finance shall not exceed RMB2.8 billion (including any interest accrued thereon) during the term of the financial services agreement. The Company shall enter into a separate contract in respect of deposit services, settlement services, credit services and other financial services with Chinalco Finance to stipulate the specific matters for the provision of these services.

During the reporting period, the cap of daily deposit balance of the deposit services under this continuing connected transaction for 2019 was RMB2,800 million and the actual maximum daily deposit balance was RMB2,798 million.

### 6. Provision of factoring services to the Group

The Company entered into the factoring cooperation framework agreement with China Aluminum Business on 28 March 2019. The Group transferred the Account Receivables under the Underlying Transaction Contracts to China Aluminum Business. China Aluminum Business agreed to the transfer of the aforesaid Account Receivables and provides the Group with one or more factoring services including factoring facility, sales subsidiary ledger management, accounts receivable collection, credit investigation and evaluation, credit risk controls and bad debt guarantees. According to the anticipated conditions of business development, the Company planned to enter into a new factoring agreement with the factoring company to specify an annual cap on factoring facility limit and total amount of the expenses occurred of RMB1 billion for 2019 to 2021. The factoring service agreement has a term commencing on 18 June 2019 and ending on 31 December 2021.

Chinalco is the controlling Shareholder of the Company. Pursuant to the Listing Rules of the Stock Exchange, Chinalco and its subsidiaries are the connected persons of the Company. China Aluminum Business is the wholly-owned subsidiary of Chinalco Capital, the wholly-owned subsidiary of Chinalco, and thus the connected persons of the Company. During the reporting period, the annual cap of this continuing connected transaction for 2019 was RMB1,000 million and the actual transaction amount was RMB439 million.



## SECTION 6 KEY MATTERS

The independent non-executive Directors of the Company had reviewed each of the above continuing connected transactions and confirmed the transactions were:

- (1) conducted in the normal course of business of the Group;
- (2) conducted on normal commercial terms; if the comparable transactions could not be relied on to judge whether the terms of these transactions were normal commercial terms, those terms should not be less favorable than the terms accepted or provided by independent third parties so far as the Group was concerned; and
- (3) and conducted in accordance with the terms of agreement related to relevant transactions and the terms were fair and reasonable and in the interests of Shareholders as a whole.

The Company has engaged an external auditor to report on the Group's continuing connected transactions in accordance with the Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to the Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants (HKICPA). The auditor has issued its letter containing its findings and conclusions in respect of the above transactions in accordance with Rule 14A.56 of the Listing Rules. The Company has provided a copy of the said letter to the Stock Exchange. Based on the work performed, the auditor of the Company has provided a letter to the Board confirming the following matters in relation to the continuing connected transactions as disclosed above:

- (1) Nothing has come to the auditor's attention that would cause the auditor to believe that the disclosed continuing connected transactions have not been approved by the Board of Directors.
- (2) For transactions involving the provision of goods or services by the Group, nothing has come to the auditor's attention that would cause the auditor to believe that the transactions were not, in all material respects, in accordance with the pricing policies of the Group.
- (3) Nothing has come to the auditor's attention that would cause the auditor to believe that the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions.
- (4) With respect to the aggregate amount of each of the continuing connected transactions set out above, nothing has come to the auditor's attention that would cause the auditor to believe that such continuing connected transactions have exceeded the maximum aggregate annual cap formulated by the Company.

For the above connected transactions, the Directors also confirmed that the Company had complied with the disclosure requirements of Chapter 14A of the Listing Rules.

## SECTION 6 KEY MATTERS

### (III) Connected transaction in ordinary course of operations

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

Applicable     Not applicable

##### Overview

At the 27th meeting of 2019 of the board of the third session held on 31 October 2019, the Company considered and adopted the resolution on re-signing the general agreement of general services between the Company and Chinalco and adjusting the cap on relevant connected transactions. The original general agreement of general services between the Company and Chinalco expired on 31 December 2019, and the Company and the China Aluminum Group re-signed the general agreement of general services in respect of back-up service, storage, transportation, property leasing, labor service and training and other general services between the two parties on 30 October 2019. The new general agreement of general services redefines the content of the aforementioned comprehensive services provided between the Company and its subsidiaries and Chinalco and its subsidiaries, determines specific pricing policies, updates the annual cap on transactions for 2020-2022, and specifies that the agreement will be valid from 1 January 2020 to 31 December 2022 subject to the consideration and approval at the general meeting of the Company. The resolution was approved by the independent non-executive directors of the Company. When the Board was considering the resolution, the independent non-executive Directors of the Company also expressed their independent opinions to approve relevant resolution. The above resolution was approved and considered at the fourth extraordinary general meeting of 2019 of the Company.

##### Details available at

For details, please see the Company's announcements on SSE website ([www.sse.com.cn](http://www.sse.com.cn)) and the website of the Stock Exchange ([www.hkex.com.hk](http://www.hkex.com.hk)) on 31 October and 31 December 2019.

## SECTION 6 KEY MATTERS

### Overview

At the 27th meeting of 2019 of the Board of the third session held on 31 October 2019, the Company considered and adopted the resolution on re-signing the general agreement of commodities purchase and sales between the Company and the Chinalco and adjusting the cap on relevant connected transactions. The original general agreement of commodity purchase and sales between the Company and the Chinalco expired on 31 December 2019, and the two parties re-signed the general agreement of commodity purchase and sales in respect of commodity supply between them in the next three years on 30 October 2019 in order to satisfy business needs of the Company and better the normative management of connected transactions related to commodity supply and purchase. The new general agreement of commodity purchase and sales redefines the content of mutual commodity supply and purchase between the Company and its subsidiaries and Chinalco and its subsidiaries, determines specific pricing policies, updates the annual cap on transactions for 2020-2022, and specifies that the agreement will be valid from 1 January 2020 to 31 December 2022 subject to the consideration and approval at the general meeting of the Company. The resolution was approved by the independent non-executive directors of the Company. When the Board was considering the resolution, the independent non-executive Directors of the Company also expressed their independent opinions to approve the resolution. The above resolution was approved and considered at the fourth extraordinary general meeting of 2019 of the Company.

### Details available at

For details, please see the Company's announcements on SSE website ([www.sse.com.cn](http://www.sse.com.cn)) and the website of the Stock Exchange ([www.hkex.com.hk](http://www.hkex.com.hk)) on 31 October and 30 December 2019.

## SECTION 6 KEY MATTERS

### Overview

At the 27th meeting of 2019 of the board of Directors of the third session held on 31 October 2019, the Company considered and adopted the resolution on re-signing the general agreement of general services between the Company and the Chinalco and adjusting the cap on relevant connected transactions. The original general agreement of general services between the Company and the Chinalco expired on 31 December 2019, and in order to satisfy business requirements of the Company and reinforce standardized management of connected transactions in respect of engineering services, the two parties re-sign the general agreement of general services on 30 October 2019. The new general agreement of general services redefines the content of the aforementioned comprehensive services provided between the Company and its subsidiaries and Chinalco and its subsidiaries, determines specific pricing policies, updates the annual cap on transactions for 2020-2022, and specifies that the agreement will be valid from 1 January 2020 to 31 December 2022 subject to the approval at the general meeting of the Company. The resolution was approved by the independent non-Executive directors of the Company. When the board of Directors was considering the resolution, the independent non-executive Directors of the Company also expressed their independent opinions to approve the resolution. The above resolution was considered and considered at the fourth extraordinary general meeting of 2019 of the Company.

### Details available at

For details, please see the Company's announcements on SSE website ([www.sse.com.cn](http://www.sse.com.cn)) and the website of the Stock Exchange ([www.hkex.com.hk](http://www.hkex.com.hk)) on 31 October 2019 and 30 December 2019.

## SECTION 6 KEY MATTERS

### Overview

At the 27th meeting of 2019 of the board of Directors of the third session held on 31 October 2019, the Company considered and adopted the resolution on signing the framework service agreement between the Company and China Aluminum Finance Lease Co., Ltd. and determining the cap on relevant connected transactions. The Company entered into the framework cooperative agreement with China Aluminum Finance Lease Co., Ltd. (“China Aluminum Finance Lease”) on 30 October 2019, pursuant to which the latter provided finance lease services for the Company to ease its cash flow pressures and improve the efficiency in fund utilization. Based on estimation of finance lease transactions between the Company and China Aluminum Finance Lease, at any time point during the term of the Framework Cooperative Agreement, the balance of finance lease and other financial services (including lease service, investment and financing advisory service and accounts receivable management) provided by China Aluminum Finance Lease to the Company shall not exceed RMB1 billion. The Framework Cooperative Agreement shall be valid for three years, from the date on which the general resolution on entering into the framework cooperative agreement is adopted at the general meeting. The resolution was approved by the independent non-Executive directors of the Company. When the board of Directors was considering the resolution, the independent non-executive Directors of the Company also expressed their independent opinions to approve the resolution. The above resolution was considered and considered at the fourth extraordinary general meeting of 2019 of the Company.

### Details available at

For details, please see the Company’s announcements on SSE website ([www.sse.com.cn](http://www.sse.com.cn)) on 31 October 2019 and 30 December 2019.

## SECTION 6 KEY MATTERS

### 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

## (IV) Connected transactions in asset or equity acquisition or disposal

### 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

(1) CNPT (one of our subsidiaries) entered into an agreement with Chalco Shanghai (a subsidiary of Chalco) on 30 April 2019 to transfer its 70% equity in Suzhou Nonferrous Metal Material and Technology Co., Ltd. (蘇州中色金屬材料科技有限公司) to the latter for a consideration of RMB166,180. The transaction was consummated in June 2019.

(2) CNPT (one of our subsidiaries) entered into an agreement with Asset Company on 29 March 2019 to subscribe for incremental registered capital of and acquire 51.22% equity in Luoyang Foyang Decoration Engineering Co., Ltd. (a subsidiary of Luoyang Institute) for a consideration of RMB12.915 million. The transaction was consummated in May 2019. For details, refer to the Announcement disclosed by the Company on 28 March 2019.

### 3. Events not disclosed in provisional announcements

Applicable    Not applicable

## SECTION 6 KEY MATTERS

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

Applicable     Not applicable

### **(V) Material connected transactions in joint external investments**

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

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

### **(VI) 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**

Applicable     Not applicable

## SECTION 6 KEY MATTERS

### 3. Events not disclosed in provisional announcements

Applicable     Not applicable

Unit: Yuan Currency: RMB

Related party	Relation to the Company	Borrowings to related parties			Borrowings to related parties		
		Opening balance	Transaction amount	Closing balance	Opening balance	Transaction amount	Closing balance
Aluminum Corporation of China	Parent				2,000,000,000.00		2,000,000,000.00
Chalieco Finance Company Limited	Wholly owned subsidiary			1,073,000,000.00	-272,000,000.00		801,000,000.00
China Aluminum Commercial Factoring (Tianjin) Co., Ltd.	Wholly owned subsidiary			243,500,000.00	195,000,000.00		438,500,000.00
Chinalco Assets Operation and Management Co., Ltd	Wholly owned subsidiary			135,000,000.00	-135,000,000.00		-
Total				1,451,500,000.00	1,788,000,000.00		3,239,500,000.00

Reason giving rise to borrowings to or from related parties Amounts provided by related parties for the listed company included entrusted loans, lending and factoring facility.

Impact of borrowings due to or from related parties No material impact.

### (VII) Other information

Applicable     Not applicable



## SECTION 6 KEY MATTERS

### XV. MATERIAL CONTRACTS AND THEIR PERFORMANCE

#### (I) Custody, contracting and lease

##### 1. Custody

Applicable    Not applicable

##### 2. Contracting

Applicable    Not applicable

##### 3. Lease

Applicable    Not applicable

#### (II) Guarantees

Applicable    Not applicable

## SECTION 6 KEY MATTERS

Unit: '0000 Yuan 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			Type of guarantee	Guarantee			Counter party		Related party to the Company
				(agreement signing date)	Commencement date	Ending date		performed or not	Overdue or not	Overdue amount	guaranteed or not	guarantee or not	
Hanzhong Ninth Metallurgical Construction Co., Ltd.	Subsidiary	Mian County Urban and Rural Infrastructure Construction Co., Ltd.	7,270	20 Oct 2015	20 Oct 2015	19 Oct 2027	General guarantee	No	No	0	Yes	No	
Ninth Metallurgical Construction Co., Ltd.	Subsidiary	Mian County Urban Development Investment Co., Ltd.	4,100	7 Jan 2013	7 Jan 2013	6 Jan 2023	General guarantee	No	No	0	Yes	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Yunnan Ningyong Expressway Co., Ltd.	128,580	18 Dec 2019	18 Dec 2019	18 Dec 2053	General guarantee	No	No	0	No	No	
China Aluminum International Engineering Corporation Limited	Headquarters	Yunnan Lin Yun Expressway Co., Ltd.	128,580	18 Dec 2019	18 Dec 2019	18 Dec 2053	General guarantee	No	No	0	No	No	
Cumulative amount of guarantees provided during the reporting period (excluding those for subsidiaries)												257,160	
Total balance of guarantees at end of the reporting period (A) (excluding those for subsidiaries)												268,530	
Guarantees provided by the Company and its subsidiaries to subsidiaries													
Cumulative amount of guarantees provided for subsidiaries during the reporting period												866,063.10	
Total balance of guarantees provided for subsidiaries at end of the reporting period (B)												811,063.10	
Total amount of guarantees provided by the Company (including those provided for subsidiaries)													
Total amount of guarantees (A+B)												1,070,593.10	
Ratio of total amount of guarantees to net assets of the Company (%)												94.55	
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)												743,063.10	
Total amount of guarantees in excess of 50% of net assets (E)												0	
Total of the above three types of guarantees (C+D+E)												743,063.10	

## SECTION 6 KEY MATTERS

### (III) Particulars of cash under discretionary management

#### 1. Assets under discretionary management

(1) Overview of assets under discretionary management

Applicable     Not applicable

Other information

Applicable     Not applicable

(2) Details of single assets under discretionary management

Applicable     Not applicable

Other information

Applicable     Not applicable

(3) Provision for impairment of assets under discretionary management

Applicable     Not applicable

#### 2. Particulars of entrusted loans

(1) Overview of entrusted loans

Applicable     Not applicable

Other information

Applicable     Not applicable

(2) Details of single entrusted loans

Applicable     Not applicable

Other information

Applicable     Not applicable

## SECTION 6 KEY MATTERS

(3) Entrusted loan impairment provision

Applicable Not applicable

### 3. Other information

Applicable Not applicable

#### (IV) Other material contracts

Applicable Not applicable

## XVI. EXPLANATIONS OF OTHER MATERIAL MATTERS

Applicable Not applicable

## XVII. PARTICULARS ON EFFORTS REGARDING POSITIVE PERFORMANCE OF SOCIAL RESPONSIBILITY

### (I) Poverty alleviation efforts of the listed company

Applicable Not applicable

#### 1. Targeted poverty alleviation plan

Applicable Not applicable

To further implement the poverty alleviation policies of the Communist Party and the state, and fully social responsibility of central enterprises, the Company and member companies actively respond to the national targeted policies on poverty alleviation, adhere to taking scientific and pertinent measures for poverty alleviation, and stick to the principle of “making overall plans, highlighting key points, making the best efforts according its capacity, and seeking comprehensive advancement”. The Company concentrates its efforts on strengthening the construction of rural grassroots organizations and improving farmer’s quality, focuses on strengthening the infrastructure construction, strives to make breakthroughs in adjusting and optimizing industrial structures, and continuously carries out targeted poverty alleviation through methods including fixed-point support, investigation and visit, donation, construction of infrastructure and public services facilities, and the introduction of farm machinery technology to rural areas.

## SECTION 6 KEY MATTERS

### 2. Overview of targeted poverty alleviation efforts for the year

Applicable    Not applicable

In 2019, four tier-2 subsidiaries of the Company, including CNPT, Changkan Institute, Changsha Institute, and Guiyang Institute, participated in poverty alleviation in which they were stationed and carried out poverty alleviation program through various forms and channels in places in need of targeted poverty alleviation, including Wangcun Village in Cangtuo Town of Xin'an County in Luoyang, Henan Province, Minshi Village in Shatang Town of Shuangfeng County in Loudi, Hunan Province, Gaojia Village in Lixi Town of Yuanling County in Huaihua, Hunan Province, and Jinkeng Village in Niudachang Town of Shibing County in Qiandongnan Miao and Dong Autonomous Prefecture, Guizhou Province. Development-based assisting and supporting methods were adopted, which integrated introduction with production and concentrated on production. A total of 4 temporary cadres were dispatched. Three working teams including 9 people were stationed in the villages. RMB851,200 of various kinds was directly invested in those villages, and so were materials worth RMB80,000. They helped targeted poverty alleviation counties introduce a supportive capital of RMB14.6191 million and RMB69,900 worth of social donations. They purchased RMB929,200 worth of agricultural products from the poverty-stricken areas and assisted them in selling RMB201,200 worth of agricultural products. 196 people received vocational skill education in each round of training. The Company also encouraged the party members, leading cadres and employees to donate RMB244,100 and materials worth RMB40,000. In addition, as the National Poverty Alleviation Day comes, our employees have donated over RMB1 million to the "Chinalco Charity Grant" for poor outstanding students in Chinalco's targeted poverty alleviation regions to complete their study program.

### 3. Achievements in targeted poverty alleviation

Applicable    Not applicable

Unit: '0000 Yuan Currency: RMB

Indicators	Quantity and details
I. Overview	
Specifically, 1. Funds	85.12
2. Materials (equivalent in cash)	8
3. Number of registered poverty-stricken people lifted out from poverty	893
II Investment by item	
1. Poverty alleviation through industrial development	

## SECTION 6 KEY MATTERS

Indicators	Quantity and details
Specifically, 1.1 Type of poverty alleviation program through industrial development	<input checked="" type="checkbox"/> Poverty alleviation through agricultural and forestry industry <input checked="" type="checkbox"/> Poverty alleviation through tourism <input checked="" type="checkbox"/> Poverty alleviation through e-commerce <input type="checkbox"/> Poverty alleviation through tourism <input checked="" type="checkbox"/> Poverty alleviation through science and technology <input type="checkbox"/> Others
1.2 Number of poverty alleviation programs through industrial development (program)	6
1.3 Funds invested in poverty alleviation programs through industrial development	26.5
1.4 Number of registered poverty-stricken people receiving help lifted out from poverty (person)	382
2. Poverty alleviation through employment transfer	
Specifically, 2.1 Funds invested in vocational skill training	3
2.2 Number of people receiving vocational skill training (person/time)	196
2.3 Number of registered poverty-stricken people receiving help in employment (person)	219
3. Poverty alleviation through relocation	
Specifically, 3.1 Number of relocated people receiving help in employment (person)	99
4. Poverty alleviation through education	
Specifically, 4.1 Funds invested in supporting poverty-stricken students	13.34
4.2 Number of subsidized poverty-stricken students	71
4.3 Funds invested in improving educational resources in poverty-stricken areas	-
5. Poverty alleviation in health domains	
Specifically, 5.1 Funds invested in medical and health resources in poverty-stricken areas	9.98
6. Poverty alleviation through ecological protection	

## SECTION 6 KEY MATTERS

Indicators	Quantity and details
Specifically, 6.1 Program name	<input type="checkbox"/> Ecological protection and construction <input type="checkbox"/> Establishing way of compensation for ecological protection <input checked="" type="checkbox"/> Establishing ecological public welfare post <input type="checkbox"/> Others
6.2 Investment amount	0.47
7. Fallback security	
Specifically, 7.1 Funds invested in helping the left-behind elderly, children and women	0.97
7.2 Number of the left-behind elderly, children and women getting help (person)	97
7.3 Funds invested in helping the poverty-stricken disabled	0.72
7.4 Number of the poverty-stricken disabled getting help (person)	42
8. Poverty alleviation through the society	
Specifically, 8.1 Funds invested by cooperation in poverty alleviation between eastern and western parts of China	-
8.2 Funds invested in targeted poverty alleviation	4.44
8.3 Non-profit foundation for poverty alleviation	-
9. Other programs	
Specifically, 9.1 Number of program	5
9.2 Investment amount	25.7
9.3 Number of registered poverty-stricken people receiving help lifted out from poverty (person)	511
9.4. Description of other programs	Renovated roads in Wangcun Village; built irrigation canals for Minshi Village; helped Jinkeng Village build village office buildings

## SECTION 6 KEY MATTERS

Indicators

Quantity and details

### III. Awards Received (content, rank)

LU Tingge, the first stationed secretary from CNPT won the “Poverty Alleviation Contribution Award of Xin’an County”. Minshi Village, which was supported by Changkan Institute, was honored as the “Civilized Village” by the Civilization Office of Shuangfeng County; the Party Branch of Minshi Village was awarded the “Demonstration Party Branch of Construction in Five Aspects” by the Organization Department of Loudi Municipal Party Committee; the case of Helping Rural Residents and Stationing in Villages and Taking Targeted Measures in Poverty Alleviation written by Changkan Institute was honored as one of the “Top Ten Outstanding Practical Cases of Social Responsibility in 2018” of China Aluminum Group; Changkan Institute’s village stationed assistance work in 2019 was rated as excellence at the provincial level.

#### 4. Subsequent targeted poverty alleviation plan

Applicable    Not applicable

The Company will continue its work adhering to elevating the annual income of poverty-stricken families above current national standards for poverty alleviation, fully meeting living needs for food and clothing, and guaranteeing compulsory education, basic medical treatment, and housing security, concerning the omission in the registration and elimination of poverty-stricken population, as well as comprehensive poverty incidence, and satisfaction degree of the masses. The Company will always follow General Secretary Xi Jinping’s important discourse on poverty alleviation, strictly benchmark against advanced enterprises, strengthen responsibility fulfillment and set up a lofty sense of political responsibility and mission. The Company will continue to work hard regardless of difficulties and win the battle against poverty with firm resolution.



## SECTION 6 KEY MATTERS

### (II) Corporate social responsibility

Applicable    Not applicable

Please refer to the 2019 Social Responsibility Report of China Aluminum International Engineering Corporation Ltd. disclosed at the SSE website (<http://www.sse.com.cn>) and the website of the Stock Exchange (<http://www.hkexnews.hk>) for details of the Company's works of fulfillment of social responsibility.

### (III) Environmental Information

#### 1. 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

#### 2. Explanation of environmental protection information of companies not on the watch list of key pollutant discharging units

Applicable    Not applicable

In 2019, the Company followed out Xi Jinping's thought on ecological civilization, and the decision on ecological and environmental protection by the CPC Central Committee and the State Council, and continuously furthered the battle for environmental protection. By improving standards of environmental design, design companies inserted the idea of energy conservation and environmental protection from the very beginning of design, and construction companies continuously promoted "six 100%" on construction sites and earnestly fulfilled the Company's entity responsibility of environmental protection.

The Company launched the double environmental protection systems which combines the environmental management system and the accurate environmental management system and further strengthened the allocation and capacity building of full-time and part-time personnel for environmental protection in each level. By strengthening the evaluation to find out about environmental responsibility fulfillment and performance, intensifying the disposal of pollutants and environmental monitoring, standardizing the management of solid waste (hazardous waste), the Company took a series of actions on environmental emergency management and effectively promoted the high-quality operation of environmental management system.

## SECTION 6 KEY MATTERS

**3. Reason why companies not on the watch list did not disclose environmental information**

Applicable    Not applicable

**4. Explanation of subsequent development or changes of environmental information disclosed in the reporting period**

Applicable    Not applicable

**(IV) Other information**

Applicable    Not applicable

## XVIII. PARTICULARS OF CONVERTIBLE BONDS

Applicable    Not applicable

## **SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS**

### **I. CHANGES IN ORDINARY SHARE CAPITAL**

#### **(I) Changes in ordinary shares**

##### **1. Table of changes in ordinary shares**

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

##### **2. Explanation of changes in ordinary shares**

Applicable    Not applicable

##### **3. Impact (if any) of changes in ordinary shares on EPS, net assets per share and other financial indicators for the latest year and the latest period**

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 ORDINARY SHARES AND SHAREHOLDERS

### II. SECURITIES OFFERING AND LISTING

#### (I) Securities offering during the reporting period

Applicable     Not applicable

Unit: Share Currency: RMB

Class of stocks and derivative securities	Date of offer	Offer price (or interest rate)	Offer quantity	Listing date	Admitted quantity for trading	Trading close date
2019 Renewable Corporate Bonds (Tranche 1)	30 Oct 2019	5.29%	15,000,000	8 Nov 2019	15,000,000	

Note: Under 2019 Renewable Corporate Bonds (Tranche 1), the Company issued 15 million bonds at RMB100 each, totaling RMB1.5 billion.

Particulars of securities offering during the reporting period (outstanding bonds with different interest rate requires separate explanation):

Applicable     Not applicable

As approved by Document Zheng Jian Xu Ke [2019] No.1802 issued by the CSRC, the Company is permitted to publicly offer renewable corporate bonds up to RMB1.5 billion to qualified investors in more than one tranche.

The Company closed the public offering of 2019 Renewable Corporate Bonds on 31 October 2019, with RMB1.5 billion issued in aggregate at a coupon rate of 5.29% for the first period. The bonds got listed on SSE on 8 November 2019.

#### (II) Changes in total number of ordinary shares and shareholder structure of the Company and changes in assets and liabilities structure of the Company

Applicable     Not applicable

#### (III) Existing employee shares

Applicable     Not applicable

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

### III. PARTICULARS OF SHAREHOLDERS AND EFFECTIVE CONTROLLER

#### (I) Structure of share capital and public float (required to be disclosed under the Listing Rules of the Stock Exchange)

##### 1. Structure of share capital

As at 31 December 2019, the Company had a total share capital of RMB2,959,066,667, divided into 2,959,066,667 shares (including 399,476,000 H shares and 2,559,590,667 A shares) at RMB1.00 each.

##### 2. Public float

Based on information publicly available to the Company and so far as the Directors are aware, the issued A Shares and H Shares of the Company held by the public as at the Latest Practicable Date prior to the publication of this annual report was in compliance with the requirements under the Listing Rules of Stock Exchange.

#### (II) Total number of shareholders

Total Number of ordinary shareholders at end of reporting period	50,894
Total Number of ordinary shareholders at end of the last month immediately preceding the disclosure date of the Annual Report	46,533
Total Number of shareholders of preferred shares with voting right reinstated at end of reporting period	Not applicable
Total Number of shareholders of preferred shares with voting right reinstated at end of the last month immediately preceding the disclosure date of the Annual Report	Not applicable

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

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

Unit: Share

Shareholder name (full name)	Changes in reporting period	Shareholding of top 10 shareholders			Pledged or frozen shares		
		Number of shares held at end of the year	Percentage (%)	Number of restricted shares held	Status of shares	Number	Nature of shareholder
Aluminum Corporation of China	0	2,176,758,534	73.56	2,176,758,534	Nil	0	State-owned legal person
Hong Kong Securities Clearing Company Nominees Limited	0	399,476,000	13.50	0	Unknown	/	Other
Luoyang Engineering & Research Institute for Nonferrous Metals Processing	0	86,925,466	2.94	86,925,466	Nil	0	State-owned legal person
LUAN Meixia	5,269,726	5,269,726	0.18	0	Nil	0	Domestic natural person
HKSCC	3,476,709	3,492,442	0.12	0	Nil	0	Other
Agricultural Bank of China Limited –CSI Exchange-traded and Open-ended Index Securities Investment Fund	3,158,469	3,158,469	0.11	0	Nil	0	Other
GU Jing	2,786,800	2,786,800	0.09	0	Nil	0	Domestic natural person
ZHANG Huaiyun	1,106,900	2,326,900	0.08	0	Nil	0	Domestic natural person
Bank of China Limited CSI State-owned Enterprise Innovation-driven Exchange Traded Securities Investment Fund	2,277,300	2,277,300	0.08	0	Nil	0	Other
ZHANG He	2,051,400	2,051,400	0.07	0	Nil	0	Domestic natural person

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

<b>Shareholding of top 10 unrestricted shareholders</b>			
<b>Shareholder name</b>	<b>Number of unrestricted shares held</b>	<b>Class and number of shares</b>	
		<b>Class</b>	<b>Number</b>
Hong Kong Securities Clearing Company Nominees Limited	399,476,000	Overseas listed foreign shares	399,476,000
RAN Meixia	5,269,726	Renminbi ordinary shares	5,269,726
HKSCC	3,492,442	Renminbi ordinary shares	3,492,442
Agricultural Bank of China Limited. – CSI Exchange-traded and Open-ended Index Securities Investment Fund	3,158,469	Renminbi ordinary shares	3,158,469
GU Jing	2,786,800	Renminbi ordinary shares	2,786,800
ZHANG Huaiyun	2,326,900	Renminbi ordinary shares	2,326,900
Bank of China Limited. – CSI State-owned Enterprise Innovation-driven Exchange Traded Securities Investment Fund	2,277,300	Renminbi ordinary shares	2,277,300
ZHANG He	2,051,400	Renminbi ordinary shares	2,051,400
YAO Yuanxi	2,000,000	Renminbi ordinary shares	2,000,000
Vanguard Investment Australia Ltd – Vanguard Emerging Markets Stock Index Fund (Exchange)	1,830,300	Renminbi ordinary shares	1,830,300

Explanation of related relationship or acting in concert in respect of the above shareholders

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 Yunnan Aluminum International Company Limited (雲鋁國際有限公司). 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.

Note 2: The 19,495,000 H shares of the Company held by Chinalco through its subsidiary Yunnan Aluminum International Company Limited (雲鋁國際有限公司) were held by Hong Kong Securities Clearing Company Nominees Limited on its behalf.

Note 3: 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 Yunnan Aluminum International Company Limited (雲鋁國際有限公司).

Note 4: Except the above, the Company is not aware that the above shareholders have any related relationship or are acting in concert among each other.

Explanation of shareholders of preferred shares with reinstated voting rights and the number of shares held

Not applicable.

Note: H shares held by Hong Kong Securities Clearing Company Nominees Limited were held on behalf of multiple clients, and A shares held by HKSCC were held on behalf of multiple clients. At the end of the reporting period, Hong Kong Securities Clearing Company Nominees Limited held 399,476,000 shares of the Company, and details on pledge or freeze of shares were unknown.

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

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

Applicable     Not applicable

Unit: Share

No.	Restricted shareholder name	Number of restricted shares held	Restricted shares admitted for trading		Restriction conditions
			Admitted listing date	Number of additional shares admitted for listing	
1	Aluminum Corporation of China	2,176,758,534	31 August 2021	0	Three years from the date of A share listing, and two years from expiration of the lock-up period
2	Luoyang Engineering & Research Institute for Nonferrous Metals Processing	86,925,466	31 August 2021	0	Three years from the date of A share listing, and two years from expiration of the lock-up period

Explanation of related relationship or acting in concert in respect of the above shareholders

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 indirectly held through its subsidiary Yunnan Aluminum International Company Limited (雲鋁國際有限公司). 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.

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

Applicable     Not applicable



## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

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

As at 31 December 2019, 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:

Name of Shareholder	Class of Shares	Capacity/ Nature of interest	Number of Shares Held (Share)	Approximate percentage of shareholding in relevant class of Shares (%) (Note 1)	Approximate percentage of shareholding in total share capital (%) (Note 1)
Chinalco (Note 2)	A share	Beneficiary owner/ Interest of controlled corporation	2,263,684,000 (Long position)	88.44	76.50
The Seventh Metallurgical Construction Corp. Ltd.	H share	Beneficiary owner	69,096,000 (Long position)	17.30	2.34
CNMC Trade Company Limited	H share	Beneficiary owner	59,225,000 (Long position)	14.83	2.00
Leading Gain Investments Limited (Note 3)	H share	Nominee of another person (other than passive trustee)	29,612,000 (Long position)	7.41	1.00
China XD Group	H share	Beneficiary owner	29,612,000 (Long position)	7.41	1.00
Yunnan Tin (Hong Kong) Yuan Xing Company Limited	H share	Beneficiary owner	29,612,000 (Long position)	7.41	1.00
Global Cyberlinks Limited	H share	Beneficiary owner	20,579,000 (Long position)	5.15	0.70

Notes:

- (1) The percentage is calculated by dividing number of relevant class of Shares in issue of the Company as at 31 December 2019 by total number of Shares.
- (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.
- (3) Leading Gaining Investments Limited is the nominee holder of Beijing Jundao Technology Development Co., Ltd.

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

### IV. PARTICULARS OF CONTROLLING SHAREHOLDER AND EFFECTIVE CONTROLLER

#### (I) Controlling shareholder

##### 1 Legal person

Applicable    Not applicable

<b>Name</b>	<b>Aluminum Corporation of China</b>
Principal or legal representative	Yao Lin
Incorporated on	21 February 2001
Principal business	Bauxite mining (restricted to the mining of Maochang bauxite in Guizhou by China Aluminum, up to 30 December 2038); Dispatching labors required by overseas engineering projects that are commensurate with its strength, scale and performance. Operating and managing state-owned assets and state-owned equities; Production and sales of aluminum, copper, rare earth and related non-ferrous metal minerals, smelting products, processed products and carbon products; Engaged in survey and design, engineering construction general contracting, and construction and installation; Equipment manufacturing; Technical development and technical services; Import and export business. (The enterprises independently chooses business items and carry out business activities according to law; Engaged in business activities subject to approval according to law only after the approval is obtained by relevant authorities; Not allowed to engage in business activities prohibited and restricted by industrial policies of the city.)

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

<b>Name</b>	<b>Aluminum Corporation of China</b>
Equity in other domestic or overseas listed companies during the reporting period	<p>As at 31 December 2019, China Aluminum Group Limited had equity interests in the following domestic or overseas listed companies other than the Company:</p> <ol style="list-style-type: none"> <li>1. Chinalco directly held 29.67% equity in Chalco (listed on SSE, the Stock Exchange and New York Stock Exchange; SSE stock code 601600, Stock Exchange stock code 02600, and New York Stock Exchange stock code ACH). Chinalco indirectly held 40.23% equity in Ningxia Yinxing Energy Co., Ltd. (Shenzhen Stock Exchange listed company, stock code 000862) through China Aluminum Ningxia Energy Group Limited, a subsidiary of Chalco.</li> <li>2. Chinalco indirectly held 37.51% equity in Yunnan Copper Co., Ltd. (Shenzhen Stock Exchange listed company, stock code 000878) through its subsidiary Yunnan Copper (Group) Co., Ltd.</li> <li>3. Chinalco indirectly held 35.48% and 10.04% equity in Yunnan Aluminum Co., Ltd. (Shenzhen Stock Exchange listed company, stock code 000807) respectively through its subsidiaries Yunnan Metallurgical Group Limited and Chalco.</li> <li>4. Chinalco indirectly held 38.19% equity in Yunnan Chihong Zinc Germanium Co., Ltd. (SSE listed company, stock code 600497) through its subsidiary Yunnan Metallurgical Group Limited.</li> </ol>
Other information	None

### 2 Natural person

Applicable    Not applicable

### 3 Special explanation in case the Company does not have a controlling shareholder

Applicable    Not applicable

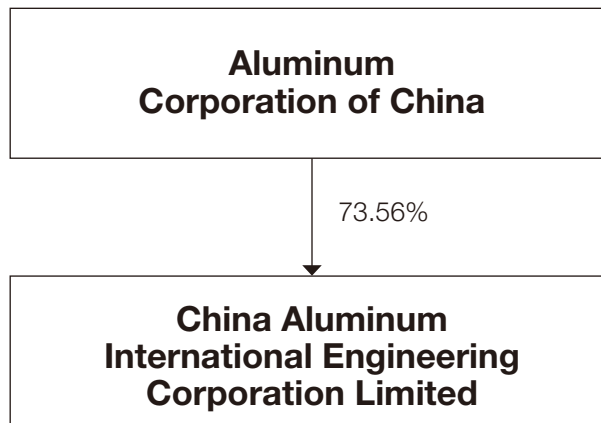
## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

### 4 Index of information regarding change in controlling shareholder during the reporting period and the date

Applicable     Not applicable

### 5 Chart of property rights and shareholding structure between the Company and its controlling shareholder

Applicable     Not applicable



## (II) Effective controller

### 1 Legal person

Applicable     Not applicable

Name    State-owned Assets Supervision and Administration Commission of the State Council

### 2 Natural person

Applicable     Not applicable

### 3 Special explanation in case the Company does not have an effective controller

Applicable     Not applicable

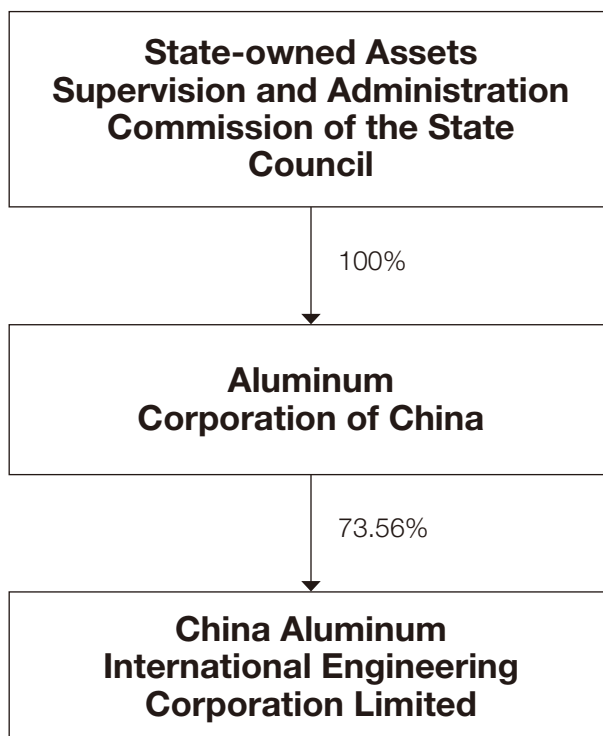
### 4 Index of information regarding change in effective controller during the reporting period and the date

Applicable     Not applicable

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

### 5 Chart of property rights and shareholding structure between the Company and its effective controller

Applicable    Not applicable



### 6 Effective controller's control over the Company through trust or other asset management means

Applicable    Not applicable

### (III) Other information on controlling shareholder and effective controller

Applicable    Not applicable

## V. OTHER CORPORATE SHAREHOLDERS WITH 10% OR MORE SHAREHOLDING

Applicable    Not applicable

## SECTION 7 CHANGES IN ORDINARY SHARES AND SHAREHOLDERS

### VI. DESCRIPTION ON RESTRICTIONS ON REDUCING SHAREHOLDING

Applicable    Not applicable

### VII. PURCHASE, REDEMPTION OR SALE OF LISTED SECURITIES

Neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2019.

### VIII. ARRANGEMENT OF PRE-EMPTIVE RIGHTS AND SHARE OPTIONS

There are no requirements for pre-emptive rights under the Articles of Association and the PRC laws which would require the Company to offer new Shares on a pro-rata basis to existing Shareholders.

### IX. DIRECTORS' AND SUPERVISORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

As at the end of 2019, no right to acquire shares in or debentures of the Company or any other body corporate were granted to any Directors or Supervisors or their associates by the Company or any of its subsidiaries or were any such rights exercised by them.

## **SECTION 8 PARTICULARS OF PREFERRED STOCK**

Applicable    Not applicable

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### I. PARTICULARS OF CHANGES IN SHAREHOLDING AND EMOLUMENTS

#### (I) Particulars of changes in shareholding and emoluments of existing and resigned directors, supervisors and senior management during the reporting period

Applicable     Not applicable

Unit: Share

Name	Position (Note)	Gender	Age	Starting date of term	Termination date of term	Number of shares held at beginning of the year	Number of shares held at end of the year	Change in number of shares held during the year	Reason for change	Pretax	Received
										emoluments received from the Company for the reporting period (in RMB10,000)	compensation from related party of the Company or not
WU Jianqiang	Chairman, executive Director	Male	55	16 Apr 2019	Re-elected/removed at the general meeting	0	0	0	N/A	62.76	No
HE Zhihui	Former chairman, executive Director	Male	57	23 May 2017	21 Feb 2019	0	0	0	N/A	12.72	No
WANG Jun	Non-executive Director	Male	49	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	0	Yes
LI Yihua	Non-executive Director	Male	41	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	0	Yes
ZONG Xiaoping	Executive Director President	Male	51	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	69.03	No
WU Zhigang	Executive Director	Male	59	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	63.5	No
ZHANG Jian	Executive Director, Secretary to the Board	Male	48	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	56.74	No
GUI Weihua	Independent non-executive Director	Male	69	27 Feb 2018	Re-elected/removed at the general meeting	0	0	0	N/A	14.29	No
CHEUNG Hung Kwong	Independent non-executive Director	Male	52	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	14.29	No
FU Jun	Independent non-executive Director	Male	48	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	14.29	No
FAN Guangsheng	Chairman of the board of supervisors and the employee supervisor	Male	53	26 Mar 2019	Elected/removed at the employee representative meeting and the meeting of the board of supervisors	0	0	0	N/A	58.79	No
HE Bincong	Chairman of the board of supervisors and the employee supervisor	Male	57	20 Mar 2017	26 Mar 2019	0	0	0	N/A	9.65	No



## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

Name	Position (Note)	Gender	Age	Starting date of term	Termination date of term	Number of shares held at beginning of the year	Number of shares held at end of the year	Change in number of shares held during the year	Reason for change	Pretax emoluments received from the Company for the reporting period (in RMB10,000)	Received compensation from related party of the Company or not
OU Xiaowu	Supervisor	Male	55	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	0	Yes
LI Wei	Supervisor	Male	49	23 May 2017	Re-elected/removed at the general meeting	0	0	0	N/A	0	Yes
WANG Yonghong	Vice president	Male	56	9 Oct 2018	Re-elected/removed at the general meeting	0	0	0	N/A	64.84	No
LIU Ruiping	Vice president	Male	52	9 Oct 2018	Re-elected/removed at the general meeting	0	0	0	N/A	63.52	No
BI Xiaoge	Vice president	Male	52	9 Oct 2018	Re-elected/removed at the general meeting	0	0	0	N/A	58.92	No
ZHAI Feng	Former assistant to the president, and the secretary to the Board	Male	42	23 May 2017	12 Apr 2019	0	0	0	N/A	31.31	No
Total	/	/	/	/	/				/	594.65	/

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

The Company has received annual confirmations from each independent non-executive Director as to their independence pursuant to Rule 3.13 of the Listing Rules and believes that each independent non-executive Director is independent from the Company.

Name	Main work experience
WU Jianqiang	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
HE Zhihui	aged 57, served as the chairman, the executive Director, the Party secretary and the chairman of the trade union of the Company for a portion of the reporting period. He is an excellent senior engineer with a master’s degree in engineering and granted special government subsidy by the State Council. He served as the president of Guiyang Aluminum and Magnesium Design and Research Institute, and the deputy general manager and the president of the Company, and the chairman of China Nonferrous Metals Processing Technology Co., Ltd.. Mr. HE is currently an assistant to the general manager of China Aluminum Group and a member of the joint board of directors of Chinalco-Rio Tinto Technical Cooperation Center. Due to work redeployment, Mr. HE Zhihui resigned as chairman, executive Director, and member and chairman of each of the risk management committee, the nomination committee and the strategy committee of the board of Directors of the Company on 21 February 2019. Mr. HE Zhihui did not hold any post in the Company upon his resignation.
WANG Jun	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
LI Yihua	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
ZONG Xiaoping	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
WU Zhigang	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
ZHANG Jian	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
GUI Weihua	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
CHEUNG Hung Kwong	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
FU Jun	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.
FAN Guangsheng	For details, see “II(I) Profiles of Current Directors, Supervisors and Senior Management” of this section.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

Name	Main work experience
HE Bincong	aged 57, served as the chairman of the board of supervisors, the employee supervisor, the deputy Party secretary and the secretary of the discipline inspection commission of the Company for a portion of the reporting period. He is a senior engineer with a bachelor's degree in engineering. He served as a deputy director of the Supervision Bureau of China Nonferrous Metals Industry Corporation (中國有色金屬工業總公司), the manager of the administrative department of Beijing Xinou Science and Technology Development Co., Ltd. (北京鑫歐科技發展有限公司), the deputy Party secretary and secretary of the discipline inspection commission of Shanxi Carbon Factory (山西碳素廠), the deputy general manager of the human resources department of Chalco and the deputy general manager of Chalco Real Estate Development Co., Ltd. (中鋁置業發展有限公司). He is the chairmen of the trade union of the Company, and the director of Zhuzhou Tianqiao Crane Co., Ltd. (株洲天橋起重機股份有限公司). Due to work redeployment, Mr. HE Bincong resigned as the chairman of the board of supervisors and employee supervisor of the Company on 26 March 2019. Mr. HE Bincong did not hold any post in the Company upon his resignation.
OU Xiaowu	For details, see "II(I) Profiles of Current Directors, Supervisors and Senior Management" of this section.
LI Wei	For details, see "II(I) Profiles of Current Directors, Supervisors and Senior Management" of this section.
ZONG Xiaoping	For details, see "II(I) Profiles of Current Directors, Supervisors and Senior Management" of this section.
WANG Yonghong	For details, see "II(I) Profiles of Current Directors, Supervisors and Senior Management" of this section.
LIU Ruiping	For details, see "II(I) Profiles of Current Directors, Supervisors and Senior Management" of this section.
BI Xiaoge	For details, see "II(I) Profiles of Current Directors, Supervisors and Senior Management" of this section.
ZHAI Feng	aged 43, served as assistant to the president, secretary to the Board and company secretary of the Company over a portion of the reporting period. He is an economist with a master's degree in business administration. He served as auditor and assistant manager at KPMG Huazhen Certified Public Accountants (畢馬威華振會計師事務所), a business manager of the secretary office of the board of directors (president's office), business manager of the operation department, a senior manager of the capital operation division and vice manager of Chalco (中國鋁業). Due to the requirements of his personal career development, Mr. ZHAI resigned from the position of assistant to the president, secretary to the Board, company secretary and authorized representative of the Company under Rule 3.05 of the Listing Rules on 12 April 2019. Mr. ZHAI Feng did not hold any post in the Company upon his resignation.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### Other information

Applicable    Not applicable

### (II) Share incentives granted to Directors and senior management during the reporting period

Applicable    Not applicable

## II. POSITIONS OF EXISTING AND RESIGNED DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

### (I) Profiles of Current Directors, Supervisors and Senior Management

#### Directors

Non-executive Directors

**Mr. LI Yihua (李宜華)**: aged 41, is currently the non-executive Director of the Company and a member of the Risk Management Committee of the Board. He is an economist with a master's degree in business administration. He has worked as the project manager in Yunnan Huawen Hengye Investment Company (雲南華文恒業投資公司) and has served as the director of legal affairs department and deputy head of investment and development department in Yunnan Sino-platinum Metals Co., Ltd. (雲南貴研鉑業股份有限公司), the deputy director of the corporate development department in Yunnan Tin Group (Holding) Co., Ltd. (雲南錫業集團(控股)有限責任公司), the secretary for board of directors, and the director of the securities department in Yunnan Tin Co., Ltd. (雲南錫業股份有限公司), the vice president of Yunnan Investment Holding Group Co., Ltd. (雲南投資控股集團有限責任公司), the deputy director of the legal department of Chinalco (中鋁公司), and the director of the legal affairs department in Chinalco (中鋁集團). Mr. LI is a general manager of capital operation department of Chinalco (中鋁集團), a director of China Aluminum International Trading Corporation Limited (中鋁國際貿易有限公司), a director of Aluminum Corporation of China Iron Ore Holdings Limited (中鋁鐵礦控股有限公司), and a director of China Aluminum Group High-end Manufacturing Co., Ltd. (中國鋁業集團高端製造股份有限公司).

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

**Mr. WANG Jun (王軍)**, aged 49, is currently a non-executive Director, and a member of the Audit Committee and the Remuneration Committee of the Board of the Company. He is a senior accountant with a master's degree. He has been accredited the SIFM qualification certificate and obtained the qualification of Chartered Institute of Management Accountants (CIMA) and has also been admitted to the National Training Program for Accounting Army Leading Backup (全國會計領軍(後備) 人才培養工程). He has worked in Chinalco as the general representative of the Peru office and has served in various positions, including the executive Director, the chief financial officer and the secretary to the Board of the Company; the chief financial officer and the manager of the finance department of China Aluminum Mineral Resources Co., Ltd. (中鋁礦產資源有限公司); a director of China Aluminum Insurance Broker (Beijing) Co. Ltd (中鋁保險經紀(北京)股份有限公司); a director of Chinalco Asset Management Company (中鋁資產經營管理公司); a supervisor of Chalco; and the deputy chief accountant, the director of the finance department and the director of capital operation department of Chinalco (中鋁集團), etc. Mr. WANG is the chief financial officer and the secretary of board of Chalco (中國鋁業). He is also the chairman of the board of supervisors of China Rare Earth Holdings Limited (中國稀有稀土股份有限公司), a director and the president of Aluminum Corporation of China Overseas Holdings Limited (中鋁海外控股有限公司), a director of Chinalco Finance Company Limited, a director of Chinalco Capital Holdings Limited (中鋁資本控股有限公司), the chairman of the board of directors of Beijing National Aluminum Investment Management Co. Ltd. (北京國鋁投資管理有限公司), the legal representative and a member of investment decision making committee of Beijing China Adjustment Chalco Copper Industry Development Fund (Limited Partnership) (北京國調中鋁銅產業發展基金(有限合夥)), a director of Dongfang Yuanjing Company (東方遠景公司) and a director of Yangguang Yuanjing Company (陽光遠景公司).

### Executive Directors

**Mr. WU Jianqiang (武建強)**, aged 55, is the chairman, Party secretary executive director, member and chairman of the Risk Management Committee of the Board, member of the Nomination Committee and chairman of the Strategy Committee of the Company. He is assistant to the general manager of Aluminum Corporation of China (中國鋁業集團有限公司). He is an excellent senior engineer and Ph.D. graduate in economics. He worked as the dispatcher, director of Dispatching Room, assistant of the factory director and deputy director of Shanxi Aluminum Factory (山西鋁廠), deputy general manager of Shanxi Branch of Chalco (中國鋁業山西分公司), deputy general manager and party secretary of Shanxi Huaze Aluminum and Electricity Co., Ltd (山西華澤鋁電有限公司), chairman, general manager, and Party secretary of Shanxi Huasheng Aluminum Co., Ltd (山西華聖鋁業有限公司), general manager of Guangxi Branch of Chalco (中國鋁業廣西分公司), vice president, president, director, and deputy party secretary of China Copper Industry Co., Ltd (中國銅業有限公司), deputy general manager and general manager of Copper Business Division of Chinalco (中鋁集團銅事業部), general manager of Copper Business Division of China Aluminum Group, president, director, and deputy party secretary of Yunnan Copper Industry (Group) Co., Ltd (雲南銅業(集團)有限公司), chairman, director, party secretary of Yunnan Copper Co., Ltd. (雲南銅業股份有限公司), chairman of China Aluminum Mineral Resources Co., Ltd. (中鋁礦產資源有限公司), etc..

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

**Mr. ZONG Xiaoping (宗小平):** aged 51, is currently the executive Director, the president, the deputy Party secretary and the member of the Strategy Committee of the Board of the Company. He is an excellent senior engineer with a master's degree in business administration. He served as the responsible person for project technology and project manager, the deputy director in chief engineer office, deputy general manager and the general manager of the Third Construction Company of East China Sea Development and Construction Corporation of China State Construction Eighth Engineering Corporation Limited (中國建築第八工程局有限公司東海開發建設總公司第三建築公司); the general manager of Guangzhou Branch of China State Construction Eighth Engineering Corporation Limited (中國建築第八工程局有限公司廣州分公司); the deputy general manager in the headquarter of southwest region of China State Construction Engineering Corporation Limited (中國建築股份有限公司); and the executive director and legal representative of China Construction Aluminum Advanced Material (Chengdu) Co., Ltd. (中建鋁新材料成都有限公司), etc.. Mr. ZONG is also the chairman and legal representative of China Construction Aluminum Advanced Material Co., Ltd. (中建鋁新材料有限公司).

**Mr. WU Zhigang (吳志剛):** aged 59, is currently the executive Director and the vice president of the Company. He is a senior engineer with a college degree. Mr. WU served as the deputy manager of Machinery Engineering Company in Sixth Metallurgical Construction Company of China Nonferrous Metals Industry Co., Ltd. (中國有色金屬工業第六冶金建設公司機械化工程公司), the chief deputy manager and the standing deputy manager of its Hainan Branch, the deputy general manager and the general manager in Sixth Metallurgical Construction Company of China Nonferrous Metals Industry Co., Ltd. and an executive director and the general manager in Sixth Metallurgical Construction Company of China Nonferrous Metals Industry Co., Ltd., etc. Mr. WU also serves as the executive director of the China Aluminum International Investment Management (Shanghai) Co., Ltd. (中鋁國際投資管理(上海)有限公司).

**Mr. ZHANG Jian (張建):** aged 48, is currently the executive Director, the chief financial officer, the secretary to the Board and the Company secretary of the Company. He is an accountant graduating with a master's degree in business administration. Mr. ZHANG served as the deputy section head and head of the cost estimation section of the finance department of Henan Branch of Chalco (中國鋁業河南分公司); the business manager of the general office, deputy manager of the accounting office and deputy manager of the budget analysis office in the finance department of Chalco (中國鋁業); the deputy manager of the finance department (taking charge of the work) of Zhongzhou Branch of Chalco (中國鋁業中州分公司); the deputy manager of the accounting office (taking charge of the work) and the manager of the general management office of the finance department of Chalco (中國鋁業); the chief financial officer of Chalco Hong Kong Limited (中國鋁業香港有限公司) and the chief legal adviser of the Company., etc. Mr. ZHANG is also the director of the Chinalco Finance Company Limited.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### Independent Non-Executive Directors

**Mr. GUI Weihua (桂衛華):** aged 69, is currently the independent non-executive Director, the member and the chairman of the Remuneration Committee, the member of the Nomination Committee, and the member of the Strategy Committee of the Board. He is a professor holding master postgraduate qualification. Mr. GUI is the academician of the Chinese Academy of Engineering, an academic leader among the Innovative Research Groups of the National Natural Science Foundation of China (國家自然科學基金創新研究群體), the head of the Nonferrous Metallurgical Automation, the Ministry of Education's Engineering Research Center (有色冶金自動化教育部工程研究中心), the head of the Institute of Information Science and Engineering, Central South University (中南大學信息科學與工程學院控制工程研究所), as well as a professor and instructor of doctorate students of Central South University (中南大學). Mr. GUI also served as a director of Changsha Wuhua Technology Development Co., Ltd. (長沙伍華科技開發有限公司).

**Mr. CHEUNG Hung Kwong (張鴻光):** aged 52, is currently the independent non-executive Director of the Company, the member and the chairman of the Audit Committee of the Board. He is a member of the American Institute of Certified Public Accountants and a chartered financial analyst qualified by the CFA Institute. Mr. CHEUNG obtained master postgraduate qualification and served as a manager of the transaction service department/audit department of PricewaterhouseCoopers. He served as the chief financial officer of the Boto Company Limited (寶途集團), and the chief financial officer, company secretary and joint authorized representative of the Kaisa Group Holdings Ltd. (佳兆業集團控股有限公司).

**Mr. FU Jun (伏軍):** aged 48, is the currently independent non-executive Director of the Company, the member of the Risk Management Committee of the Board, the member of the Audit Committee, the member of the Remuneration Committee, the member and the chairman the Nomination Committee of the Board. He is a Professor with a doctoral degree of law. Mr. FU went on an exchange and interviewed with Harvard University as a senior visiting scholar of Fulbright (福布賴特高級訪問學者). He served as a teaching assistant and associate professor in University of International Business and Economics (對外經濟貿易大學), and an independent non-executive director of CCB Principal Asset Management Co., Ltd. (建信基金管理有限責任公司). He is a professor of the Law School of University of International Business and Economics (對外經濟貿易大學); an arbitrator of China International Economic and Trade Arbitration Commission (中國國際經濟貿易仲裁委員會), an arbitrator of South China International Economic and Trade Arbitration Commission (Shenzhen Court of International Arbitration) (華南國際經濟貿易仲裁委員會 (深圳國際仲裁院)), an arbitrator of Guangzhou Arbitration Commission (廣州仲裁委員會), an arbitrator of Shanghai International Economic and Trade Arbitration Commission (Shanghai International Arbitration Center)(上海國際經濟貿易仲裁委員會 (上海國際仲裁中心)) and an arbitrator of Beijing Arbitration Commission (北京仲裁委員會). Mr. FU is the deputy secretary general and permanent member of Institute of International Economic Law under China Law Society (中國法學會國際經濟法學研究會), the deputy director of the Professional Committee of the International Financial Law under China Law Society (中國法學會國際金融法專業委員會) and an executive director of China Banking Law Society (中國銀行法學研究會).



## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### Supervisors

**Mr. FAN Guangsheng (範光生):** aged 53, is currently the chairman of Supervisory Board and employee representative Supervisor of the Company, deputy Party secretary and the secretary to discipline inspection commission. He is a senior engineer with a master's degree in business administration. Mr. FAN served as a technician of the design management office, the deputy secretary of the Communist Youth League, and deputy director of the Party Committee Office in Qinghai Aluminum Factory (青海鋁廠), the director of the Party Committee Office, the assistant to the general manager, the director of the manager office, the deputy Party secretary, the secretary to discipline inspection commission, and the chairman of the labor union of Qinghai Aluminum Co., Ltd. (青海鋁業有限責任公司), the deputy Party secretary, the secretary to discipline inspection commission, and the chairman of the labor union of the Qinghai Branch of Chalco (中國鋁業青海分公司), the Party secretary, the secretary to discipline inspection commission, and the chairman of the labor union of the Northwest Aluminum Processing Branch of Chalco (中國鋁業西北鋁加工分公司), the Party secretary, the secretary to discipline inspection commission, and the chairman of the labor union of Northwest Aluminum Processing Factory (西北鋁加工廠), the Party secretary, the chairman of the labor union, the general manager, and the director of Shanxi Huaxing Aluminum Co., Ltd. (山西華興鋁業有限公司), and the member of Shanxi Work Promotion Office of Chalco (中鋁山西工作推進辦公室), etc.

**Mr. LI Wei (李衛):** aged 49, is currently the Supervisor of the Company. He obtained a master's degree in law and served in various positions, including the probation deputy division head of the 2nd Factory of Beijing Coal Corporation (北京市煤炭總公司), the discipline inspector of the Research Office under the Integrated Inspection Office of the Discipline Commission of the Communist Party of China (director-level), the office director of the Accredited Institution of the Integrated Inspection Office (director-level), the director of the 2nd division of seconded cadres of organization department, the deputy director of the department of discipline inspection and supervision (inspection office) of Chinalco, the regional center director (Southwest region) of discipline inspection and supervision. Mr. LI is the deputy head of the department of discipline inspection of the Party Committee of Chinalco (中鋁集團).

**Mr. OU Xiaowu (歐小武):** aged 55, is currently the Supervisor of the Company. He is a senior auditor with a bachelor's degree in economics. Mr. OU served as the director of 1st division of the audit department in China Nonferrous Metals Industry Corporation (中國有色金屬工業總公司), the deputy director of the finance department and audit department of China Copper Lead Zinc Group Corporation (中國銅鉛鋅集團公司), the director of the finance department (audit department) in Chinalco, a general manager of the finance department of Chalco (中國鋁業), the chairman of the supervisory board of China Aluminum Insurance Broker (Beijing) Co- Ltd (中鋁保險經紀(北京)股份有限公司), the director and chief financial officer of China Copper Co., Ltd. (中國銅業有限公司), and the supervisor of Guangxi Huayin Aluminum Co., Ltd. (廣西華銀鋁業有限公司). Mr. OU is the deputy chief auditor and the general manager of the audit department of Chinalco (中鋁集團) and is also the supervisor of Chalco (中國鋁業), the supervisor of China Copper Co., Ltd. (中國銅業有限公司), the supervisor of China Aluminum Group High-end Manufacturing Co., Ltd. (中國鋁業集團高端製造股份有限公司), the supervisor of Chalco Energy Co., Ltd. (中鋁能源有限公司), and the chairman of the supervisory board of Qinghai Yellow River Hydropower Renewable Aluminum Co., Ltd. (青海黃河水電再生鋁業有限公司).



## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### Senior Management

**Mr. ZONG Xiaoping:** For details of the profile of Mr. ZONG Xiaoping, please refer to the sub-section headed “Directors” above.

**Mr. WU Zhigang:** For details of the profile of Mr. WU Zhigang, please refer to the sub-section headed “Directors” above.

**Mr. WANG Yonghong (王永紅):** aged 56, is currently the vice president and the safety officer of the Company. He is an excellent senior engineer with a master’s degree in engineering. Mr. WANG served as a technician in Shanxi Wenxi Fertilizer Factory (山西聞喜化肥廠); the officer of the engineering department and Alumina Engineering Supervising Unit of Shanxi Aluminum Plant (山西鋁廠); the deputy head of the engineering division of Alumina Engineering Supervising Unit (氧化鋁工程指揮部) of Shanxi Aluminum Plant (山西鋁廠); the deputy head of the general deployment unit, the head of the mechanical engineering division, and the head of the third Alumina sub-branch of Shanxi Aluminum Plant (山西鋁廠); the deputy general manager, the deputy general manager (taking charge of the work), and general manager of Zhongzhou Branch of Chalco (中國鋁業中州分公司); a member of the tenth session of the Jiaozuo Committee of Communist Party of China; the executive director, general manager, Party secretary, chairman of the labour union of Chinalco Shenyang Non-Ferrous Metals Processing Co., Ltd. (中鋁瀋陽有色金屬加工有限公司); the assistant to president of China Rare Earth Holdings Limited (中國稀有稀土股份有限公司); the ombudsman of aluminum processing division of Chinalco (中鋁集團); and the deputy head of Work Promotion Office of Chinalco Henan, etc. Mr. WANG is also the director of Chalco Tendering Company Limited (中鋁招標有限公司) and non-independent director of Zhuzhou Tianqiao Crane Co., Ltd. (株洲天橋起重機股份有限公司).

**Mr. LIU Ruiping (劉瑞平):** aged 52, is currently the vice-president of the Company. He is an excellent senior engineer with a postgraduate degree from Party School of the Central Committee. Mr. LIU served as the chief engineer and deputy director of economic planning division of SAMI; the deputy manager and manager of the Alumina Project of Investment Management Department and manager of the First Division of Chalco (中國鋁業); and the senior manager, deputy general manager and general manager of the Investment Management Department of Chalco. Mr. LIU is also the executive director and the Party secretary of China Nonferrous Metals Industry’s 12th Metallurgical Construction Co., Ltd. (中色十二冶金建設有限公司), and the executive director of Shanxi 12th Metallurgical Asset Management Co., Ltd. (山西十二冶資產管理有限公司).

**Mr. ZHANG Jian:** For details of the profile of Mr. ZHANG Jian, please refer to the sub-section headed “Directors” above.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

**Mr. BI Xiaoge (畢效革):** aged 52, is currently the vice president of the Company. He is a senior engineer and graduated from Party School of the Central Committee. He served as various positions in Shandong Aluminum Company (山東鋁業公司), including a technician in quality management department of the Alumina Plant; the deputy director of Alumina Plant Workshop No. 62, the deputy head of quality management department, and the head of Workshop No. 2. He served as the director of quality management department of Shandong Aluminum Holdings Limited (山東鋁業股份有限公司), the deputy head of quality management department of Shandong Aluminum Company (山東鋁業公司), the deputy manager of the production operation department (quality management department), the deputy manager (taking charge of the work) and general manager of planning operation department of Shandong Branch of Chalco (中國鋁業山東分公司), the manager of the investment management department of Chalco Shandong Co., Ltd. (中鋁山東有限公司), a member of the enterprise transformation and upgrading workgroup of Chinalco Zhengzhou (中鋁鄭州); the deputy general manager of Henan Branch of Chalco (中國鋁業河南分公司), a standing member of the Party Committee of China Great Wall Aluminum Corporation Limited (中國長城鋁業有限公司); the deputy general manager of Chinalco Mining Corporation Limited (中鋁礦業有限公司), etc. Mr. BI is also the executive director of China Aluminum International Technology Development Co., Ltd. and the executive director of Beijing Zichen Investment Development Corporation Limited., executive directors of Beijing Zichen Investment & Development Co., Ltd. (北京紫宸投資發展有限公司).

### Secretary to the Board

**Mr. ZHANG Jian:** For details of the profile of Mr. ZHANG Jian, please refer to the sub-section headed "Directors" above.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### (II) Positions held at the Shareholder

Applicable       Not applicable

Position holder's name	Shareholder's name	Position at the Shareholder	Term starting date	Term ending date
WU Jianqiang	Chinalco	Assistant to general manager	Mar 2020	–
LI Yihua	Chinalco	Deputy director of legal affairs department	May 2013	Dec 2016
		Director of legal affairs department	Dec 2016	Jul 2018
		Director of capital operation department	Jul 2018	Nov 2019
		General manager of capital operation department	Nov 2019	–
WANG Jun	Chinalco	Deputy chief accountant of the finance department	Dec 2015	Jan 2019
		Director of the finance department	Dec 2015	Jan 2019
OU Xiaowu	Chinalco	Deputy chief auditor of the audit department	Mar 2015	–
		Director of the audit department	Dec 2009	Nov 2019
		General manager of the audit department	Nov 2019	–
LI Wei	Chinalco	Deputy head of the department of discipline inspection of the Party Committee	Dec 2016	Dec 2019
		Director of the department of discipline inspection and supervision department	Dec 2016	Dec 2019
		Director of the inspection office	Dec 2016	Aug 2019
		Deputy head of the discipline inspection and supervision team	Apr 2019	–
Explanation of positions at the shareholder	None			

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### (III) Position held at other companies

Applicable       Not applicable

Position holder's name	Other company's name	Position at other company	Term starting date	Term ending date
ZONG Xiaoping	China Construction Aluminum Advanced Material Co., Ltd.	Legal representative, chairman	Aug 2015	–
WU Zhigang	China Aluminum International Investment Management (Shanghai) Co., Ltd.	Executive Director	Nov 2018	–
ZHANG Jian	Chinalco Finance Company Limited	Director	Feb 2016	–
LI Yihua	China Aluminum International Trading Corporation Limited	Director	Sep 2015	–
	Aluminum Corporation of China Iron Ore Holdings Limited	Director	Oct 2018	–
	China Aluminum Group High-end Manufacturing Co., Ltd.	Director	Sep 2019	–
WANG Jun	Aluminum Corporation of China Overseas Holdings Limited	Director, president	Nov 2015	–
	Dongfang Yuanjing Company	Director	Dec 2015	–
	Yangguang Yuanjing Company	Director	Dec 2015	–
	Chinalco Finance Company Limited	Director	Nov 2015	–
	Chinalco Capital Holdings Limited	Director	Dec 2015	–
	China Rare Earth Holdings Limited	Chairman of the supervisory board	Jun 2016	–
	Beijing National Aluminum Investment Management Co. Ltd.	board	Jun 2017	–
	Beijing China Adjustment Chalco Copper Industry Development Fund (Limited Partnership) Chalco	Chairman of the board of directors	Jun 2017	–
		Legal representative and a member of investment decision making committee	Jan 2019	–
		Chief financial officer and the secretary of board		
OU Xiaowu	Chalco	Supervisor	Aug 2019	–
	China Copper Co. Ltd	Supervisor	Feb 2019	–
	China Aluminum Group High-end Manufacturing Co., Ltd.	Supervisor	Sep 2019	–
	Qinghai Yellow River Hydropower Renewable Aluminum Co., Ltd.	Chairman of the board of supervisors	Oct 2012	–
	Chalco Energy Co., Ltd.	Supervisor	May 2011	–
GUI Weihua	Changsha Wuhua Technology Development Co., Ltd.	Director	May 2002	–
WANG Yonghong	Chalco Tendering Company Limited	Director	Jul 2019	–
LIU Ruijing	China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd.	Party secretary, executive Director	May 2018	–
	Shanxi 12th Metallurgical Asset Management Co., Ltd.	Executive Director	Jan 2019	–
BI Xiaoge	China Aluminum International Technology Development Co., Ltd.	Executive Director	Jan 2018	–
Explanation of positions at other entities	China Construction and Aluminum Advanced Materials Co., Ltd., of which our executive Director Mr. ZONG Xiaoping was the legal representative and the chairman, is owned by China State Construction Engineering Corporation as to 60% and by Chinalco as to 40%. Mr. GUI Weihua, an independent Director, is also a director of Changsha Wuhua Technology Development Co., Ltd. which is not related to the Company. Internal Directors and supervisors are appointed to their concurrent positions by the Company or its controlling shareholder according to relevant procedures.			

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### III. EMOLUMENTS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Applicable      Not applicable

Decision-making procedures for remuneration of directors, supervisors and senior management

Based on the market level and the compensation strategy of Chinalco, the Company's human resources department puts forward the compensation package for directors, supervisors and senior management, which is subject to the approval of the Remuneration Committee of the Board and then to the consideration of the Board. Specifically, the remuneration of senior management is determined by the Board, and the remuneration of Directors and supervisors is subject to the approval of the Board and then to the general meeting for consideration and approval.

Basis for determining the remuneration of directors, supervisors and senior management

Based on the development strategy, corporate culture and the remuneration strategy of Chinalco, the Company determines the remuneration of Directors, supervisors and senior management by reference to the remuneration level of identical positions at comparable companies (scale, industry, nature, etc.) and taking into account the Company's annual operating performance, the performance of Directors and supervisors and the performance assessment results of senior management.

Actual payment of remuneration to Directors, supervisors and senior management

The Company pays remuneration to Directors, supervisors and senior management in full and on time every month based on the remuneration standards for Directors, supervisors and senior management determined by the general meeting and the Board.

Total remuneration actually received by all directors, supervisors and senior management at the end of the reporting period

Total remuneration paid to Directors, supervisors and senior management of the Company was RMB5.9465 million for 2019.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

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

Applicable     Not applicable

Name	Position	Change	Reason for change
HE Zhihui	Former chairman, executive Director		Mr. HE Zhihui resigned as chairman, executive Director and other roles on the Board on 21 February 2019 due to work redeployment. Mr. HE Zhihui did not hold any post in the Company upon his resignation.
HE Bincong	Former chairman of the Board of Supervisors, employee representative supervisor		Mr. HE Bincong resigned as chairman of the Board of Supervisors and employee representative supervisor of the Company on 26 March 2019 due to work redeployment.
FAN Guangsheng	Chairman of the Board of Supervisors, employee representative supervisor		On 26 March 2019, the Company convened the employee representative meeting and the eighth meeting of the Board of Supervisors of the third session and elected Mr. FAN Guangsheng as the employee representative supervisor and chairman of the Board of Supervisors of the Company till expiration of the term of the Board of Supervisors of the third session of the Company.
ZHAI Feng	Former assistant to the president, secretary to the Board, company secretary, authorized representative		Mr. ZHAI Feng resigned from the positions of assistant to the president, secretary to the Board, company secretary and authorized representative of the Company under Rule 3.05 of the Listing Rules of the Stock Exchange on 12 April 2019 due to the need of his own career development. Mr. ZHAI Feng did not hold any post in the Company upon his resignation.
WU Jianqiang	Chairman, executive Director		On 16 April 2019, the second extraordinary general meeting of the Company of 2019 elected Mr. WU Jianqiang as executive Director of the Company till the date of election of the Board of the next session. On the same day, the 21st meeting of the Board of the third session of the Company elected Mr. WU Jianqiang as chairman of the Board of directors of the third session till expiration of the term of the current Board.
ZHANG Jian	Joint company secretary, authorized representative, secretary to the Board		On 12 April 2019, the 20th meeting of the Board of the third session considered and passed relevant resolution, appointing Mr. ZHANG Jian and Ms. WU Jiawen as the Company's joint company secretaries for a term of three years, and appointing Mr. ZHANG Jian as the Company's authorized representative, effective from the date of the resolution of the Board. On 31 May 2019, the 24th meeting of the Board of the third session considered and passed relevant resolution, appointing Mr ZHANG Jian, executive Director and chief financial officer of the Company, as the secretary to the Board for a term ended on the date of election of the next Board.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### V. DETAILS ON PUNISHMENTS IMPOSED BY SECURITIES REGULATORY AUTHORITIES DURING LAST THREE YEARS

Applicable      Not applicable

On 8 December 2017, Mr. SUN Chuanyao, then independent Director of the Company, received the “Decision on Administrative Penalty” ([2017] No. 97) issued by the CSRC. During his tenure as an independent director of Harbin Electric Corporation Jiamusi Electric Machine Co., Ltd. (哈爾濱電氣集團佳木斯電機股份有限公司) (stock abbreviation: Jiamusi Electric (佳電股份), stock code: 000922), the CSRC imposed a warning and a penalty of RMB70,000 on Mr. SUN Chuanyao, who was then an independent director of Jiamusi Electric, on the grounds of information disclosure in violation of laws and regulations. Mr. SUN Chuanyao resigned as an independent Director of the Company on 27 February 2018.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### VI. PARTICULARS OF EMPLOYEES OF THE PARENT COMPANY AND MAJOR SUBSIDIARIES

#### (I) Employees

Number of existing employees of the parent company	78
Number of existing employees of major subsidiaries	14,607
Total number of existing employees	14,685
Number of resigned and retired employees born expenses by the parent company and major subsidiaries	10,340

#### By profession

Profession	Number of employees (person)
Operational management personnel	4,409
Engineering technicians	6,806
Production personnel	2,036
Service and other personnel	1,434
Total	14,685

#### By level of education

Level of education	Number of employees (person)
Graduate degree and above	1,319
Undergraduate degree	6,797
Associate degree	2,943
Secondary school and below	3,626
Total	14,685



## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### (II) Remuneration policy

Applicable       Not applicable

In the general principle of “salaries rising with profit and salaries falling with profit”, the Company conducted budgetary management of total salaries, allocating more wages to member companies with good economic benefits, better cost control and higher labor productivity. The Company is responsible for managing salaries of the operation management team and controlling total salary of employees of the enterprise, while the operation management team of the enterprise is responsible for corporate internal assessment and salary management of employees. The Company biases total salary allocation towards core and backbone employees, guides enterprises to establish and perfect the backbone employee-biased incentive policy by inclining total amount of salaries towards them, and actively organises enterprises to promote the backbone employee incentive efforts, in order to stimulate the enthusiasm of the core talents, and stabilise backbone employees.

### (III) Retirement and employees benefit scheme

Details of the Group’s retirement and employees benefit scheme are set out in Key Item Note (29) salary payable to staff, and (37) long-term salary payable to staff, to the consolidated financial statements.

In accordance with regulations applicable to enterprises and the relevant requirements of various local governments in areas in which we operate, we established the pension insurance, medical insurance, unemployment insurance, maternity insurance and workers’ injury compensation insurance for our employees and workers. We also established an employee housing fund according to applicable PRC regulations. In addition to statutory contributions to the above social insurance, the Company provides voluntary benefits for existing employees and retired employees, including supplementary medical insurance and corporate annuity.

### (IV) Incentive for Employees

The Group keeps responding to the development needs. It further established and optimized an effective employees’ performance assessment system based on clear objectives of each position. The employees’ performance is objectively and accurately assessed by breaking down the key tasks of the Group in the year, clarifying performance objective of different roles and setting performance standards. The assessment results are linked to the performance-based salaries in employees’ remuneration to encourage innovation of the potential and devotion of employees.

## SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES

### (V) Employees' training

Applicable     Not applicable

The Company has long regarded the employees' education and training as a basic work to continuously improve the overall quality of the employee teams, update the employees' knowledge, and cultivate professional talents with unremitting determination and strict implementation. In the employee education and training, based on the team building condition of the employees and in accordance with the Company's strategy, customers' needs and personal abilities, we aim to improve the employees' political theory level and business performance ability. By adhering to the strategy of "going out and coming in", and insisting on the working concept of organic combination of centralized-training and self-improvement, we invest a large amount of human and financial resources to create a training environment for employees and to implement the measures of employee education and training in an effective manner.

### (VI) Outsourced labor

Applicable     Not applicable

## VII. OTHER INFORMATION

Applicable     Not applicable

### (I) Director's supervisors' and senior management's interests and short positions in share, underlying shares and debentures

As at 31 December 2019, none of the Directors, Supervisors and senior management of the Company had any interest or short position in the Shares, underlying Shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which was 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 any such Director, Supervisor, and senior management was taken or deemed to have under such provisions of the SFO), or which are required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein, or which are required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers, to be notified to the Company and the Stock Exchange.

## **SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES**

### **(II) Directors' and Supervisors' service contracts**

The Company entered into service contracts with each Director. The details of such service contracts mainly consist of: (1) term of three years from 23 May 2017 (Mr. GUI Weihua was appointed in place of Mr. SUN Chuanyao as the independent non-executive Director on 27 February 2018 and the service contract commenced from 27 February 2018 and will end upon the date of the election of the next session of the Board; Mr. Wu Jianqiang was appointed as the executive directors of the Company on 16 April 2019 and the service contract commenced from 16 April 2019 and will end upon the date of election of the next session of the Board); and (2) termination subject to terms of each contract.

For compliance with relevant regulations and the Articles of Associations and the provisions of arbitration, the Company had entered into contracts with each Supervisor.

Save as disclosed above, none of Directors entered into a service contract with the Company which was not determinable by the Company within one year without payment of compensation (other than statutory compensation).

### **(III) Material interests of the Directors and Supervisors in contracts, transactions or arrangements**

During the reporting period, none of Directors, Supervisors or other connected entities had directly or indirectly entered into significant contracts, transactions or arrangements in which they have material interests with the Company.

### **(IV) Directors' insurance**

As of the date of this report, the Company has purchased the effective directors insurance for (existing and resigned) Directors.

### **(V) Permitted indemnity**

The Company has arranged sufficient and proper insurance for Directors to better perform their responsibilities and risk aversion pursuant to the provision A.1.8 of the Corporate Governance Code as contained in Appendix 14 to the Listing Rules of the Stock Exchange. Save for the above, during the financial year of 2019 and as at the date of this annual report, the Company has no other provision of permitted indemnity (as defined in Section 470 of the Companies Ordinance).

## **SECTION 9 PARTICULARS OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AND EMPLOYEES**

### **(VI) Directors' interests**

At no time during the year and up to the date of this annual report was the Company or any of its subsidiaries or holding company or any subsidiaries of the Company's holding company a party to any arrangements to enable the Directors to acquire benefits by means of the acquisition of Shares or debentures of the Company or any other body corporate, and none of the Directors or their spouse and children under the age of 18 was given any right to subscribe the shares or debt securities of the Company or other body corporates, or had exercised any such rights.

### **(VII) The financial, business and family relationships among the Board, supervisors and senior management**

As at the date of this report, there were no financial, business or family relationships among members of the Board, Supervisors and senior management of the Company.

### **(VIII) Share incentives acquired by directors, supervisors and senior management**

In October 2013, the Company implemented share appreciation rights scheme targeting on specific Directors, senior management and management officers and key employees who made significant influence on the development of the Company. As of October 2017, the initial grant scheme became invalid. The Company has not again granted new share appreciation rights and any other forms of share incentive.

### **(IX) Directors' interests in competing business**

During the year of 2019, none of Directors or their Associates had any competing interest in any business which competes or may compete, directly or indirectly, with the Group's business:

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### I. PARTICULARS IN RELATION TO CORPORATE GOVERNANCE

Applicable    Not applicable

During the reporting period, the Company continuously standardized its corporate governance and improved its corporate system in strict accordance with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, relevant regulations of the CSRC and other regulatory authorities, as well as relevant requirements of SSE and the Stock Exchange. According to the Company Law of the People's Republic of China (Revised in 2018), the Guidelines for the Articles of Association of Listed Companies (Revised in April 2019) and other relevant laws and regulations, the Company revised relevant provisions of 5 corporate governance documents to further standardize corporate governance, including the Articles of Association of the Company, the Rules of Procedure of the Shareholders' General Meeting, the Rules of Procedure of the Board of Directors, the Rules of Procedure of the Audit Committee of the Board of Directors and the Rules of Procedure of the Nomination Committee of the Board of Directors. The general meeting, the Board of Directors and its special committees and the Board of Supervisors of the Company operated in accordance with laws and regulations and in an effective manner. The work of information disclosure and investor relations gradually strengthened, and the level of corporate governance further improved. The Company won the "Best Corporate Governance Award" of China Securities Golden Bauhinia Awards.

Whether the Company's corporate governance deviated materially from relevant CSRC requirements? If any, provide the reason.

Applicable    Not applicable

### II. COMPLIANCE WITH THE CORPORATE GOVERNANCE CODES

#### (I) Company's Compliance with the Corporate Governance Codes

The Company adhered to maintain a high standard of corporate governance as a listed company on the Stock Exchange. Since Mr. HE Zhihui has resigned his duties including being the chairman and Director of the Company, a majority of the Directors of the Company jointly recommended Mr. Zong Xiaoping, the executive director and president, to take his place as the chairman during the period from the resignation of Mr. He Zhihui to on 21 February 2019 the appointment of Mr. WU Jianqiang as the chairman by the Company on 16 April 2019. According to the code provision A.2.1 set out in the Corporate Governance Codes contained in Appendix 14 to the Listing Rules of the Stock Exchange, the roles of the chairman and chief executive officer should be separated and should not be performed by the same individual. The Company maintained sound corporate governance practice during Mr. Zong Xiaoping's tenure of both positions. The Board is of the view that the balance of power and authority were not affected as for the arrangement, and this structure enabled the Company to make and implement decisions more promptly and effectively. After the appointment of Mr. WU Jianqiang as the chairman of the Company, the duties between the chairman and the president were separated.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

Saved as disclosed above, during the year ended 31 December 2019, the Company has complied with all code provisions (excluding provision A.2.1) set out in the Corporate Governance Code contained in Appendix 14 to the Listing Rules of the Stock Exchange, and adopted in its best practice proposed in which as appropriate.

### (II) Risk Management and Internal Control of the Company

The Company aims to strengthen the development of the internal control systems, ensure that its operation and management are in compliance with relevant laws and regulations, safeguard its assets, maintain the authenticity and completeness of financial reports and related information, enhance operating efficiency and effect as well as facilitate its corporate development strategies. Achieving the vision and mission of becoming “a competitive technology and service provider in the international market” is the ultimate goal of the Company to develop such internal control systems.

The Company has attached prime importance to internal control. An internal control system covering the headquarters of the Company and each branch and subsidiary has been established to safeguard the investments of Shareholders and the assets of the Company. Based on the Requirements of Application Guidelines for Internal Control of SASAC (國資委內部控制應用指引要求) and COSO framework’s Five Components, the internal control system includes five aspects, namely internal environment, risk assessment, control activities, information and communications, and supervision. On the level of the Company, the internal control system includes internal environment, risk assessment, information and communications, and internal supervision, which involves a total of 98 control standards, while on the process level, the internal control system includes 16 processes and 500 control standards in total. There are a total of 598 control standards at both company level and process level.

The Company believes that good internal control plays an important role in corporate operations. The Company has established Audit Committee and Risk Management Committee to perform internal audit functions and conduct analysis and independent assessments on the adequacy and effectiveness of the risk management and internal control systems of the Company. The Board is dedicated to establishing effective internal control systems, and implementing and supervising internal control. The Board is ultimately responsible for the internal control, risk management and compliance management of the Company. It makes decisions for internal control, risk management and compliance policies and reviews the effectiveness of such policies, as well as monitoring the design, implementation and supervision of risk management and internal control systems by the Board. The Board also approves the internal control assessment report, risk assessment report and compliance report for the year, reviews the resources, employees’ qualifications and experiences in respect of the accounting, internal audit and financial reporting functions, as well as the adequacy of training courses received by employees and the relevant budget. The Board continues to monitor the risk management and internal control systems of the Company. In 2019, the risk management and internal control systems of the Company and its subsidiaries, including financial control, operation control and compliance control, were reviewed by the Board.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

The Company conducted 2 internal control tests in 2019 and did not identify any material and significant deficiency. The Board considers that such risk management and control systems are adequate and effective.

In terms of rules and regulations, the Company consecutively formulated various internal control measures of the Company, such as the Measures on Auditing and Administration of Internal Control of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司內部控制審計管理辦法》), the Measures on Assessment and Management of Corporate Risks of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司企業風險評估管理辦法》), the Measures on Administration of Internal Audit Statistic Works of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司內部審計統計工作管理辦法》), the Measures on Assessment, Control and Administration of Risk Management of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司風險管理測評及監控管理辦法》), the Implementation of Articles of the Decision-making System on “Three Important Matters and One Big Concern” of Chalieco (《中鋁國際「三重一大」決策制度實施細則》), the Measures on Administration for the Appointment of Intermediaries of China Aluminum International Engineering Corporation Limited to Conduct Auditing (《中鋁國際工程有限責任公司委托中介機構審計管理辦法》), the Regulations on Documentation for Internal Auditing of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司內部審計檔案工作規範》) and the Internal Control Manual of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司內部控制手冊》).

The effective implementation of the internal systems ensured the orderly development of the Company’s operating and management activities as well as effective risks control, safeguarded the security and integrity of the Company’s property and guaranteed the realization of the Company’s operating and management objectives.

In terms of organizational structure, the Company has established the department of legal affairs and risk control which is responsible for risk management, evaluation on internal control, audit for construction projects, review of economic responsibilities and other specific audit works. The functional arms or operations units including business, finance and investment of the Company and all our subsidiaries assume primary responsibilities in their respective internal control systems. Specialized organizations or departments including risk management department and the internal control and compliance department are responsible for the coordination and planning as well as organization and implementation before and during risk management and internal control and compliance; internal audit organizations or departments are responsible for supervising and carrying out periodic auditing on the effectiveness of risk management, internal control and compliance, and investigating the accountability for any behavior violating the requirements.

In terms of the disclosure of inside information, the Company has established standardized control procedures to collect, organize, review and disclose information. The Company will ensure that the information is kept confidential before it is fully disclosed to the public. For information that is difficult to keep confidential, the Company will disclose it in a timely manner to effectively protect the benefit of investors and stakeholders.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

Based on the results of risk management and internal control in 2019, no material failure or weakness was found in respect of risk monitoring. The management procedures of financial reports and information disclosure of the Company is in strict compliance with the regulations under the Listing Rules of the Stock Exchange. The Board considers that the risk management and internal control of the Company is in effective operation according to its assessment. Each department of the Company is able to smoothly submit to the Board any data which is needed to be submitted. Being the most senior point of contact to each department, the president of the Company is able to effectively report to the Board in relation to the operation of each department, and to coordinate the demands of each department and carry out relevant mobilization to facilitate reasonable decision making within the Company. Accordingly, any possible significant matter (if disclosure to the market is required) identified by the staff can be reported to the management of the Company in a timely, accurate and effective manner, and the decisions made by the management of the Company can be carried out accurately and timely under supervision. Through the assessment of the internal control systems of the Group by the Audit Committee and internal control department, the Board was of the view that, in 2019 and as at the date of publication of this report, the Company continues to have comprehensive internal control and risk management systems including corporate governance, operations, investment, finance and administration and human resources. Such internal control and risk management systems are in full effect.

In 2019, the Company adopted the following measures to implement risk management and internal control:

Based on the practical situation in operations, the Company collected relevant information internally and externally and systematically sorted out business and management flows. It carried out in-depth analysis on every risk event in the risk event database from the perspectives including policies, systems and implementation, organizational responsibilities, human resources, finance and daily operations. Through reorganization, identification and screening of risk events, the annual risk event database was eventually established. Each department of the Company determined the significant risks of the Company after comprehensive rating upon prudent investigation and assessment. Corresponding preventive measures against significant risks were formulated by the Company under the regular monthly supervision by the responsible department. The Company summarized the monitoring of significant risk on a monthly, quarterly and annual basis, and reported to Chinalco the risk management statement.

The Company integrated comprehensive risk and internal control into operational management procedures in daily operations to achieve prevention beforehand and control on procedures, continuously improved various systems, strengthened the risk control on projects and enhanced risk prevention capability by various tasks including conducting due diligence and project evaluation. At the same time, risk events were monitored by the Company on monthly and quarterly basis respectively in order to supervise and manage the monitoring and control of the significant risks and the rectification of the deficiencies of internal control. The risk awareness of all relevant departments in our daily operations is raised, guaranteeing the smooth production and operation of the Company.



## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

Pursuant to the arrangement of assessments on internal control system by Chinalco, the Company conducts a total of 2 internal control assessments each year, in which the annual and interim internal control are assessed respectively. The department of legal affairs and risk control formed inspection teams to carry out independent reviews on internal control of member companies selected and required rectification measures to be made by individual member in need. In 2019, the Board has obtained the approval from the management in respect of the effectiveness of the risk management and internal control systems of the Company.

In order to review and continuously enhance the effectiveness of the internal control systems of the Company, in 2020, the Board and the Audit Committee have heard and discussed the 2019 internal control assessment report of the Company while the Board and the Risk Management Committee have heard and discussed the 2019 risk assessment and management report of the Company. Such internal control systems aim at managing, but not eliminating, risk related to failure of achieving business goals and the Board only provides reasonable but not absolute assurance on the absence of material misstatement or loss.

### III. COMPLIANCE WITH MAJOR LAWS AND REGULATIONS AND PROMOTING THE CONSTRUCTION OF CORPORATE LEGAL GOVERNANCE

#### (I) Company's Compliance with Major Laws and Regulations

The operation of the Group has always complied with the national and local laws and regulations. It upholds honesty and integrity, and performs its social responsibility. The Company and its staffs have exercised their best endeavors to strictly follow the applicable rules, laws and industry standards. The Directors are not aware of any breach of laws or regulations which have a significant impact on the Group, nor are they aware of any cases of corruption, bribery, extortion, fraud or money laundering involving the Group in 2019.

The Company continues to review its current systems and procedures, emphasizes and strives to comply with the Company Law of the People's Republic of China, the Contract Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Listing Rules of the SSE and of the Stock Exchange, the SFO, the applicable Hong Kong Companies Ordinance and other relevant laws and regulations which have a significant impact on the Company. The Company is committed to safeguard the interest of Shareholders, improve its corporate governance and enhance the functions of the Board.

The Group insists on reinforcing the risk control throughout the whole lifecycle and building of legal governance. It ensures a 100% legal review for contracts, regulatory systems and major decisions of its subsidiaries. It broadens legal knowledge throughout the Company and fosters all staff to build up the concept of acting by law and to develop a habit of doing business according to principles. The Company establishes a "legal culture" based on the core principles of decision-making, operating and managing according to law. Legal governance becomes the core concept of the Company and all staff follows voluntarily. The concept and means of legal governance are realized in every aspect of corporate governance, operation and management.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### (II) Promoting the Construction of Corporate Legal Governance

The Company implements the primary responsible person requirement of corporate legal governance, strengthens the review of legality and compliance of major decisions; as well as facilitates the scientific and standardized decisions of the Company. It also develops legality and compliance assessment and actively promotes the implementation of regulatory system in order to ensure each operation management part of the corporates is granted rules and a system basis to follow. The efficiency of business process across departments, professions and levels can thus be enhanced. It also reinforces legal support and capability to uphold its rights in accordance with the law and pursues legal risk management to avoid prosecution. The Company strengthens its case management and avoids increasing of cases and at the same time reducing the caseload, which would effectively reduce the Company-involved number of lawsuits. The Company focuses its risk management on major sectors by integrating audits and monitoring resources. It also strengthens management and control of major segments such as construction projects and does its utmost to prevent corruption risk.

## IV. SHAREHOLDERS' MEETING

Session of meeting	Convening date	Websites designated for disclosure of resolutions	Resolutions disclosing date (A Share/H Share)
The first extraordinary meeting of 2019	18 January 2019	www.sse.com.cn	19 January 2019
		www.hkexnews.hk	18 January 2019
The second extraordinary meeting of 2019	16 April 2019	www.sse.com.cn	17 April 2019
		www.hkexnews.hk	16 April 2019
2018 Annual General Meeting	18 June 2019	www.sse.com.cn	19 June 2019
		www.hkexnews.hk	18 June 2019
The third extraordinary meeting of 2019	11 November 2019	www.sse.com.cn	12 November 2019
		www.hkexnews.hk	11 November 2019
The fourth extraordinary meeting of 2019	30 December 2019	www.sse.com.cn	31 December 2019
		www.hkexnews.hk	30 December 2019

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### Particulars of the general meeting

Applicable     Not applicable

During the reporting period, the Company held five general meetings.

The first extraordinary general meeting of 2019 was held by the Company on 18 January 2019, at which five resolutions were considered and approved, including the resolution on alternation to registered capital and registration with the industry and commerce administration, resolution on revision to the Articles of Association, and resolution on providing security for a subsidiary.

The second extraordinary general meeting of 2019 was held by the Company on 16 April 2019, at which the resolution of the election of Mr. WU Jianqiang as the executive Director of the Board of the third session of the Company was considered and approved.

On 18 June 2019, the annual general meeting of 2018 was held by the Company, at which 13 resolutions, including the Directors' Report for 2018, the Supervisors' Report for 2018, the Report on Final Accounts for 2018 and the Profit Distribution Plan for 2018, were reviewed and passed.

The third extraordinary general meeting of 2019 was held by the Company on 11 November 2019, at which four resolutions were considered and approved, including the resolution on amending the Articles of Association of the Company, the resolution on amending the Rules of Procedure of the Shareholders' General Meeting, the resolution on amending the Rules of Procedure of the Board of Directors, and the resolution on issuing a letter of undertaking for making up the deficiency in equity investments in an expressway company.

The fourth extraordinary general meeting of 2019 was held by the Company on 30 December 2019, at which six resolutions were considered and approved, including the resolution on re-signing the related party transaction agreement and adjusting the cap on related party transactions, the resolution on preparing financial statements solely under the China Accounting Standards for Business Enterprises and the resolution on terminating the engagement of the international auditor.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### V. COMMUNICATIONS WITH SHAREHOLDERS

The Company chronically, highly and continuously maintains and develops relationship with its investors, delivers the information of the Company to public in a timely and efficient manner, enhances transparency of the information regarding the Company and builds an effective channel for it to maintain the relationship with investors.

#### (I) Shareholders' Rights

The Board is committed to maintaining communications with Shareholders and discloses significant development of the Company to Shareholders and investors when appropriate. The annual general meeting of the Company provides a good communication opportunity between Shareholders and the Board. In the event of convening a general meeting, a written notice, which specifies the meeting agenda and the date and venue of the meeting, should be sent to all Shareholders whose names appear on the share register 45 days prior to the convening of the meeting (convening date inclusive). Shareholders who intend to attend the general meeting should serve the reply in writing to the Company 20 days prior to convening the meeting for attending the meeting.

Two or more Shareholders individually or collectively holding more than ten percent (ten percent inclusive) of the outstanding Shares of the Company carrying voting rights may, by written requisition(s) stating the object of the meeting, require the Board to convene an extraordinary general meeting or a class Shareholders' meeting. The Board shall as soon as practicable within two months after the receipt of such written requisition(s) proceed to convene the extraordinary general meeting or class Shareholders' meeting. The shareholdings referred to above shall be calculated as at the date of the delivery of the written requisition(s).

Where the Board fails to issue notice of convening meeting within thirty days upon receipt of the above-written requisition(s) Shareholder(s) individually or collectively holding more than ten percent (ten percent inclusive) of the outstanding Shares of the Company carrying voting rights are entitled to request by written requisition(s) the Supervisory Board to convene the extraordinary general meeting or class Shareholders' meeting. The Supervisory Board may convene the meeting on their own accord within four months upon the Board having received such request. In case the Supervisory Board does not convene and hold meetings, Shareholder(s) individually or collectively holding more than ten percent of the Shares for 90 consecutive days may convene meetings on their own accord. The convening procedures shall as much as possible be equivalent to those of for meeting convened by the Board

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### (II) Enquires of and Communication with Shareholders

In order to maintain channels for effective communication, the Company publishes its address, e-mail address, phone number and fax number in detail on its website and in its regular reports. If any enquiry, the shareholders may contact the Company through the above channels, and the Company will respond to all enquiries on a timely and proper basis.

The Board welcomes Shareholders' views and encourages them to attend general meetings in order to propose any concerns they might have directly to the Board or the management. The chairman of the Board and the chairmen of all Committees usually attend the annual general meeting and other general meetings to address questions raised by the Shareholders.

Detailed procedures of voting and resolutions voted by way of poll have been set out in the circular previously dispatched to the Shareholders.

## VI. THE BOARD

### (I) Composition of the Board

As of 31 December 2019, the Board consisted of 9 directors, including 4 executive directors, 2 non-executive directors and 3 independent non-executive directors. The profile details of the Directors as at the date of this report are set out on pages 127 to 130 of this annual report. There are no financial, business, family or other material or relevant relationship among members of the Board. The structure of the Board is well balanced with each Director possessing sound knowledge, experience and expertise relevant to the business operation and development of the Group. All Directors are deeply aware of their joint and several liabilities to the Shareholders.

The Company has appointed adequate number of duly qualified independent non-executive Directors as per requirements of the CSRC, the SSE and the Listing Rules of the Stock Exchange. Since the Listing of the Company, the Board has been in compliance with the requirements of the Listing Rules of the Stock Exchange regarding the appointment of at least three independent non-executive Directors, and that the appointed independent non-executive Directors shall represent at least one-third of the members of the Board. The qualifications of the three independent non-executive Directors of the Company are in full compliance with the requirements under Rules 3.10(1) and (2) of the Listing Rules of the Stock Exchange. In addition, the Company has received annual confirmations from each independent non-executive Director as to their independence pursuant to Rule 3.13 of the Listing Rules of the Stock Exchange. The Company, therefore, considered all independent non-executive Directors to be in compliance with the independence requirements as set out in the Listing Rules of the Stock Exchange.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

As of 31 December 2019, the list of members of the Company's Board of Directors is as follows:

<b>Name</b>	<b>Post in the Company</b>	<b>Date of Appointment</b>
<b>Directors</b>		
HE Zhihui <sup>(1)</sup>	Chairman and executive Director	23 May 2017
WU Jianqiang <sup>(1)</sup>	Chairman and executive Director	16 April 2019
WANG Jun	Non-executive Director	23 May 2017
LI Yihua	Non-executive Director	23 May 2017
ZONG Xiaoping	Executive Director	23 May 2017
WU Zhigang	Executive Director	23 May 2017
ZHANG Jian	Executive Director	9 June 2015
GUI Weihua	Independent non-executive Director	27 February 2018
CHEUNG Hung Kwong	Independent non-executive Director	23 May 2017
FU Jun	Independent non-executive Director	23 May 2017

Note:

- (1) Mr. He Zhihui resigned as Chairman, executive Director, as well as member and chairman of Risk Management Committee, Nomination Committee and Strategy Committee of the Company on 21 February 2019 due to role redeployment. After his resignation, Mr. He Zhihui no longer holds any post in the Company. Mr. Wu Jianqiang was appointed executive Director and Chairman of the Company on 16 April 2019.

Pursuant to the latest amendments and requirement of the Corporate Governance Code and the Corporate Governance Report in the Listing Rules of the Stock Exchange, the Company prepared the Board Diversification Policy of China Aluminum International Engineering Corporation Limited (《中鋁國際工程股份有限公司董事會成員多元化政策》) and submitted the same to the Nomination Committee for consideration and approval.

### (II) Functions and Powers Exercised by the Board and the Management

The rights and duties of the Board and the management have been clearly provided in the Articles of Association, which aims to ensure adequate check and balance mechanism for good corporate governance and internal control.

The Board is responsible for deciding the Company's business and investment plans as well as the establishment of the Company's internal management structure, formulating the Company's basic management system, determining other material business and administrative matters of the Company and monitoring the performance of the management.

Under the leadership of the president (who is also an executive Director), the management of the Company is responsible for implementing the resolutions approved by the Board and administering the daily operation and management of the Company.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### (III) Appointment and Re-election of Directors

Pursuant to the Articles of Association, Directors shall be elected at general meetings with a term of office of no more than three years for each session and may offer themselves for re-election. The Company has implemented a set of effective procedures for the appointment of new Directors. Nomination of new Directors shall be first considered by the Nomination Committee, whose recommendations will then be given to the Board for consideration. All candidates are subject to election and approval at general meetings.

The Company has entered into service contracts with each of the Directors (including non-executive Directors). Such service contracts are for a term of three years.

### (IV) Corporate Governance Functions

The Company's corporate governance function is performed by the Board. The corporate governance function is to develop and review the Company's policies and practices on corporate governance in order to comply with Corporate Governance Code and other legal or regulatory requirements, and make recommendations to the Board; to oversee the induction program for new Directors; to review and oversee the training and continuous professional development for the Directors and senior management; to develop, review and oversee the code of conduct and compliance manual (if any) applicable to employees and the Directors; and to review the Company's disclosure in the Corporate Governance Report.

### (V) Board Diversification Policy

Believing the diversification of the composition of the Board would be helpful in enhancing the Company's performance, the Company formulated the Board Diversification Policy of China Aluminum International Engineering Corporation Limited in August 2013, which stipulates that the diversification of the composition of the Board takes account of a variety of aspects when determining the composition of the Board, including but not limited to age, cultural and educational background, professional experience, skill and knowledge. The Board made all the appointments based on talents and had considered the benefits, which would be brought about by diversifying the composition of the Board under the objective conditions, when selecting the candidates. The Board will select its members based on an array of diversification standards, including but not limited to age, cultural and educational background, professional experience, skill and knowledge.

The Nomination Committee will disclose the composition of the Board in the Corporate Governance Report on an annual basis and will oversee the enforcement of the Policy. The Nomination Committee will review the policy when appropriate to ensure its effectiveness. It will also discuss and propose any necessary revisions to the Board for consideration and approval.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### VII. DUTY PERFORMANCE OF DIRECTORS

#### (I) Directors attendance at the Board meeting and the general meeting

Director's name	Independent director or not	Number of required attendances at the Board meeting of the year	Attendance at the Board meeting				Failing to attend the meeting in person for two consecutive times or not		Attendance at the general meeting
			Number of attendance in person	Number of attendances by communication means	Number of attendances by proxy	Number of absences	Number of attendances at the general meeting		
HE Zhihui <sup>(1)</sup>	No	N/A	N/A	N/A	N/A	N/A	N/A	1	
WU Jianqiang <sup>(1)</sup>	No	9	9	7	0	0	No	3	
ZONG Xiaoping	No	12	12	9	0	0	No	5	
WU Zhigang	No	12	10	9	2	0	No	4	
ZHANG Jian	No	12	12	9	0	0	No	5	
WANG Jun	No	12	10	9	2	0	No	0	
LI Yihua	No	12	11	9	1	0	No	1	
GUI Weihua	No	12	11	9	0	0	No	2	
CHEUNG Hung Kwong	No	12	11	9	1	0	No	4	
FU Jun	No	12	11	9	1	0	No	2	

Note:

Due to work redeployment, Mr. HE Zhihui resigned as the chairman and executive Director of the Company on 21 February 2019, and the Company did not hold any Board meeting while he was in office. Mr. WU Jianqiang was appointed as the chairman and executive Director of the Company on 16 April 2019.

Explanation of failure to attend the Board meeting for two consecutive times

Applicable       Not applicable

Number of Board meetings held during the year	12
Including: number of onsite meetings	3
Number of meetings through communication means	9
Number of meetings both onsite and through communication means	0

#### (II) Independent Directors' objections to relevant matters

Applicable       Not applicable



## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### (III) Other information

Applicable     Not applicable

#### 1. Directors' Training

During 2019, all Directors participated in continuous professional development to develop and refresh their knowledge and expertise so as to ensure their continuous contribution to the Board when informed and necessary. The details of training for all Directors are as follows:

Name	Position	Training time	Training content
HE Zhihui <sup>(1)</sup>	Chairman and executive Director	2 hours	including compliance of listed company and corporate governance
WU Jianqiang <sup>(1)</sup>	Chairman and executive Director	14 hours	including compliance of listed company and corporate governance
WANG Jun	Executive Director	7 hours	including compliance of listed company and corporate governance
LI Yihua	Non-executive Director	7 hours	including compliance of listed company and corporate governance
ZONG Xiaoping	Executive Director	14 hours	including compliance of listed company and corporate governance
WU Zhigang	Executive Director	7 hours	including compliance of listed company and corporate governance
ZHANG Jian	Executive Director	23.5 hours	including compliance of listed company and corporate governance
GUI Weihua	Independent non-executive Director	7 hours	including compliance of listed company and corporate governance
CHEUNG Hung Kwong	Independent non-executive Director	7 hours	including compliance of listed company and corporate governance
FU Jun	Independent non-executive Director	7 hours	including compliance of listed company and corporate governance

Note:

Due to work redeployment, Mr. HE Zhihui resigned as the chairman and executive Director of the Company on 21 February 2019. Mr. WU Jianqiang was appointed as the chairman and executive Director of the Company on 16 April 2019.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### 2. Independence of the independent non-executive Directors

Each of the independent non-executive Directors has met the requirement on independence guidelines set out in Rule 3.13 of the Listing Rules of the Stock Exchange and has provided to the Company the requisite annual confirmation as to his independence. None of the independent non-executive Directors of the Company has any business with or significant financial interests in the Company or its subsidiaries, and accordingly the Company considered that all the independent non-executive Directors continue to be independent.

## VIII. CHAIRMAN AND PRESIDENT

Since Mr. HE Zhihui has resigned his duties including being the chairman and Director of the Company, a majority of the Directors of the Company jointly recommended Mr. Zong Xiaoping, the executive director and president, to take his place as the chairman during the period from the resignation of Mr. He Zhihui on 21 February 2019 to the appointment of Mr. WU Jianqiang as the chairman on 16 April 2019. According to the code provision A.2.1 set out in the Corporate Governance Codes contained in Appendix 14 to the Listing Rules of the Stock Exchange, the roles of the chairman and chief executive officer should be separated and should not be performed by the same individual. The Company will ensure sound corporate governance practice during Mr. Zong Xiaoping's tenure of both positions. The Board is of the view that the balance of power and authority was affected as for the arrangement, and this structure enabled the Company to make and implement decisions more promptly and effectively. After the appointment of Mr. WU Jianqiang as the chairman of the Company, the duties between the chairman and the president was separated.

The roles of chairman and president (i.e. chief executive officer under relevant provisions of the Listing Rules of the Stock Exchange) of the Company are now performed by two different persons respectively to ensure their independence and accountability and the balance of power and authorization. The chairman is Mr. WU Jianqiang and the president is Mr. ZONG Xiaoping. The Articles of Association defines the division of responsibilities between the chairman and the president.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### IX. DISCLOSURE OF IMPORTANT OPINIONS AND RECOMMENDATIONS AND DETAILS ON OBJECTIONS (IF ANY) FROM THE SPECIAL COMMITTEES UNDER THE BOARD DURING THE REPORTING PERIOD

Applicable      Not applicable

There are 5 special committees under the Board, namely the Audit Committee, Remuneration Committee, Nomination Committee, Risk Management Committee and Strategy Committee, which carefully review and consider professional proposals and give play to professional functions of the Board.

#### (I) Audit Committee

The Audit Committee consists of three Directors, namely: Mr. CHEUNG Hung Kwong (independent non-executive Director), Mr. WANG Jun and Mr. FU Jun (independent non-executive Director). Mr. CHEUNG Hung Kwong serves as the chairman.

Audit Committee is given the function of corporate governance of the Company. The main duties of Audit Committee include: to direct the construction of internal corporate control mechanism, and to examine and assess the compliance and effectiveness of significant operation activities of the Company; to make recommendations to the Board in respect of engaging or replacement of intermediaries such as accounting firms as well as their remuneration; to review the Company's financial information and its disclosure, to review the significant financial system of the Company and its implementation, to oversee the financial operations position, to oversee the truthfulness of the financial reports and the effectiveness of the implementation of financial reporting procedures by the management, and to make suggestions to the Board; to make recommendations to the Board in respect of appointment or removal of person-in-charge of its internal audit department; to supervise the formulation and implementation of its internal auditing system; to assess and supervise the completeness of the corporate auditing system and the effectiveness of its operations; to supervise the independence and objectivity of external audit firm, auditing procedures and work, and to maintain good communications with the Supervisory Board as well as internal and external audit firms, to review external audit report; to review, supervise and reflect on the Company's financial controls, internal control and risk management systems, and to provide advice and recommendations in respect of the completeness and comprehensiveness of the Company's internal control systems and the risk management systems; to review the self-evaluation reports on internal control; to review concern required by the Company and raised by the employees in respect of the misconduct during financial reporting; and to supervise the rectification and improvement of material issues. The Audit Committee exercises its authority pursuant to the requirements under Rule D.3.1 of the Corporate Governance Code.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

During the reporting period, the Audit Committee convened five meetings in total, which has reviewed and considered 23 resolutions, particulars of which are as follows:

The ninth meeting of the Audit Committee of the third session of the Board was held on 27 March 2019, at which the resolution on the Announcement of Annual Results and the Annual Report of the Company for 2018 (《關於審議公司2018年度業績公告和年度報告的議案》), the resolution on the Report on Final Accounts of the Company for 2018 (《關於審議公司2018年度財務決算報告的議案》); the resolution on the Report on Operating Plan of the Company for 2019 (《關於審議公司2019年度經營計劃報告的議案》), the resolution on Profit Distribution and Dividend Distribution Plan of the Company for 2018 (《關於審議公司2018年度利潤分配及股息派發方案的議案》), the resolution on Evaluation Report on Internal Control of the Company for 2018 (《關於審議公司2018年內部控制評價報告的議案》), the resolution on Audit Report on Internal Control of the Company for 2018 (《關於審議公司2018年內部控制審計報告的議案》), the resolution on adjusting the cap on factoring service transactions (《關於調整保理服務交易上限的議案》) and the resolution on internal entrusted loans of the Company for 2019 (《關於審議2019年度公司內部委托貸款的議案》) were considered and adopted.

The tenth meeting of the Audit Committee of the third session of the Board was held on 28 April 2019, at which the Resolution on the Re-appointment of the International Auditor and the Domestic Auditor (《關於續聘國際核數師和國內審計師的議案》) and the Resolution on the First Quarter Report of the Company of 2019 (《關於審議公司2019年第一季度報告的議案》) were considered and adopted.

The eleventh meeting of the Audit Committee of the Board of the third session was held on 20 August 2019, at which the resolution on the Interim Report of the Company for 2019 (《關於審議公司2019年半年度報告的議案》), the resolution on the Semi-annual Special Report on the Deposit and Actual Use of Proceeds from Fund Raising for 2019 (《關於審議公司2019年半年度募集資金存放與實際使用情況的專項報告的議案》), the resolution on Revising the Rules of Procedures of the Audit Committee (《關於修訂審核委員會議事規則的議案》) and the resolution on review expenses for 2019 Interim Report of the Company (《關於審議公司2019年半年度報告審閱費用的議案》) were considered and adopted.

The twelfth meeting of the Audit Committee of the third session of the Board was held on 29 October 2019, at which the resolution on the Third Quarter Report of the Company for 2019 (《公司2019年第三季度報告的議案》), the resolution on the establishment of Chinalco Environmental Protection and Energy Saving Technology (Hunan) Co., Ltd. jointly by Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy and Chinalco Environmental Protection and Energy Saving Group Co., Ltd. (《關於長沙有色冶金設計研究院有限公司與中鋁環保節能集團有限公司合資成立中鋁環保節能科技(湖南)有限公司的議案》), the resolution on re-signing the General Agreement of General Services and adjusting the cap of relevant related party transactions (《關於重新簽署<綜合服務總協議>並調整相關關聯交易上限的議案》), the resolution on re-signing the General Agreement of Commodity Purchase and Sales and adjusting the cap of relevant related party transactions (《關於重新簽署<商品買賣總協議>並調整相關關聯交易上限的議案》), the resolution on re-signing the Engineering Service General Agreement and adjusting the cap of relevant related party transactions (《關於重新簽署<工程服務總協議>並調整相關關聯交易上限的議案》), the resolution on entering into the Framework Cooperative Agreement with China Aluminum Finance Lease Co., Ltd. and determining the cap of relevant related party transactions (《關於與中鋁融資租賃有限公司簽署<框架合作協議>並確定相關關聯交易上限的議案》), the resolution on the grant of entrusted loan by China Nonferrous Metals Processing Technology Co., Ltd. to Luoyang Foyang Decoration Engineering Co., Ltd. (《關於中色科技股份有限公司向洛陽佛陽裝飾工程有限公司提供委托貸款的議案》) were considered and adopted.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

The thirteenth meeting of the Audit Committee of the third session of the Board was held on 26 November 2019, at which the resolution on preparing financial statements solely under the China Accounting Standards for Business Enterprises (《關於統一根據中國企業會計準則編製財務報表的議案》) and the resolution on terminating the engagement of the international auditor (《關於終止聘任國際核數師的議案》) were considered and adopted.

The attendance of the meetings is as follows:

Name	Position	Number of Meetings Attended/Held	Attendance
CHEUNG Hung Kwong	Chairman of the Audit Committee	5/5	100%
WANG Jun	Member of the Audit Committee	5/5	100%
FU Jun	Member of the Audit Committee	5/5	100%

### (II) Remuneration Committee

The Remuneration Committee consists of three Directors, namely: Mr. GUI Weihua (independent non-executive Director), Mr. WANG Jun and Mr. FU Jun (independent non-executive Director). Mr. GUI Weihua serves as the chairman.

The Company has adopted the model, in which the Remuneration Committee makes recommendation to the Board in order to determine the remuneration packages of executive Directors and senior management.

The main duties of the Remuneration Committee include: to make recommendations to the Board on the overall remuneration policy and structure of the Directors and the senior management of the Company and on the establishment of a formal and transparent procedure for developing such remuneration policies; to make recommendations to the Board in respect of the specific remuneration packages of all executive Directors and the senior management, including benefits in kind, pension rights and compensation payments (including compensation payable for loss or termination of office or appointment), and make recommendations to the Board in respect of the remuneration of non-executive Directors; to assess the performance of the executive Directors, approve the terms in the service contract with the executive Directors and to review and approve performance-based remuneration with reference to corporate objectives as approved by the Board from time to time; to review and approve the compensation payable to executive Directors and the senior management in connection with any loss or termination of office or appointment to ensure that such compensation is determined in accordance with relevant contractual terms and that such compensation is otherwise fair and reasonable and not excessive for the listed company; to review and approve compensation arrangements relating to dismissal or removal of Directors for misconduct to ensure

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

that such arrangements are determined in accordance with relevant contractual terms and that such compensation payment is otherwise reasonable and appropriate; to ensure that no Director or any of his/her Associates is involved in determining his/her own remuneration.

During the reporting period, the Remuneration Committee of the third session of the Board convened 1 meeting, at which 2 resolutions were reviewed and considered. The second meeting of the Remuneration Committee of the third session of the Board was convened on 30 May 2019 in Beijing, at which the resolution on the remuneration of the Directors for 2019 of the Company (《關於審議公司2019年度董事薪酬的議案》) and the resolution on the remuneration of the senior management for 2019 of the Company (《關於審議公司2019年度高級管理人員薪酬的議案》) were considered and passed.

The attendance of the meeting is as follows:

Name	Position	Number of Meetings	
		Attended/Held	Attendance
GUI Weihua	Chairman of the Remuneration Committee	1/1	100%
WANG Jun	Member of the Remuneration Committee	1/1	100%
FU Jun	Member of the Remuneration Committee	1/1	100%

### (III) Nomination Committee

The Nomination Committee consists of three Directors, namely: Mr. WU Jianqiang, Mr. GUI Weihua (independent non-executive Director) and Mr. FU Jun (independent non-executive Director). Mr. FU Jun serves as the chairman.

The main duties of the Nomination Committee include: to review the structure, size and composition (including the skills, knowledge and experience) of the Board on a regular basis and make recommendation to the Board regarding any proposed changes in order to promote the corporate strategy of the Issuer; to widely search for and identify individuals who are suitable to become a member of the Board and the president of the Company (may extend to the senior management of the Company, where necessary, the same below), to examine and make recommendations to the Board on the election of individuals nominated for Directors and the president; to assess the independence of the independent non-executive Directors; to examine the selection criteria and procedure for the Directors and the president and make recommendations in this regard; to make recommendations to the Board on matters relating to the appointment or reappointment of Directors or the president and succession plans for Directors (including the chairman) or the president; to seek independent professional advice, if necessary, in order to perform its duties.

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In accordance with the requirements of relevant laws and regulations and the Articles of Association, the Nomination Committee shall examine the selection criteria and procedures and the terms of office for the proposed Directors with reference to the Company's actual condition. Any resolution made in this regard shall be filed and submitted to the Board for consideration, approval and implementation. Detailed procedures are as follows: the Committee shall communicate with the relevant departments of the Company to examine the Company's demand for new Directors and to prepare the written proposal; carry out an extensive search for candidates of Directors within the Company, its holding company or other companies; seek consents from proposed candidates for the nomination, otherwise he/she shall not be put on the list of candidates of Directors; upon consideration and approval at the general meeting or Board meeting, carry out other work in relation to holding office in accordance with the resolutions of the general meeting or Board meeting.

The Nomination Committee considered that the composition of members of the Board during the reporting period was in compliance with the requirement of the "Board Diversification Policy".

During the reporting period, the Nomination Committee of the third session of the Board convened 2 meetings, at which 3 resolutions have been reviewed and considered. The third meeting of the Nomination Committee of the third session of the Board was convened on 21 February 2019, at which the resolution on the nomination of Mr. WU Jianqiang as a candidate for executive Director of the Company (《關於提名武建強為公司執行董事候選人的議案》) was considered and approved. The fourth meeting was held on 21 August 2019, at which the Resolution on Revising the Rules of Procedure of the Nomination Committee of the Board of Directors of China Aluminum International Engineering Corporation Limited (《關於修訂中鋁國際工程股份有限公司董事會提名委員會議事規則的議案》) and the Resolution on Nominating Mr. FU Jun as the Chairman of the Nomination Committee of the Board of Directors of the Third Session of the Company (《關於提名伏軍先生為公司第三屆董事會提名委員會主席人選的議案》) were considered and passed.

The attendance of the meeting is as follows:

Name	Position	Number of Meetings	
		Attended/Held	Attendance
HE Zhihui <sup>(1)</sup>	Former chairman of the Nomination Committee	0	–
WU Jianqiang <sup>(2)</sup>	Member of the Nomination Committee	1/1	100%
GUI Weihua	Member of the Nomination Committee	2/2	100%
FU Jun <sup>(2)</sup>	Chairman of the Nomination Committee	2/2	100%



## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

Notes:

- (1) Due to other work arrangements, Mr. HE Zhihui has resigned as the chairman of the Board, executive Director, the member and chairman of each of the Risk Management Committee, the Nomination Committee and the Strategy Committee of the Board of the third session on 21 February 2019. Mr. HE Zhihui has not held any post in the Company since his resignation.
- (2) On 16 April 2019, Mr. WU Jianqiang was appointed the chairman of the Company, and the member and the chairman of each of the Risk Management Committee, the Nomination Committee and the Strategy Committee, and his tenure will last till expiration of the term of the Board of this session.

On 22 August 2019, the twenty-fifth meeting of the Board of the third session of the Company reviewed and adopted the resolution on adjusting the chairman of the Nomination Committee of the Board of the third session, pursuant to Rules of Procedures of Nomination Committee. Mr. WU Jianqiang did not hold the office of the chairman of the Nomination Committee any more and the Board appointed Mr. FU Jun as the chairman of the Nomination Committee till expiration of the term of the Board of the third session of the Company.

### (IV) Risk Management Committee

The Risk Management Committee consists of three Directors, namely: Mr. WU Jianqiang, Mr. LI Yihua and Mr. FU Jun (independent non-executive Director). Mr. WU Jianqiang serves as the chairman.

The main duties of Risk Management Committee include: to consider judgment standard or mechanism for material business decisions, material risks, events and business processes and the risk assessment report of major decisions; to supervise, assess and inspect the completeness and operating effectiveness of the Company's internal risk management system and report the same to the Board; to examine, approve or verify the matters related to investment, financing and external transactions contracts submitted by the president pursuant to the authority granted by the Board; to handle other matters entrusted by the Board.

During the reporting period, the Risk Management Committee of the third session of the Board convened 1 meeting and has reviewed and considered 2 resolutions, details of which are as follows:

The second meeting of the Risk Management Committee of the Board of the third session was held on 28 March 2019, details of which are as follows: to consider and approve the resolution on the compliance with the OFAC undertakings in 2018 (《關於2018年度公司遵守OFAC承諾的議案》) and the resolution on the overall risk management of the Company for 2019 (《關於審議公司2019年全面風險管理工作的議案》).



## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

The attendance of the meetings is as follows:

Name	Position	Number of Meetings Attended/held	Attendance
HE Zhihui <sup>(1)</sup>	Former chairman of the Risk Management Committee	0	–
WU Jianqiang <sup>(1)</sup>	Chairman of the Risk Management Committee	0	–
LI Yihua	Member of the Risk Management Committee	1/1	100%
FU Jun	Member of the Risk Management Committee	1/1	100%

Note:

- (1) Due to work redeployment, Mr. HE Zhihui has resigned as the chairman of the Board, executive Director, the member and chairman of each of the Risk Management Committee, the Nomination Committee and the Strategy Committee of the Board on 21 February 2019. Mr. WU Jianqiang was appointed the chairman of the Board, executive Director, the member and chairman of each of the Risk Management Committee, the Nomination Committee and the Strategy Committee of the Board on 16 April 2019.

### (V) Strategy Committee

The Strategy Committee consists of three Directors, namely Mr. WU Jianqiang (1), Mr. ZONG Xiaoping and Mr. GUI Weihua (independent non-executive Director). Mr. WU Jianqiang serves as the former chairman.

The main duties of Strategy Committee include: to conduct research and provide advice on the Company's development strategy and medium – and long-term development plan, and to assess and monitor their implementation; to conduct research and provide advice on the plan of increasing or decreasing registered capital, issuance of bonds, merger, separation, dissolution of the Company; to conduct research and provide advice for the Company on the acquisition, merger, disposal of assets of which required review of the Board; to conduct research and provide advice for the Company on the expansion of new market and new business; to conduct research and provide advice for the Company on the problems such as investment and financing, asset operation and capital operation of which required review of the Board; to conduct research and provide advice for the Company on major restructuring and adjustment plan; to conduct examination and assessment for the implementation of the above-mentioned matters and provide written opinions on the results of examination and assessment; to guide and supervise the Board in respect of the execution of the relevant resolutions; and other duties delegated by the Board.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

During the reporting period, the Strategy Committee of the Board of the third session convened one meeting, at which 2 resolutions were considered with details as follows:

On 27 March 2019, the first meeting of the Strategy Committee of the Board of the third session was convened, at which:

The resolution on requesting the general meeting to grant the Board the general mandate to issue shares (《關於提請股東大會授予董事會發行股份一般性授權的議案》), and the resolution on general mandate in respect of issuance of domestic and overseas debt financing instruments of the Company (《關於公司發行境內外債務融資工具一般性授權的議案》) were considered and adopted.

The attendance of the meeting is set out below:

Name	Position	Number of Meetings Attended/held	Attendance
HE Zhihui <sup>(1)</sup>	Former chairman of the Strategy Committee	0	–
WU Jianqiang <sup>(1)</sup>	Chairman of the Strategy Committee	0	–
ZONG Xiaoping	Member of the Strategy Committee	1/1	100%
GUI Weihua	Member of the Strategy Committee	1/1	100%

Note:

- (1) Due to work redeployment, Mr. HE Zhihui has resigned as the chairman of the Board, executive Director, the member and chairman of each of the Risk Management Committee, the Nomination Committee and the Strategy Committee of the Board on 21 February 2019. Mr. WU Jianqiang was appointed the chairman of the Board, executive Director, the member and chairman of each of the Risk Management Committee, the Nomination Committee and the Strategy Committee of the Board on 16 April 2019.

## X. EXPLANATION OF RISKS IDENTIFIED BY THE BOARD OF SUPERVISORS

Applicable       Not applicable

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### XI. EXPLANATION OF CIRCUMSTANCES WHERE THE COMPANY CANNOT MAINTAIN THE ABILITY TO OPERATE INDEPENDENTLY AND MAINTAIN INDEPENDENCE FROM ITS CONTROLLING SHAREHOLDER IN TERMS OF BUSINESS, PERSONNEL, ASSETS, ORGANIZATIONAL STRUCTURE AND FINANCE

Applicable      Not applicable

In case of competition with its controlling shareholder, the Company should have countermeasures, work progress and subsequent work plan.

Applicable      Not applicable

The Company entered into a non-competition agreement with Chinalco on 2 June 2012, pursuant to which, Chinalco provided certain non-competition undertakings to the Company and granted the options to seek any new business opportunities and options for acquisition and the relevant pre-emptive rights to the Company. Pursuant to the agreement, the independent non-executive Directors are responsible for reviewing and considering whether or not to exercise such options and pre-emptive rights and are entitled, on behalf of the Company, to review the implementation of the undertakings under the agreement on an annual basis.

In June 2016, Chinalco submitted the commitment letter in relation to competitions and has committed, as required by Chalieceo, that the businesses of Henan Huahui Nonferrous Engineering Design Co., Ltd. and Kunkan Institute which are related to Chalieceo would be transferred or entrusted to Chalieceo or non-related third parties by ways of equity transfer, entrusted management or other appropriate methods within five years from the date of the signing of the commitment letter.

In September 2017, the commitment letter submitted by Chinalco mainly contains: (1) Henan Huahui Nonferrous Engineering Design Co., Ltd., CHALCO Shanxi Industry Service Co., Ltd., Henan Zhongzhou Aluminum Construction Co., Ltd., Yuxi Feiya Mining Industry Development Management Co., Ltd. and Shanxi Aluminum Plant Design Institute Co., Ltd. (the Five Companies) will complete its business which coincides with the engineering survey, consultancy, design, construction, engineering contracting and relevant equipment manufacturing business engaged by Chalieceo and/or its subsidiaries with customers which are third parties outside the organization of Chinalco as soon as possible. From the date of the submission of this commitment letter, the Five Companies will no longer launch new business in respect of the aforementioned aspects with third parties outside the organization of Chinalco, and only provide related services to companies within the organization of Chinalco. (2) The Five Companies will no longer upgrade its existing qualifications related to business which coincides with the engineering survey, consultancy, design, construction, engineering contracting and relevant equipment manufacturing business engaged by Chalieceo and/or its subsidiaries. (3) Chinalco will be in strict compliance with the Noncompetition Agreement signed by Aluminum Corporation of China and China Aluminum International Engineering Corporation Limited". (4) If in breach of the aforesaid commitments occurs, Chinalco would accept full responsibility incurred thereunder, and would thereby fully indemnify or compensate all the direct or

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

indirect loss incurred to Chalieco and other Shareholders of Chalieco. If the Five Companies breaches this commitment by executing new business contracts which coincide with the engineering survey, consultancy, design, construction, engineering contracting and relevant equipment manufacturing business engaged by Chalieco and/or its subsidiaries with third parties outside the organization of Chinalco, Chalieco would be entitled, from the date of such business contracts become effective, to reduce the amount equal to the amount of such business contracts from unpaid but payable profit distribution in cash corresponding to Shares of Chalieco held by the Company until the elimination of the event of breach of this commitment.

During the reporting period, the independent non-executive Directors had reviewed the implementation of the non-competition agreement and confirmed that Chinalco had been in full compliance with the agreement and there was no breach by Chinalco. During the reporting period, there is no breach of the aforesaid agreement or commitment by Chinalco.

### XII. ESTABLISHMENT AND EXECUTION OF ASSESSMENT MECHANISM AND INCENTIVE MECHANISM FOR SENIOR MANAGEMENT DURING THE REPORTING PERIOD

Applicable    Not applicable

Based on the market level and the Company's remuneration strategy, the Company's human resources department put forward the compensation package for senior management, subject to the approval of the Remuneration Committee of the Board and then to the approval of the Board. The human resources department finalized KPI and remuneration of senior management based on the Company's operating performance and the performance of senior management for the year.

### XIII. WHETHER THE SELF-ASSESSMENT REPORT ON INTERNAL CONTROL IS DISCLOSED

Applicable    Not applicable

The fifteenth meeting of the Board of Supervisors of the third session and the thirtieth meeting of the Board of Directors of the third session of the Company held on 30 March 2020 considered and adopted the 2019 Assessment Report on Internal Control of China Aluminum International Engineering Corporation Limited. For details, refer to the 2019 Assessment Report on Internal Control of China Aluminum International Engineering Corporation Limited disclosed on SSE website ([www.sse.com.cn](http://www.sse.com.cn)) on the same day as this Annual Report.

Explanation of material defects with internal control during the reporting period

Applicable    Not applicable

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### XIV. PARTICULARS OF INTERNAL CONTROL AUDIT REPORT

Applicable      Not applicable

The fourteenth meeting of Audit Committee of the Board of the third session held on 28 March 2020 and the thirtieth meeting of the Board of Directors of the third session of the Company held on 30 March 2020 considered and adopted the 2019 Audit Report on Internal Control of China Aluminum International Engineering Corporation Limited, pursuant to which our auditor WUYIGE Certified Public Accountants LLP confirmed that the Company has maintained effective internal control over financial reporting in all material aspects. For details, refer to the 2019 Audit Report on Internal Control of China Aluminum International Engineering Corporation Limited disclosed on SSE (www.sse.com.cn) on the same day as this Annual Report.

Whether the internal control audit report is disclosed: yes

### XV. OTHER INFORMATION

Applicable      Not applicable

#### (I) Compliance With The Code For Securities Transactions

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules of the Stock Exchange as the code of conduct for dealings in the securities of the Company by all of our Directors and Supervisors. Having made specific enquiries with the Directors and Supervisors, all Directors and Supervisors have confirmed that they have strictly complied with the standards stipulated 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 operation 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 safeguard Shareholders' interests.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### (II) Investor Relations

#### 1. Investor relations activities

On 18 July 2019, the Company participated in the event of “2019 Collective Reception Day for Investors of SSE Listed Companies in Beijing” jointly organized by Beijing Association of Listed Companies and SSE Information and Network Co., Ltd. to communicate with investors online on issues of concern to investors such as corporate governance, development strategy, operating status and sustainable development. In addition, the Company responded to questions raised by investors in a timely manner through SSE’ e-Hudong platform, investor hotline, dedicated email and other means and had sufficient communication with investors.

#### 2 Information disclosure

The Company issued more than 400 announcements on the websites of the stock exchange and SSE

### (III) Revision to the Articles of Association During the Reporting Period

In 2019, the Company revised relevant provisions of the Articles of Association in accordance with the Company Law of the People’s Republic of China (Revised in 2018), the Guidelines for the Articles of Association of Listed Companies (Revised in April 2019) and other relevant laws and regulations to further standardize corporate governance.

In December 2018, due to changes in its shares and relevant requirements for industrial and commercial registration, the Company decided to change its registered capital and revise relevant provisions of the Articles of Association as appropriate. The relevant resolution was adopted at the first extraordinary general meeting held on 18 January 2019, and the revision to the Articles of Association came into force on 18 January 2019.

In August 2019, as per requirement of PRC laws and regulations and in connection with its specific conditions, the Company decided to revise some provisions of the Articles of Association. The relevant resolution was adopted at the third extraordinary general meeting held on 11 November 2019, and the revision to the Articles of Association came into force on 11 November 2019.

Details of revisions to the Articles of Association and the full text of the Articles of Association have been published on the website of the SSE, the Stock Exchange and the Company.

## SECTION 10 CORPORATE GOVERNANCE (CORPORATE GOVERNANCE REPORT)

### **(IV) Auditor's Remuneration**

For details on auditor's remuneration, see "VI. Information on Appointment and Removal of Auditor" under Section 6 "Important Matters".

### **(V) Company Secretary**

Due to his own career development requirement, Mr. ZHAI Feng resigned as the company secretary on 12 April 2019. The Company appointed Mr. ZHANG Jian as our joint company secretary and engaged Ms. WU Jiawen as the external joint Company Secretary on 12 April 2019. The main internal contact of the Company is Mr. ZHANG Jian.

Mr. ZHANG Jian and Ms. WU Jiawen, the company secretaries of the Company, received relevant trainings in 2019, which is in accordance with the requirements set out in Rule 3.29 of the Listing Rules of the Stock Exchange.

### **(VI) Directors Responsibility for the Financial Statements**

The Board acknowledged its responsibility for preparing the financial statements of the Group for the year ended 31 December 2019. The Board is responsible for presenting a clear and understandable assessment of annual and interim reports, price-sensitive information and other disclosures as required under the Listing Rules of the Stock Exchange and other regulatory requirements. The management has provided the Board with such necessary explanation and information to enable the Board to make an informed assessment of the financial information and position of the Group for the consideration and approval by the Board.

There are no material uncertainties relating to events or conditions that may cast significant doubt on the Company's ability to operate as a going concern.

In addition, appropriate insurance coverage has been arranged by the Company against possible legal proceedings and liabilities to be taken against the Directors.

### **(VII) Dividend policy of the Company**

For details, see "I. Proposal for Profit Distribution to Ordinary Shareholders or for Converting Capital Reserve into Share Capital" Under "Section 6 Important Matters" in this report.

## SECTION 11 INFORMATION ON CORPORATE BONDS

Applicable Not applicable

### I. BASIC INFORMATION ON BONDS OF THE COMPANY

In order to improve its debt duration structure and optimize its capital structure, the Company issued the following corporate bonds. All bonds of the Company are offered publicly and traded on stock exchange, with details as follows:

Unit: Yuan Currency: RMB

Bond name	Abbreviation	Code	Issued on date	Maturing date	Outstanding balance	Interest rate (%)	Repayment terms	Trading place
2017 Renewable Corporate Bonds (Tranche 1)	17 Zhong Gong Y1	136974	13 Mar 2017	This tranche of bonds have a basic term of 3 years, within each three years as an interest calculation period, at the end of which the issuer has the option to either extend the bonds for another term (i.e. 3 years) or fully redeem the bonds.	500,000,000	6.00	Interest paid once year if the issuer does not exercise the option of deferred interest payment	SSE
2019 Renewable Corporate Bonds (Tranche 1)	19 Zhong Gong Y1	155867	30 Oct 2019	This tranche of bonds have a basic term of 3 years, within each three years as an interest calculation period, at the end of which the issuer has the option to either extend the bonds for another term (i.e. 3 years) or fully redeem the bonds.	1,500,000,000	5.29	Interest paid once year if the issuer does not exercise the option of deferred interest payment	SSE

#### Information on payment of principal of and interest on bonds of the Company

Applicable Not applicable

The Company issued an announcement on 8 March 2018, declaring the payment of year-1 interest on “17 Zhong Gong Y1”. The Company issued an announcement on 11 March 2019, declaring the payment of year-2 interest on “17 Zhong Gong Y1”. The Company issued an announcement notice on 6 March 2020, declaring the payment of year-3 interest on “17 Zhong Gong Y1”. As at the date of the Report, the Company has made payment of the above interest.

#### Other information on bonds of the Company

Applicable Not applicable



## SECTION 11 INFORMATION ON CORPORATE BONDS

### II. CONTACT PERSON AND CONTACT DETAILS OF CUSTODIAN AND CREDIT RATING AGENCY OF BONDS OF THE COMPANY

Custodian of bonds	Name	Haitong Securities Co., Ltd.
	Office address	15/F, Yuan Xiang Tai Building, 5 Anding Road, Chaoyang District, Beijing
	Contacts	ZHENG Yunqiao, GUO Shi
Custodian of bonds	Tel	010-88027267
	Name	Ping An Securities Co., Ltd.
	Office address	61-64/F, Ping An Financial Center, 5033 Yitian Road, Futian District, Shenzhen
Credit rating agency	Contacts	PAN Linhui, DONG Jingjing
	Tel	010-56800264
	Name	Dagong Global Credit Rating Co., Ltd.
Credit rating agency	Office address	29/F, Building A, Eagle Run Plaza, 26 Xiaoyun Road, Chaoyang District, Beijing
	Name	United Credit Ratings Co., Ltd.
Credit rating agency	Office address	508 Ai Li Yuan Apartment, Shuishang Park Avenue (North), Nankai District, Tianjin

Other explanation

Applicable    Not applicable

### III. USE OF PROCEEDS OF BOND OFFERING

Applicable    Not applicable

Pursuant to the China Aluminum International Engineering Corporation Limited Prospectus for Public Offering of 2017 Renewable Corporate Bonds (Tranche 1) (to Qualified Investors) disclosed by the Company on 13 March 2017, the proceeds of offering of “17 Zhong Gong Y1” bonds, net of offering costs, would be used to supplement the Company’s working capital. The proceeds of offering of this tranche of bonds have been applied for such purposes as disclosed in the prospectus.

Pursuant to the China Aluminum International Engineering Corporation Limited Prospectus for Public Offering of 2019 Renewable Corporate Bonds (Tranche 1) (to Qualified Investors) disclosed by the Company on 30 October 2019, the proceeds of offering of “19 Zhong Gong Y1” bonds, net of offering costs, would be used to supplement the Company’s working capital. The proceeds of offering of this tranche of bonds have been applied for such purposes as disclosed in the prospectus.

## SECTION 11 INFORMATION ON CORPORATE BONDS

### IV. CREDIT RATING OF BONDS

Applicable    Not applicable

According to its Credit Rating Report (Da Gong Bao SD [2019] No.066) dated 28 May 2019, Dagong Global Credit Rating Co., Ltd. gave China Aluminum International Engineering Corporation Limited a long-term issuer rating of AA+ with a stable outlook, and gave its “16 Zhong Gong Y1” bond and “17 Zhong Gong Y1” bond a credit rating of AAA.

According to its Credit Rating Report (Lian He [2019] No.1803) dated 9 July 2019, United Credit Ratings Co., Ltd. gave China Aluminum International Engineering Corporation Limited a long-term issuer rating of AA+ with a stable outlook, and gave its “19 Zhong Gong Y1” bond a credit rating of AAA.

### V. CREDIT ENHANCEMENT MECHANISM, REPAYMENT SCHEME AND OTHER RELEVANT INFORMATION OF AND ON BONDS OF THE COMPANY DURING THE REPORTING PERIOD

Applicable    Not applicable

According to its overall funding arrangement, the Company will duly honor the principal of and interest on bonds “17 Zhong Gong Y1” and “19 Zhong Gong Y1” in accordance with the agreement. Please refer to the Company’s subsequent announcements for specific payment arrangements.

### VI. HOLDING OF BONDHOLDER MEETINGS OF THE COMPANY

Applicable    Not applicable

From the date of issuance of corporate bonds to the date of disclosure of the report, the Company has not had any matters falling into the scope of authority of the bondholder meeting, so the custodian of bonds has not convened any bondholder meeting.

### VII. DUTY PERFORMANCE BY CUSTODIAN OF BONDS OF THE COMPANY

Applicable    Not applicable

The custodians of bonds, i.e. Ping An Securities Co., Ltd. and Haitong Securities Co., Ltd. actively performed their respective duties to timely issue annual reports and provisional reports on custody affairs, and to continuously supervise the Company’s performance of bond-related disclosure obligations.

## SECTION 11 INFORMATION ON CORPORATE BONDS

## VIII. ACCOUNTING FIGURES AND FINANCIAL INDICATORS OF THE COMPANY FOR THE LAST TWO YEARS AS AT THE END OF THE REPORTING PERIOD

Applicable    Not applicable

Unit: '0000 Yuan    Currency: RMB

Main Indicators	2019	2018	Year-on-year Change (%)	Reason for Change
EBITDA	<b>153,914.17</b>	182,969.52	-15.88	Due largely to a decreasing in net profit for the year
Current ratio	<b>1.27</b>	1.26	-0.01	
Quick ratio	<b>1.18</b>	1.16	-0.03	
Asset-liability ratio (%)	<b>72.51</b>	73.10	-0.59	Mainly because the Company reasonably controlled its total liabilities and increased its total assets through project payment collection and adding operating assets
Debt to EBITDA ratio	<b>0.07</b>	0.11	-0.04	Due largely to the increase in interest-bearing liabilities and equity instruments issued
Interest coverage ratio	<b>0.23</b>	0.55	-0.32	Due largely to a decrease in net profit
Net cash from operating activities to interest ratio	<b>17.25</b>	15.37	1.88	Mainly because monetary fund increased dramatically at end of the year
EBITDA to interest ratio	<b>1.58</b>	1.97	-0.39	Mainly because net profit decreased but interest expense increased
Loan repayment rate (%)	<b>100</b>	100	-	-
Interest payment rate (%)	<b>100</b>	100	-	-

## SECTION 11 INFORMATION ON CORPORATE BONDS

### IX. INFORMATION ON PAYMENT OF PRINCIPAL OF AND INTEREST ON OTHER BONDS AND DEBT INSTRUMENTS OF THE COMPANY

Applicable    Not applicable

The Company has made timely payment of principal of and interest on any other bonds and debt instruments and has announced relevant issues as required in a timely manner.

### X. CREDIT LINE GRANTED BY BANKS DURING THE REPORTING PERIOD

Applicable    Not applicable

As of the reporting date, the Company had obtained RMB55.69 billion of credit line from banks, and had utilized RMB16.509 billion of credit line, leaving the available balance of credit line being RMB39.181 billion.

### XI. PERFORMANCE OF AGREEMENTS OR UNDERTAKINGS IN THE PROSPECTUS FOR BONDS DURING THE REPORTING PERIOD

Applicable    Not applicable

During the reporting period, the Company strictly observed relevant agreements or commitments in the Prospectus for bonds of the Company's bonds, and there was no information that shall be disclosed but was undisclosed.

### XII. MATERIAL EVENTS OF THE COMPANY AND THE IMPACT ON OPERATING RESULTS AND SOLVENCY OF THE COMPANY

Applicable    Not applicable

## SECTION 12 FINANCIAL REPORT



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學院國際大廈15層  
郵編100083

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### Auditor's Report

DA XIN SHEN ZI [2020] No. 1-00723

**To the Shareholders of China Aluminum International Engineering Corporation Limited,**

#### I. OPINION

We have audited the accompanying financial statements of China Aluminum International Engineering Corporation Limited (hereinafter referred to as the "Company"), which comprise the consolidated and company statements of financial position as at 31 December 2019, and the consolidated and company statements of comprehensive income, the consolidated and company statements of cash flows and the consolidated and company statements of changes in shareholders' equity for year then ended, and notes to the financial statements.

In our opinion, the accompanying financial statements, in all material respects, have been prepared in accordance with the requirements of Accounting Standards for Business Enterprises and give a true and fair view of the consolidated and company financial position as at 31 December 2019, and the consolidated and company financial performance and cash flows for the year then ended.

#### II. BASIS FOR OPINION

We conducted our audit in accordance with the China Certified Public Accountants Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with China Code of Ethics for Certified Public Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

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

## SECTION 12 FINANCIAL REPORT

### III. KEY AUDIT MATTERS

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

#### (I) Revenue and cost recognition on construction contracts

##### 1. Description of the matter

For accounting policies and disclosures related to the revenue and cost on construction contracts, refer to Notes “(26) Revenue” and “(35) Key assumptions and uncertainties in important judgments and accounting estimates made in applying accounting policies” under “3. Significant Accounting Policies and Accounting Estimates”, and (46) Operating Income and Operating Costs” under “5. Notes to Important Items in Consolidated Financial Statements”.

The revenue and profit of the Company mainly are derived from the construction operations. In the Company’s consolidated statement of comprehensive income for 2019, the construction operations accounted for 66.89% of the operating income and 66.70% of the operating cost. The Company recognizes revenue and cost of such business over time by measuring the performance progress if it can be reasonably determined, which involves significant judgments, such as the continuous and reasonable estimation of the expected total contract revenue and total contract cost throughout the contract period. Therefore, we identify it as a key audit matter.

##### 2. Audit response

Our audit procedures for revenue and cost recognition on construction contracts mainly include:

- (1) Understanding, assessing and testing the effectiveness of related key internal control design in relation to construction contracts during the reporting period;
- (2) Sampling construction projects and examining the relevant contract, cost budget, etc. which the expected total contract revenue and total contract cost are based on, to assess whether the estimation made by the management is reasonable and groundful;

## SECTION 12 FINANCIAL REPORT

- (3) Examining the contract costs incurred during the reporting period by tracing to supporting documentation on a sampling basis;
- (4) Carrying out a cut-off test procedure to check whether related contract costs were recognized in the proper accounting period;
- (5) Analysing gross margin of major construction contracts;
- (6) Recalculating the performance progress of construction contracts to examine its accuracy on a sample basis;
- (7) Visiting the selected sites of major construction projects, discussing with the project management department the extent to which the construction work was completed, comparing to the performance progress in record, and making a further examination for unusual deviations if necessary.

### (II) Expected credit losses of receivables and contract assets

#### 1. Description of the matter

For relevant accounting policies and disclosures, refer to Notes “(11) Determination and accounting treatment of expected credit loss” and “(35) Key assumptions and uncertainties in important judgments and accounting estimates made in exercising accounting policies” under “3. Significant Accounting Policies and Accounting Estimates”, and “5. Notes to Important Items in Consolidated Financial Statements”.

The Company makes loss allowance for receivables and contract assets based on expected credit risks. As at 31 December 2019, the Company had a gross carrying amounts of accounts receivable of RMB16,180,551,400, other receivables of RMB3,128,012,000, contract assets of RMB13,255,409,100, long-term receivables (including the portion presented in current portion of non-current assets) of RMB2,412,148,700 and long-term contract assets (presented in other non-current assets) of RMB799,919,300, and the expected credit losses provided for these assets were RMB1,896,335,500, RMB776,538,000, RMB247,097,000, RMB95,773,000 and RMB5,928,000 respectively. The management continuously evaluated the expected credit losses on these assets based on relevant information available to it. Considering the assumptions and input values which the management used in impairment testing depend on significant judgment, we identify this as a key audit matter.

## SECTION 12 FINANCIAL REPORT

### 2. Audit response

Our audit procedures for expected credit losses of receivables and contract assets mainly include:

- (1) Understanding, assessing and testing the effectiveness of related key internal control design in relation to the credit approval and impairment testing;
- (2) Reviewing relevant considerations and objective evidence which the management used in assessing expected credit risk of receivables and contract assets, including determination of provision matrix and reasonable expected credit loss rate;
- (3) For receivables and contract assets individually assessed for expected credit losses, reviewing whether the management made appropriate estimation of expected future cash flows by tracing to supporting evidence, such as mortgage and security agreements, third party evaluation report on the pledged assets, the repayment plan;.
- (4) For trade receivables and contract assets assessed by provision matrix for expected credit losses, testing the accuracy of the aging schedule of those assets based on contracts, settlement data and other information, and recalculating the loss allowance.

## IV. OTHER INFORMATION

The management of the Company is responsible for the other information. The other information comprises all of the information included in the Company's annual report for 2019 other than the financial statements and our auditor's report thereon.

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

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

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



## SECTION 12 FINANCIAL REPORT

### V. RESPONSIBILITIES OF THE MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

The management of the Company is responsible for the preparation of the financial statements that give a true and fair view in accordance with Accounting Standards for Business Enterprises, and for such internal control as the management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

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

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

### VI. AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

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

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

- (1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- (2) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- (3) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.

## SECTION 12 FINANCIAL REPORT

- (4) Conclude on the appropriateness of the management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- (5) Evaluate the overall presentation, structure and content of the financial statements, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

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

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

**WUYIGE Certified Public Accountants LLP.**

China Certified Public Accountant: Xie Qing  
(Engagement Partner)

Beijing • China

China Certified Public Accountant: Ding Ting Ting

30 March 2020

## SECTION 12 FINANCIAL REPORT

## CONSOLIDATED BALANCE SHEET

As at 31 December 2019

Unit: RMB

Item	Note	At 31 December 2019	At 1 January 2019	At 31 December 2018
<b>Current assets</b>				
Monetary fund	5.1	<b>10,025,925,365.07</b>	6,811,036,444.23	6,811,036,444.23
Held-for-trading financial assets				
Derivative financial assets	5.2		188,760.00	188,760.00
Notes receivable	5.3	<b>569,959,008.85</b>	524,256,735.77	524,256,735.77
Accounts receivable	5.4	<b>14,284,215,819.57</b>	14,308,244,901.08	14,308,244,901.08
Factoring of receivables				
Prepayments	5.5	<b>376,065,504.37</b>	1,154,136,289.66	1,154,443,987.85
Other receivables	5.6	<b>2,353,289,986.09</b>	2,197,882,112.10	2,197,882,112.10
– Interest receivable				
– Dividends receivable	5.6	<b>1,815,949.86</b>	199,941.87	199,941.87
Inventories	5.7	<b>3,110,392,382.89</b>	3,432,854,847.08	3,432,854,847.08
Contract assets	5.8	<b>13,008,312,180.99</b>	11,066,548,440.99	11,066,548,440.99
Held-for-sale assets				
Current portion of non-current assets	5.9	<b>405,403,386.22</b>	1,049,736,706.16	1,049,736,706.16
Other current assets	5.10	<b>656,337,615.69</b>	798,684,175.34	798,684,175.34
<b>Total current assets</b>		<b>44,789,901,249.74</b>	41,343,569,412.41	41,343,877,110.60
<b>Non-current assets:</b>				
Debt investments				
Other debt investments				
Long-term receivables	5.11	<b>1,910,972,285.42</b>	1,647,678,997.89	1,647,678,997.89
Long-term equity investments	5.12	<b>770,306,732.72</b>	480,523,006.21	480,523,006.21
Other equity instrument investments	5.13	<b>45,422,963.86</b>	207,654,873.93	207,654,873.93
Other non-current financial assets	5.14	<b>18,900,000.00</b>		
Investment properties	5.15	<b>478,102,673.52</b>	212,448,557.35	212,448,557.35
Fixed assets	5.16	<b>2,313,832,928.14</b>	2,081,360,272.61	2,081,360,272.61
Construction in progress	5.17	<b>300,722,025.12</b>	381,053,227.65	381,053,227.65
Bearer biological assets				
Oil & gas assets				
Rights-of-use assets	5.18	<b>26,986,403.95</b>	28,531,409.02	
Intangible assets	5.19	<b>1,086,857,150.91</b>	971,458,016.58	971,458,016.58
Development costs	5.20	<b>2,297,253.07</b>	1,083,239.87	1,083,239.87
Goodwill				
Long-term prepaid expenses	5.21	<b>27,138,251.28</b>	25,445,372.07	25,445,372.07
Deferred tax assets	5.22	<b>782,643,655.49</b>	676,982,699.10	676,982,699.10
Other non-current assets	5.23	<b>3,445,379,547.40</b>	1,039,435,992.30	1,039,435,992.30
<b>Total non-current assets</b>		<b>11,209,561,870.88</b>	7,753,655,664.58	7,725,124,255.56
<b>Total assets</b>		<b>55,999,463,120.62</b>	49,097,225,076.99	49,069,001,366.16

## SECTION 12 FINANCIAL REPORT

Item	Note	At 31 December 2019	At 1 January 2019	At 31 December 2018
<b>Current liabilities</b>				
Short-term borrowings	5.24	<b>7,198,295,269.03</b>	9,052,044,116.44	9,052,044,116.44
Held-for-trading financial liabilities				
Derivative financial liabilities	5.25		22,500.00	22,500.00
Notes payable	5.26	<b>957,266,218.53</b>	752,425,989.46	752,425,989.46
Accounts payable	5.27	<b>15,737,937,151.26</b>	15,316,246,085.16	15,316,246,085.16
Advances from customers				
Contract liabilities	5.28	<b>2,381,391,809.44</b>	2,716,817,684.88	2,716,817,684.88
Employee benefits payable	5.29	<b>200,663,502.30</b>	255,124,757.26	255,124,757.26
Taxes payable	5.30	<b>267,058,741.21</b>	324,100,136.79	324,100,136.79
Other payables	5.31	<b>4,979,140,933.59</b>	1,694,587,531.61	1,694,587,531.61
– Interest payable	5.31		17,471,084.13	17,471,084.13
– Dividends payable	5.31	<b>30,000,000.00</b>	30,000,000.00	30,000,000.00
Held-for-sale liabilities				
Current portion of non-current liabilities	5.32	<b>872,946,075.66</b>	1,365,250,795.66	1,353,597,500.02
Other current liabilities	5.33	<b>2,596,562,617.52</b>	1,344,399,651.43	1,344,399,651.43
<b>Total current liabilities</b>		<b>35,191,262,318.54</b>	32,821,019,248.69	32,809,365,953.05
<b>Non-current liabilities:</b>				
Long-term borrowings	5.34	<b>4,666,498,225.22</b>	2,223,000,000.00	2,223,000,000.00
Debentures payable				
– Preferred stock				
– Perpetual bonds				
Lease liabilities	5.35	<b>13,909,401.66</b>	16,570,415.19	
Long-term payables	5.36	<b>4,598,530.23</b>	5,606,227.87	5,606,227.87
Long-term employee benefits payable	5.37	<b>599,488,000.00</b>	713,871,000.00	713,871,000.00
Estimated liabilities				
Deferred income	5.38	<b>53,036,425.27</b>	40,813,744.29	40,813,744.29
Deferred tax liabilities	5.22	<b>75,290,268.87</b>	74,821,813.00	74,821,813.00
Other non-current liabilities				
<b>Total non-current liabilities</b>		<b>5,412,820,851.25</b>	3,074,683,200.35	3,058,112,785.16
<b>Total liabilities</b>		<b>40,604,083,169.79</b>	35,895,702,449.04	35,867,478,738.21

## SECTION 12 FINANCIAL REPORT

Item	Note	At 31 December 2019	At 1 January 2019	At 31 December 2018
<b>Shareholders' equity</b>				
Share capital	5.39	<b>2,959,066,667.00</b>	2,959,066,667.00	2,959,066,667.00
Other equity instruments	5.40	<b>2,996,084,905.65</b>	1,699,801,886.79	1,699,801,886.79
– Preferred stock				
– Perpetual bonds	5.40	<b>2,996,084,905.65</b>	1,699,801,886.79	1,699,801,886.79
Capital reserve	5.41	<b>795,341,809.69</b>	854,180,385.99	854,180,385.99
Less: treasury stock				
Other comprehensive income	5.42	<b>223,826,729.99</b>	197,286,107.26	197,286,107.26
Special reserve	5.43	<b>124,905,233.17</b>	64,767,607.84	64,767,607.84
Surplus reserve	5.44	<b>201,586,598.10</b>	188,914,615.74	188,914,615.74
Undistributed profit	5.45	<b>4,021,247,997.05</b>	4,194,677,085.74	4,194,677,085.74
<b>Total shareholders' equity attributable to the parent</b>				
		<b>11,322,059,940.65</b>	10,158,694,356.36	10,158,694,356.36
Minority shareholders' interests		<b>4,073,320,010.18</b>	3,042,828,271.59	3,042,828,271.59
<b>Total shareholders' equity</b>				
		<b>15,395,379,950.83</b>	13,201,522,627.95	13,201,522,627.95
<b>Total liabilities and shareholders' equity</b>				
		<b>55,999,463,120.62</b>	49,097,225,076.99	49,069,001,366.16

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin

## SECTION 12 FINANCIAL REPORT

## BALANCE SHEET OF THE PARENT

As at 31 December 2019

Unit: RMB

Item	Note	At 31 December 2019	At 1 January 2019	At 31 December 2018
<b>Current assets</b>				
Monetary fund		<b>2,373,696,059.99</b>	2,216,957,755.29	2,216,957,755.29
Held-for-trading financial assets				
Derivative financial assets				
Notes receivable		<b>139,433,342.34</b>	71,096,760.58	71,096,760.58
Accounts receivable	14.1	<b>1,516,735,150.81</b>	2,097,585,328.60	2,097,585,328.60
Factoring of receivables				
Prepayments		<b>83,025,087.51</b>	92,222,696.28	92,222,696.28
Other receivables	14.2	<b>5,320,321,539.47</b>	6,270,987,924.15	6,270,987,924.15
– Interest receivable				
– Dividends receivable	14.2	<b>130,825,077.12</b>	363,266,717.96	363,266,717.96
Inventories		<b>156,652,612.17</b>	206,541,898.88	206,541,898.88
Contract assets		<b>559,798,235.37</b>	756,735,998.28	756,735,998.28
Held-for-sale assets				
Current portion of non-current assets		<b>1,150,000,000.00</b>	644,260,000.00	644,260,000.00
Other current assets		<b>96,188,791.51</b>	141,353,068.90	141,353,068.90
<b>Total current assets</b>		<b>11,395,850,819.17</b>	12,497,741,430.96	12,497,741,430.96
<b>Non-current assets:</b>				
Debt investments				
Other debt investments				
Long-term receivables		<b>1,038,065,453.50</b>	1,616,633,887.40	1,616,633,887.40
Long-term equity investments	14.3	<b>6,160,668,872.38</b>	4,240,246,565.00	4,240,246,565.00
Other equity instrument investments		<b>18,180,000.00</b>	177,087,452.35	177,087,452.35
Other non-current financial assets		<b>18,900,000.00</b>		
Investment properties				
Fixed assets		<b>80,233,096.11</b>	83,427,735.68	83,427,735.68
Construction in progress				
Bearer biological assets				
Oil & gas assets				
Rights-of-use assets				
Intangible assets		<b>147,688,005.51</b>	154,260,025.64	154,260,025.64
Development costs				
Goodwill				
Long-term prepaid expenses			10,642.90	10,642.90
Deferred tax assets		<b>81,208,124.13</b>	40,929,775.91	40,929,775.91
Other non-current assets				
<b>Total non-current assets</b>		<b>7,544,943,551.63</b>	6,312,596,084.88	6,312,596,084.88
<b>Total assets</b>		<b>18,940,794,370.80</b>	18,810,337,515.84	18,810,337,515.84

## SECTION 12 FINANCIAL REPORT

Item	Note	At 31 December 2019	At 1 January 2019	At 31 December 2018
<b>Current liabilities</b>				
Short-term borrowings		<b>2,849,800,200.00</b>	5,052,476,823.09	5,052,476,823.09
Held-for-trading financial liabilities				
Derivative financial liabilities			22,500.00	22,500.00
Notes payable		<b>129,848,202.57</b>	84,000,000.00	84,000,000.00
Accounts payable		<b>1,899,655,199.50</b>	2,820,742,685.72	2,820,742,685.72
Advances from customers				
Contract liabilities		<b>706,997,265.31</b>	821,966,166.29	821,966,166.29
Employee benefits payable		<b>5,152,326.82</b>	7,771,419.13	7,771,419.13
Taxes payable		<b>7,021,293.26</b>	6,022,470.65	6,022,470.65
Other payables		<b>1,180,427,289.85</b>	1,406,436,473.51	1,406,436,473.51
– Interest payable			10,219,078.45	10,219,078.45
– Dividends payable		<b>30,000,000.00</b>	30,000,000.00	30,000,000.00
Held-for-sale liabilities				
Current portion of non-current liabilities		<b>740,000,000.00</b>	717,997,500.02	717,997,500.02
Other current liabilities		<b>1,045,727,361.76</b>	40,689,318.21	40,689,318.21
<b>Total current liabilities</b>		<b>8,564,629,139.07</b>	10,958,125,356.62	10,958,125,356.62
<b>Non-current liabilities:</b>				
Long-term borrowings		<b>2,990,000,000.00</b>	1,737,000,000.00	1,737,000,000.00
Debt securities payable				
– Preferred stock				
– Perpetual bonds				
Lease liabilities				
Long-term payables				
Long-term employee benefits payable		<b>3,754,000.00</b>	4,010,000.00	4,010,000.00
Estimated liabilities				
Deferred income				
Deferred tax liabilities				
Other non-current liabilities				
<b>Total non-current liabilities</b>		<b>2,993,754,000.00</b>	1,741,010,000.00	1,741,010,000.00
<b>Total liabilities</b>		<b>11,558,383,139.07</b>	12,699,135,356.62	12,699,135,356.62

## SECTION 12 FINANCIAL REPORT

Item	Note	At 31 December 2019	At 1 January 2019	At 31 December 2018
<b>Shareholders' equity</b>				
Share capital		<b>2,959,066,667.00</b>	2,959,066,667.00	2,959,066,667.00
Other equity instruments		<b>2,996,084,905.65</b>	1,699,801,886.79	1,699,801,886.79
– Preferred stock				
– Perpetual bonds		<b>2,996,084,905.65</b>	1,699,801,886.79	1,699,801,886.79
Capital reserve		<b>1,193,196,521.57</b>	1,198,894,634.78	1,198,894,634.78
Less: treasury stock				
Other comprehensive income		<b>11,735,970.00</b>	–36,967,802.08	–36,967,802.08
Special reserve		<b>810,240.05</b>		
Surplus reserve		<b>201,586,598.10</b>	188,914,615.74	188,914,615.74
Undistributed profit		<b>19,930,329.36</b>	101,492,156.99	101,492,156.99
<b>Total shareholders' equity</b>		<b>7,382,411,231.73</b>	6,111,202,159.22	6,111,202,159.22
<b>Total liabilities and shareholders' equity</b>				
		<b>18,940,794,370.80</b>	18,810,337,515.84	18,810,337,515.84

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin



## SECTION 12 FINANCIAL REPORT

## CONSOLIDATED INCOME STATEMENT

For Year 2019

Unit: RMB

Item	Note	2019	2018
<b>I. Operating revenue</b>	5.46	<b>31,059,791,611.63</b>	33,634,851,195.32
Less: operating cost	5.46	<b>27,779,687,486.15</b>	30,360,193,735.52
operating Taxes and surcharges	5.47	<b>104,748,311.07</b>	74,355,764.08
Sales expense	5.48	<b>125,447,452.22</b>	99,058,524.83
Administrative expense	5.49	<b>1,066,944,199.12</b>	978,292,982.02
R&D expense	5.50	<b>524,316,745.50</b>	482,998,217.93
Finance expense	5.51	<b>573,119,644.89</b>	513,960,595.55
– Interest expense	5.51	<b>738,061,865.69</b>	691,464,678.22
– Interest income	5.51	<b>210,652,452.70</b>	226,773,538.16
Add: other gains	5.52	<b>39,664,857.60</b>	17,696,570.01
Gain on investment (“–” for loss)	5.53	<b>50,009,798.59</b>	140,553,064.39
of which: Share of investment gain of profits of associates and joint ventures	5.53	<b>–4,779,193.39</b>	3,983,314.95
Gain on de-recognition of financial assets measured at amortized cost (“–” for loss)	5.53	<b>19,337,105.40</b>	
Gain on exposure netting (“–” for loss)			
Gain on fair value change (“–” for loss)	5.54	<b>164,450.00</b>	166,260.00
Credit impairment loss (“–” for loss)	5.55	<b>–686,895,399.73</b>	–522,959,102.63
Asset impairment loss (“–” for loss)	5.56	<b>–6,981,953.83</b>	–45,882,163.63
Gains on disposal of assets (“–” for loss)	5.57	<b>45,687,583.27</b>	1,644,533.99
<b>II. Operating profit (“–” for loss)</b>		<b>327,177,108.58</b>	717,210,537.52
Add: non-operating income	5.58	<b>89,401,690.65</b>	51,311,987.55
Less: non-operating expense	5.59	<b>71,805,546.49</b>	110,541,077.17
<b>III. Total profit (“–” for total loss)</b>		<b>344,773,252.74</b>	657,981,447.90
Less: income tax expense	5.60	<b>122,248,501.14</b>	146,672,754.71
<b>IV. Net profit (“–” for net loss)</b>		<b>222,524,751.60</b>	511,308,693.19
(I) Net profit from:			
1. Continuing operations (“–” for loss)		<b>222,524,751.60</b>	511,308,693.19
2. Discontinued operations (“–” for loss)			
(II) Net profit attributable to:			
1. Shareholders of the parent (“–” for loss)		<b>34,852,562.55</b>	306,103,823.88
2. Non-controlling interests (“–” for loss)		<b>187,672,189.05</b>	205,204,869.31

## SECTION 12 FINANCIAL REPORT

Item	Note	2019	2018
<b>V. Other comprehensive income, net of tax</b>		<b>12,657,794.37</b>	-27,494,879.97
(I) Other comprehensive income attributable to shareholders of the parent, net of tax		<b>13,062,020.53</b>	-27,915,202.02
1. Items that may not be reclassified to profit or loss		<b>11,302,806.97</b>	-75,262,131.11
(1) Change on remeasurement of defined benefit plan		<b>-21,322,270.25</b>	-36,232,011.84
(2) Other comprehensive income under equity method that may not be transferred to profit or loss			
(3) Change in fair value of other equity instrument investment		<b>32,625,077.22</b>	-39,030,119.27
(4) Fair value change arising from credit risk of the Company			
2. Items that will be reclassified subsequently to profit loss		<b>1,759,213.56</b>	47,346,929.09
(1) Other comprehensive income under equity method that may be transferred to profit or loss			
(2) Change in fair value of other debt investments			
(3) Amount recorded in other comprehensive income upon financial assets reclassification			
(4) Credit impairment provision for other debt investment			
(5) Cash flow hedge reserve			
(6) Currency translation difference		<b>1,759,213.56</b>	47,346,929.09
(7) Others			
(II) Other comprehensive income attributable to non-controlling interests, net of tax		<b>-404,226.16</b>	420,322.05
<b>VI. Total comprehensive income</b>		<b>235,182,545.97</b>	483,813,813.22
(I) Total comprehensive income attributable to shareholders of the parent		<b>47,914,583.08</b>	278,188,621.86
(II) Total comprehensive income attributable to minority shareholders		<b>187,267,962.89</b>	205,625,191.36
<b>VII. EPS</b>			
(I) Basic	15.2	<b>-0.02</b>	0.08
(II) Diluted		<b>-</b>	-

## SECTION 12 FINANCIAL REPORT

## INCOME STATEMENT OF THE PARENT

For Year 2019

Unit: RMB

Item	Note	2019	2018
<b>I. Operating revenue</b>	14.4	<b>1,349,404,566.06</b>	3,153,662,853.09
Less: operating cost	14.4	<b>1,116,219,781.59</b>	2,824,426,055.42
Taxes and surcharges		<b>4,586,412.73</b>	5,042,306.83
Sales expense		<b>36,665,601.17</b>	31,046,594.78
Administrative expense		<b>147,611,469.05</b>	167,522,430.54
R&D expense		<b>91,481,131.10</b>	156,557,424.24
Finance expense		<b>226,888,299.13</b>	72,460,870.41
– Interest expense		<b>565,344,619.10</b>	520,459,541.71
– Interest income		<b>352,090,831.97</b>	432,629,906.75
Add: other gains		<b>376,880.71</b>	235,396.86
Gain on investment (“–” for loss)	14.5	<b>482,816,433.12</b>	349,064,976.84
– Share of investment gain of associates and joint ventures	14.5	<b>2,359,070.30</b>	–523,582.10
– Gain on de-recognition of financial assets measured at amortized cost (“–” for loss)	14.5	<b>–4,704,167.26</b>	
Gain on exposure netting (“–” for loss)			
Gain on fair value change (“–” for loss)			–22,500.00
Credit impairment loss (“–” for loss)		<b>–101,917,529.22</b>	–47,174,986.58
Asset impairment loss (“–” for loss)			
Gains on disposal of assets (“–” for loss)			–16,916.90
<b>II. Operating profit (“–” for loss)</b>		<b>107,227,655.90</b>	198,693,141.09
Add: non-operating income		<b>5,255,408.87</b>	6,213,637.69
Less: non-operating expense		<b>1,150,082.00</b>	92,188.77
<b>III. Total profit (“–” for total loss)</b>		<b>111,332,982.77</b>	204,814,590.01
Less: income tax expense		<b>–15,386,840.84</b>	–10,694,788.31
<b>IV. Net profit (“–” for net loss)</b>		<b>126,719,823.61</b>	215,509,378.32
(I) Net profit from continuing operations (“–” for loss)		<b>126,719,823.61</b>	215,509,378.32
(II) Net profit from discontinued operations (“–” for loss)			

## SECTION 12 FINANCIAL REPORT

Item	Note	2019	2018
<b>V. Other comprehensive income, net of tax</b>		<b>35,225,169.88</b>	-33,818,672.57
(I) Items that may not be reclassified to profit or loss		<b>35,225,169.88</b>	-33,818,672.57
1. Change on remeasurement of defined benefit plan		<b>82,450.00</b>	-132,600.00
2. Other comprehensive income under equity method that may not be transferred to profit or loss			
3. Change in fair value of other equity instrument investment		<b>35,142,719.88</b>	-33,686,072.57
4. Fair value change arising from credit risk of the Company			
(II) Items that will be reclassified subsequently to profit loss			
1. Other comprehensive income under equity method that may be transferred to profit or loss			
2. Change in fair value of other debt investments			
3. Amount recorded in other comprehensive income upon financial assets reclassification			
4. Credit impairment provision for other debt investment			
5. Cash flow hedge reserve			
6. Currency translation difference			
7. Others			
<b>VI. Total comprehensive income</b>		<b>161,944,993.49</b>	181,690,705.75
<b>VII. EPS</b>			
(I) Basic			
(II) Diluted			

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin

## SECTION 12 FINANCIAL REPORT

## CONSOLIDATED STATEMENT OF CASH FLOWS

For Year 2019

Unit: RMB

Item	Note	2019	2018
<b>I. Cash flows from operating activities</b>			
Cash received from sales of goods or rendering of services		<b>29,281,290,505.33</b>	30,204,713,360.85
Tax rebate received		<b>61,602,362.51</b>	24,059,606.43
Other cash received relating to operating activities	5.61	<b>291,405,782.93</b>	477,586,488.77
<b>Subtotal of cash inflows from operating activities</b>		<b>29,634,298,650.77</b>	30,706,359,456.05
<hr/>			
Cash paid for sales of goods or rendering of services		<b>24,990,812,648.68</b>	26,622,860,446.58
Cash paid to and for employees		<b>2,223,636,919.05</b>	2,277,054,317.57
Taxes paid		<b>749,649,729.52</b>	764,801,255.32
Other cash paid relating to operating activities	5.61	<b>574,222,505.44</b>	476,757,176.34
<b>Subtotal of cash outflows from operating activities</b>		<b>28,538,321,802.69</b>	30,141,473,195.81
<hr/>			
<b>Net cash flows from operating activities</b>		<b>1,095,976,848.08</b>	564,886,260.24
<hr/>			
<b>II. Cash flows from investing activities</b>			
Refund of investments		<b>5,003,675,956.99</b>	4,427,812,765.73
Gain on investment received		<b>85,862,731.87</b>	123,017,448.30
Net proceeds from disposal of fixed assets, intangible assets and other long-term assets		<b>11,042,047.19</b>	5,155,420.70
Net proceeds from disposal of a subsidiary and other business unit		<b>102,650,744.94</b>	94,795,619.25
Other cash received relating to investing activities	5.61	<b>35,393,806.67</b>	
<b>Subtotal of cash inflows from investing activities</b>		<b>5,238,625,287.66</b>	4,650,781,253.98
<hr/>			
Cash paid for purchase and construction of fixed assets, intangible assets and other long-term assets		<b>1,298,261,549.95</b>	254,691,196.47
Payment for investments		<b>4,739,232,393.06</b>	4,001,003,979.27
Net cash paid for acquisition of a subsidiary and other business unit		<b>180,394,159.80</b>	190,000,000.00
Other cash paid relating to investing activities	5.61		15,000,000.00
<b>Subtotal of cash outflows from investing activities</b>		<b>6,217,888,102.81</b>	4,460,695,175.74
<hr/>			
<b>Net cash flows from investing activities</b>		<b>-979,262,815.15</b>	190,086,078.24

## SECTION 12 FINANCIAL REPORT

Item	Note	2019	2018
<b>III. Cash flows from financing activities</b>			
Capital contributions received		<b>4,960,758,225.00</b>	1,013,092,501.59
– Capital contributions received by subsidiaries from non-controlling interests		<b>2,462,258,225.00</b>	4,620,000.00
Borrowings received		<b>17,529,402,516.17</b>	15,713,276,984.25
Other cash received relating to financing activities	5.61		152,163,656.00
<b>Subtotal of cash inflows from financing activities</b>		<b>22,490,160,741.17</b>	16,878,533,141.84
Repayment of debts		<b>16,985,221,062.05</b>	16,489,824,812.65
Distribution of dividends or profit or payment of interest		<b>1,020,798,465.97</b>	963,993,162.10
– Dividends or profits paid by subsidiaries to non-controlling interests		<b>137,477,598.17</b>	132,515,680.37
Other cash paid relating to financing activities	5.61	<b>1,292,861,926.69</b>	678,441,247.74
<b>Subtotal of cash outflows from financing activities</b>		<b>19,298,881,454.71</b>	18,132,259,222.49
<b>Net cash from financing activities</b>		<b>3,191,279,286.46</b>	–1,253,726,080.65
<b>IV. Impact of exchange rate on cash and cash equivalents</b>			
		<b>–19,079,385.17</b>	42,598,446.41
<b>V. Net increase in cash and cash equivalents</b>			
		<b>3,288,913,934.22</b>	–456,155,295.76
Add: Cash and cash equivalents at beginning of the year		<b>5,831,581,515.94</b>	6,287,736,811.70
<b>VI. Cash and cash equivalents at end of the year</b>			
		<b>9,120,495,450.16</b>	5,831,581,515.94

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin

## SECTION 12 FINANCIAL REPORT

## STATEMENT OF CASH FLOWS OF THE PARENT

For Year 2019

Unit: RMB

Item	Note	2019	2018
<b>I. Cash flows from operating activities</b>			
Cash received from sales of goods or rendering of services		1,997,863,957.00	2,288,342,862.92
Tax rebate received			
Other cash received relating to operating activities		383,134,399.26	796,835,177.78
<b>Subtotal of cash inflows from operating activities</b>		<b>2,380,998,356.26</b>	3,085,178,040.70
<hr/>			
Cash paid for sales of goods or rendering of services		1,614,617,700.91	2,119,776,588.77
Cash paid to and for employees		253,331,217.43	260,413,650.76
Taxes paid		27,559,936.46	51,933,475.90
Other cash paid relating to operating activities		1,074,153,909.07	579,490,725.16
<b>Subtotal of cash outflows from operating activities</b>		<b>2,969,662,763.87</b>	3,011,614,440.59
<hr/>			
<b>Net cash flows from operating activities</b>		<b>-588,664,407.61</b>	73,563,600.11
<hr/>			
<b>II. Cash flows from investing activities</b>			
Refund of investments		11,359,249,000.00	8,159,213,000.00
Gain on investment received		728,716,935.37	533,740,854.82
Net proceeds from disposal of fixed assets, intangible assets and other long-term assets		6,865.00	300.00
Net proceeds from disposal of a subsidiary and other business unit		36,572,518.00	40,000,000.00
Other cash received relating to investing activities		15,000,000.00	
<b>Subtotal of cash inflows from investing activities</b>		<b>12,139,545,318.37</b>	8,732,954,154.82
<hr/>			
Cash paid for purchase and construction of fixed assets, intangible assets and other long-term assets		2,441,402.15	4,710,729.66
Payment for investments		10,383,787,200.00	7,705,533,000.00
Net cash paid for acquisition of a subsidiary and other business unit		1,703,056,279.80	499,000,000.00
Other cash paid relating to investing activities			15,000,000.00
<b>Subtotal of cash outflows from investing activities</b>		<b>12,089,284,881.95</b>	8,224,243,729.66
<hr/>			
<b>Net cash flows from investing activities</b>		<b>50,260,436.42</b>	508,710,425.16

## SECTION 12 FINANCIAL REPORT

Item	Note	2019	2018
<b>III. Cash flows from financing activities</b>			
Capital contributions received		<b>2,498,500,000.00</b>	1,008,472,501.59
Borrowings received		<b>10,797,668,977.78</b>	11,261,130,334.70
Other cash received relating to financing activities			
<b>Subtotal of cash inflows from financing activities</b>		<b>13,296,168,977.78</b>	12,269,602,836.29
<hr/>			
Repayment of debts		<b>10,708,865,600.87</b>	12,138,036,686.00
Distribution of dividends or profit or payment of interest		<b>611,882,169.74</b>	601,419,215.91
Other cash paid relating to financing activities		<b>1,298,488,014.01</b>	30,867,591.74
<b>Subtotal of cash outflows from financing activities</b>		<b>12,619,235,784.62</b>	12,770,323,493.65
<hr/>			
<b>Net cash from financing activities</b>		<b>676,933,193.16</b>	-500,720,657.36
<hr/>			
<b>IV. Impact of exchange rate on cash and cash equivalents</b>		<b>-2,831,358.93</b>	29,858,735.89
<hr/>			
<b>V. Net increase in cash and cash equivalents</b>		<b>135,697,863.04</b>	111,412,103.80
Add: Cash and cash equivalents at beginning of the year		<b>2,184,186,118.60</b>	2,072,774,014.80
<hr/>			
<b>VI. Cash and cash equivalents at end of the year</b>		<b>2,319,883,981.64</b>	2,184,186,118.60

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin



## SECTION 12 FINANCIAL REPORT

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For Year 2019

Unit: RMB

Item	2019											
	Share capital	Preferred stock	Other equity instrument	Capital reserve	Less: treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Subtotal	Total shareholders' interests	Minority shareholders' interests
I. Balance at end of last year	2,559,066,667.00		1,699,801,886.79	854,180,385.59		197,286,107.26	64,767,607.84	188,914,615.74	4,194,677,085.74	10,188,094,356.36	3,042,828,271.59	13,201,522,627.95
Add: Change in accounting policies												
Correction of prior-year errors												
Business combination under common control												
Others												
II. Balance at beginning of the year	2,559,066,667.00		1,699,801,886.79	854,180,385.59		197,286,107.26	64,767,607.84	188,914,615.74	4,194,677,085.74	10,188,094,356.36	3,042,828,271.59	13,201,522,627.95
III. Increases in the year ("-" for loss)			1,296,283,018.86	-58,838,576.30		26,540,822.73	60,137,623.33	12,671,982.36	-173,829,088.69	1,163,865,584.29	1,030,491,738.59	2,193,657,322.88
(I) Total comprehensive income						13,062,020.53		34,862,962.55		47,914,563.08	187,267,962.89	235,182,546.97
(II) Increase and decrease in capital contribution from shareholders			1,296,283,018.86	-58,838,576.30						1,237,444,442.56	976,995,355.66	2,214,439,798.23
1. Capital contribution from ordinary shareholders												
2. Capital contribution from other equity instrument holders			2,498,584,905.65							74,034,304.74	74,034,304.74	
3. Increase in owners' equity arising from share-based payment												
4. Others			-1,202,301,886.79	-58,838,576.30								
(III) Profit distribution								12,671,982.36	-194,803,049.04	-1,261,140,463.09	-1,551,597,174.08	-2,812,737,637.16
1. Appropriation to surplus reserve								12,671,982.36	-12,671,982.36			
2. Distribution to shareholders										-182,131,066.68	-137,828,718.17	-319,959,784.85
3. Others												
(IV) Transfers within shareholders' equity												
1. Capital reserve transferred to share capital												
2. Surplus reserve transferred to share capital												
3. Surplus reserve used to make up loss												
4. Change in DBP transferred to retained earnings												
5. Other comprehensive income transferred into retained earnings												
6. Others												
(V) Special reserve												
1. Appropriation to special reserve												
2. Use of special reserve												
(VI) Others												
IV. Balance at end of the year	2,559,066,667.00		2,996,084,905.65	795,341,809.69		223,826,729.99	124,905,233.17	201,586,598.10	4,021,247,997.05	11,322,059,940.65	4,073,320,010.18	15,395,379,950.83

## SECTION 12 FINANCIAL REPORT

Item	2018											
	Share capital	Preferred stock	Other equity instrument	Capital reserve	Less: treasury stock	Other comprehensive income	Special reserve	Surplus reserve	Undistributed profit	Subtotal	Total shareholders' interests	Minority shareholders' interests
I. Balance at end of last year	2,663,160,000.00		1,900,231,259.09	174,064,869.38		222,512,606.06	40,935,129.49	167,363,677.91	4,009,362,570.95	9,178,230,041.88	2,949,941,021.41	12,127,571,066.29
Add: Change in accounting policies						2,688,801.22				2,688,801.22	-795,239.73	1,893,561.49
Correction of prior-year errors												
Business combination under common control												
Others				4,440,616.50			219,564.71		831,628.74	5,521,809.95	9,145,637.55	14,667,447.51
II. Balance at beginning of the year	2,663,160,000.00		1,900,231,259.09	178,505,486.88		225,201,398.28	41,154,694.20	167,363,677.91	4,010,824,199.69	9,186,440,626.05	2,957,691,359.23	12,144,131,985.28
III. Increases in the year ("-" for loss)	235,906,667.00		-200,429,372.30	675,674,900.11		-27,915,202.02	23,612,913.64	21,550,937.83	183,652,886.05	972,233,730.31	85,136,912.36	1,057,390,642.67
(I) Total comprehensive income									306,103,823.88	278,188,621.86	205,625,191.36	483,813,813.22
(II) Increase and decrease in capital contribution from shareholders	235,906,667.00		-200,429,372.30	675,674,900.11						771,152,194.81	6,627,582.48	777,779,777.29
1. Capital contribution from ordinary shareholders	235,906,667.00			683,675,874.13						979,582,541.13	4,620,000.00	984,202,541.13
2. Capital contribution from other equity instrument holders												
3. Increase in owners' equity arising from share-based payment												
4. Others			-200,429,372.30	-8,000,974.02						-208,430,346.32	2,007,582.48	-206,422,763.84
(III) Profit distribution												
1. Appropriation to surplus reserve								21,550,937.83	-122,250,937.83	-100,700,000.00	-132,515,680.37	-233,215,680.37
2. Distribution to shareholders								21,550,937.83	-21,550,937.83			
3. Others									-100,700,000.00	-100,700,000.00	-132,515,680.37	-233,215,680.37
(IV) Transfers within shareholders' equity												
1. Capital reserve transferred to share capital												
2. Surplus reserve transferred to share capital												
3. Surplus reserve used to make up loss												
4. Change in DDP transferred to retained earnings												
5. Other comprehensive income transferred into retained earnings												
6. Others												
(V) Special reserve												
1. Appropriation to special reserve												
2. Use of special reserve												
Others												
IV. Balance at end of the year	2,959,066,667.00		1,699,801,886.79	854,180,385.99		197,286,107.26	64,767,607.84	188,914,615.74	4,194,677,085.74	10,158,694,356.36	3,042,828,271.59	13,201,522,627.95

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin

## SECTION 12 FINANCIAL REPORT

## STATEMENT OF CHANGES IN EQUITY OF THE PARENT

For Year 2019

Amounts in RMB

Item	2019							Total shareholders' interests			
	Share capital	Preferent stock	Other equity instrument Perpetual bonds	Others	Capital reserve	Less: treasury stock	Other comprehensive income		Special reserve	Surplus reserve	Undistributed profit
I. Balance at end of last year	2,959,066,667.00		1,699,801,886.79		1,198,894,634.78		-36,967,802.08		188,914,615.74	101,482,166.99	6,111,202,159.22
Add: Change in accounting policies											
Correction of prior-year errors											
Others											
II. Balance at beginning of the year	2,959,066,667.00		1,699,801,886.79		1,198,894,634.78		-36,967,802.08		188,914,615.74	101,482,166.99	6,111,202,159.22
III. Increases in the year ("+" for loss)			1,296,283,016.86		-5,698,113.21		48,703,772.08		12,671,982.36	-81,561,827.63	1,271,209,072.51
(I) Total comprehensive income			1,296,283,016.86		-5,698,113.21		35,225,168.88			126,719,823.61	161,944,983.49
(II) Increase and decrease in capital contribution from shareholders											1,290,584,905.65
1. Capital contribution from ordinary shareholders											2,488,584,905.65
2. Capital contribution from other equity instrument holders			2,488,584,905.65								
3. Increase in owners' equity arising from share-based payment											
4. Others			-1,202,301,886.79		-5,698,113.21						
(III) Profit distribution											-1,208,000,000.00
1. Appropriation to surplus reserve									12,671,982.36	-194,803,049.04	-182,131,066.68
2. Distribution to shareholders									12,671,982.36	-12,671,982.36	
3. Others											-182,131,066.68
(IV) Transfers within shareholders' equity							13,478,602.20			-13,478,602.20	
1. Capital reserve transferred to share capital											
2. Surplus reserve transferred to share capital											
3. Surplus reserve used to make up loss											
4. Change in DBP transferred to retained earnings											
5. Other comprehensive income transferred into retained earnings							13,478,602.20			-13,478,602.20	
6. Others											
(V) Special reserve								810,240.05			810,240.05
1. Appropriation to special reserve								9,155,748.96			9,155,748.96
2. Use of special reserve								-9,345,508.91			-9,345,508.91
(VI) Others											
IV. Balance at end of the year	2,959,066,667.00		2,996,084,903.65		1,193,196,521.57		11,735,970.00	810,240.05	201,566,588.10	19,930,229.36	7,382,411,231.73

## SECTION 12 FINANCIAL REPORT

Item	2018							Total shareholders' interests	
	Share capital	Preferred stock	Other equity instrument Perpetual bonds	Others	Attributable to shareholders of the parent Less: treasury stock	Other comprehensive income	Surplus reserve		Undistributed profit
I. Balance at end of last year	2,663,160,000.00		1,900,231,259.09		523,219,734.67	-3,149,129.51	167,363,677.91	8,233,716.50	5,259,059,258.66
Add: Change in accounting policies									
Correction of prior-year errors									
Others									
II. Balance at beginning of the year	2,663,160,000.00		1,900,231,259.09		523,219,734.67	-3,149,129.51	167,363,677.91	8,233,716.50	5,259,059,258.66
III. Increases in the year ("-" for loss)	235,906,667.00		-200,429,372.30		675,674,900.11	-33,818,672.57	21,550,937.83	93,238,440.49	852,142,900.56
(I) Total comprehensive income									
(II) Increase and decrease in capital contribution from shareholders	235,906,667.00		-200,429,372.30		675,674,900.11	-33,818,672.57		215,509,378.32	181,690,705.75
1. Capital contribution from ordinary shareholders	235,906,667.00		-200,429,372.30		683,875,874.13				771,152,194.81
2. Capital contribution from other equity instrument holders									979,582,541.13
3. Increase in owners' equity arising from share-based payment									
4. Others			-200,429,372.30		-8,000,974.02				-208,430,346.32
(III) Profit distribution									
1. Appropriation to surplus reserve							21,550,937.83	-122,250,937.83	-100,700,000.00
2. Distribution to shareholders							21,550,937.83	-21,550,937.83	
3. Others									
(IV) Transfers within shareholders' equity									
1. Capital reserve transferred to share capital									
2. Surplus reserve transferred to share capital									
3. Surplus reserve used to make up loss									
4. Change in DBP transferred to retained earnings									
5. Other comprehensive income transferred into retained earnings									
6. Others									
(V) Special reserve									
1. Appropriation to special reserve									
2. Use of special reserve									
(VI) Others									
IV. Balance at end of the year	2,959,066,667.00		1,699,801,886.79		1,198,894,634.78	-36,967,802.08	188,914,615.74	101,492,156.99	6,111,202,159.22

Legal representative:  
WU Jianqiang

Accounting principal:  
ZHANG Jian

Accounting function's principal:  
ZHANG Xiuyin

## SECTION 12 FINANCIAL REPORT

### NOTES TO THE FINANCIAL STATEMENTS

(Amounts expressed in RMB unless otherwise indicated herein)

#### 1. GENERAL INFORMATION

##### 1.1 Place of incorporation, organizational form and head office.

China Aluminum International Engineering Corporation Limited (hereinafter referred to as “Chalieco”), formerly known as China Aluminum International Engineering Co., Ltd., was established on 16 December 2003 with a capital contribution of RMB200 million from China Aluminum Group Limited (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, 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 basis of 1:1 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 “中鋁國際” and the stock code is “601068”. On 27 August 2018, the Company issued 295,906,667 ordinary shares in Renminbi (A Shares) to the public (at a face value of RMB1.00 per share), increasing its registered capital by RMB295,906,667.00. The enlarged registered capital is RMB2,959,066,667.00.

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

The ultimate controller of Chalieco is China Aluminum Group Limited.

## SECTION 12 FINANCIAL REPORT

### 1. GENERAL INFORMATION (CONTINUED)

#### 1.2 Business nature and principal operations.

The industry in which the Company operates: metals and steel-production/trading.

Principal business activities: engineering technology, design and consultancy, engineering construction and installation, equipment manufacturing and trading.

#### 1.3 Approver of the financial report and the date of approval

The financial statements were approved by the board of Directors of the Company on 30 March 2020.

#### 1.4 Scope of consolidation of financial statements for the year

Consolidated financial statements for the year covers China Aluminum International Engineering Corporation Limited and its subsidiaries. See Note 7 (1) for details.

### 2. BASIS OF PREPARATION

2.1 Basis of preparation: The financial statements have been prepared on the going concern basis of actual transactions and events in accordance with “the Accounting Standards for Business Enterprises – Basic Standards” and relevant specific standards (together “the Accounting Standards for Business Enterprises”) issued by the Ministry of Finance, and based on the following significant accounting policies and accounting estimates.

2.2 Going concern: The Company has the ability to continue as a going concern at least over the next 12 months from the end of reporting period and there is no material event that may affect the Company’s ability to operate as a going concern.

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

#### 3.1 Statement of compliance with the Accounting Standards for Business Enterprises

The financial statements prepared by the Company give a true and complete view of financial position of the Company as at 31 December 2019, and operating results and cash flows of the Company for year 2019 in accordance with the Accounting Standards for Business Enterprises.

#### 3.2 Financial year

The Company’s financial year is the calendar year, from 1st January to 31st December each year.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.3 Operating cycle

The Company takes a 12-months year as a usual operating cycle, and uses an operating cycle to as the standard to determine the liquidity of assets and liabilities.

#### 3.4 Functional currency

The Company's functional currency is RMB.

#### 3.5 Business combination

##### (a) Business combination under common control

If the acquirer of long-term equity investment arising from business combination under common control pays the consideration of combination by payment of cash, transfer of non-cash assets or assumption of debts, the Company records the initial cost of long-term equity investment based on the share of the acquiree's owners' equity in the consolidated financial statements of the ultimate controller on the combination date. If the acquirer pays the consideration of combination by issuance of equity instruments, the total face value of the issued shares is recorded as share capital. The capital reserve is adjusted for the difference between the initial investment cost of long-term equity investment and the carrying value of the consideration of combination (or the total face value of the issued shares). If the capital reserve is not sufficient, any excess reduces retained earnings.

##### (b) Business combination not under common control

For business combination not under common control, the combination cost is the sum of the fair value of assets, liabilities incurred or assumed and equity securities issued by the acquirer in order to obtain control over the acquiree on the acquisition date. The identifiable assets, liabilities and contingent liabilities of the acquiree that meet the recognition conditions and are acquired in the business combination not under common control are measured at their fair value on the acquisition date. The excess of the acquirer's combination cost over the share of fair value of net identifiable assets of the acquiree obtained in the combination is reflected in the value of goodwill. If the acquirer's combination cost is lower than the share of fair value of net identifiable assets of the acquiree obtained in the combination, and the difference remains after view, then the difference is recorded in non-operating income for the current period.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.6 Method for preparing consolidated financial statements

**(a) Scope of consolidated financial statements**

The Company includes all subsidiaries (including separate entities controlled by the Company) in the scope of consolidated financial statements, including companies controlled by the Company, separable parts of the investee and structured entities.

**(b) Unifying accounting policies, balance sheet date and accounting period of the parent and subsidiaries**

If the accounting policy or accounting period adopted by a subsidiary is inconsistent with that adopted by the Company, the subsidiary's financial statements are adjusted for the Company's accounting policy or accounting period as necessary in preparing the consolidated financial statements.

**(c) Eliminating inter-company transactions**

The Company prepares consolidated financial statements based on balance sheets of the Company and its subsidiaries, having eliminated all transactions between the Company and its subsidiaries and among subsidiaries. The share of owners' equity of a subsidiary not attributable to the Company is recorded as non-controlling interests, and presented in "non-controlling interests" under owners' equity in the consolidated balance sheet. If a subsidiary holds long-term equity investment in the Company, the same is deemed treasury stock of the Group, reduces owners' equity and is presented as "less: treasury stock" under owners' equity in the consolidated balance sheet.

**(d) Accounting Treatment of Subsidiaries Acquired through Merger**

For a subsidiary acquired through business combination under common control, its assets, liabilities, operating results and cash flows are included in the consolidated financial statements from the beginning of the current period, as if the business combination occurred when the ultimate controller started to control the subsidiary. For a subsidiary acquired through business combination not under common control, for the purpose of preparing the consolidated financial statements, its individual financial statements are adjusted to the fair value of its net identifiable assets on the date of acquisition.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.7 Classification of joint arrangements and accounting treatment of joint operations

##### (a) Classification of joint arrangements

Joint venture arrangements are classified as either joint operations or joint ventures. A joint arrangement not reached by a separate entity is classified as a joint operation. Separate entities refer to entities with separately identifiable financial structure, including separate incorporated entities, and unincorporated entities recognized by law. A joint arrangement reached through a separate entity is usually classified as a joint venture. If changes in relevant facts and circumstances lead to changes in the rights and obligations of a joint venture to the joint arrangement, the joint venture should reassess the classification of the joint arrangement.

##### (b) Accounting for joint operations

As a participant in a joint operation, the Company recognizes the following items in relation to its share of interests in the joint operation, and accounts for the same according to requirements of relevant accounting standards for enterprises: separately held assets or liabilities, share of jointly held assets or liabilities, revenue from sales of the share of output of the joint venture, share of revenue generated from the sales of output of the joint venture, separately incurred expenses, and share of expenses incurred by the joint operation.

As a participant that does not have joint control over the joint operation, the Company accounts for its investment by reference to requirements applicable to a joint venture if it enjoys relevant assets and assumes relevant liabilities of the joint operation, or it accounts for the investment in accordance with requirements of relevant accounting standards for business enterprises.

##### (c) Accounting for joint ventures

The Company, as a joint venture, accounts for its investment in the joint venture in accordance with requirements of the “Accounting Standards for Business Enterprises No.2 – Long-term Equity Investment”. If not a joint venture, the Company accounts for its investment based on degree of its influence on the joint venture.

#### 3.8 Determination of cash and cash equivalents

For the purpose of preparing the statement of cash flows, cash refers to cash on hand and deposits held at all with banks. For the purpose of preparing the statement of cash flows, cash equivalents refer to short-term highly liquid investments that can be readily converted into known amount of cash with insignificant risk of change in value.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.9 Foreign currency transactions and translation of foreign currency financial statements

##### (a) Translation of foreign currency transactions

The Company translates foreign currency transactions into functional currency at the spot exchange rate prevailing on the date of transaction. On the balance sheet date, foreign currency monetary items are converted at the spot exchange rate prevailing on the balance sheet date. Exchange gain or loss arising from the difference between the spot exchange rate prevailing on that date and the spot exchange rate prevailing at the time of initial recognition or the previous balance sheet date is recognized in the profit or loss, except that exchange differences on foreign currency special loans qualified for capitalization are capitalized and included in the cost of related assets during the capitalization period. Foreign currency non-monetary items measured at historical cost are still converted at the spot exchange rate prevailing on the transaction date, and the amount in its functional currency is not changed. Foreign currency non-monetary items measured at fair value are converted at the spot exchange rate prevailing on the date when the fair value is determined. The difference between the converted amount in functional currency and the original amount in functional currency is treated as fair value change (including exchange rate change) and in profit or loss or in other comprehensive income.

##### (b) Translation of foreign currency financial statements

If any subsidiary, joint venture and associate of the Company adopts a functional currency different from that of the Company, its foreign currency financial statements are translated before accounting and preparation of consolidated financial statements. Assets and liabilities items in the balance sheet are translated at the spot exchange rate prevailing on the balance sheet date. Except for “undistributed profit”, other owners’ equity items are translated at the spot exchange rate prevailing at the time of occurrence. Income and expense items in the income statement are translated at the spot exchange rate on the transaction date. The translation difference on foreign currency statements resulting from the translation is shown within other comprehensive income in owners’ equity in the balance sheet. Foreign currency cash flows are translated at the spot exchange rate prevailing on the date when the cash flow occurs. The impact of exchange rate changes on cash is shown separately in the statement of cash flows. When an overseas operation is disposed of, the translation difference on foreign currency statements related to the overseas operation is recorded in profit or loss for the period in which the disposal occurs in whole or at the percentage of overseas operation disposed of.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments

##### (a) Recognition and derecognition of financial instruments

The Company recognizes a financial asset, financial liability or equity instrument when it becomes a party to a financial instrument contract.

For the purchase or sale of a financial asset by conventional means, the Company recognizes the asset to be received or the liability to be assumed for this purpose on the transaction day, or derecognize the sold asset on the transaction day recognizes the gain or loss on disposal as well as the receivables due from the buyer.

A financial asset that meets any one of the following conditions is derecognized:

- (1) The contractual right to receive cash flows from the financial asset is terminated.
- (2) The financial asset has been transferred, and the transfer meets the requirements for derecognition of financial assets.

If the present obligation of a financial liability (or part thereof) has been discharged, the Company derecognizes the financial liability (or part thereof).

If the Company (as the borrower) and the lender enters into an agreement to replace the original financial liability by assuming a new financial liability, and the contract terms of the new financial liability deviated materially from the original financial liability, the Company derecognizes the original financial liability and recognizes a new financial liability.

If the Company makes any substantial revision to the contract terms of the original financial liability (or part thereof), the original financial liability is derecognized and a new financial liability is recognized in accordance with the revised terms.

If a financial liability (or part thereof) is derecognized, the Company records the difference between its book value and the consideration paid (including non-cash assets transferred or liabilities assumed) in the profit or loss.

If the Company repurchases part of a financial liability, the book value of the financial liability is allocated between the derecognized portion and the remaining portion in proportion to their respective fair values on the repurchasing date. The difference between the book value allocated to the derecognized portion and the consideration paid (including non-cash assets transferred or liabilities assumed) is included in the profit or loss.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (b) Transfer of financial assets

Transfer of a financial asset refers to that the Company (as the transferor) transfers or delivers the financial asset (or its cash flows) to another party (transferee) other than the issuer of the financial asset.

Transfer of a financial asset includes the following two circumstance:

- (1) The Company transfers the contractual right to receive cash flows from the financial asset to another party.
- (2) The Company retains the contractual right to receive cash flows from the financial asset, but undertakes the contractual obligation to pay the received cash flows to one or more ultimate beneficiaries, and the following conditions are satisfied:
  - A. The Company is obliged to pay the ultimate beneficiary only when it receives equivalent cash flows from the financial asset. This condition is deemed satisfied if the Company provides advances but has the right to fully recover the advance and charge interest at the market interest rate.
  - B. Although the transfer contract prohibits the Company from selling or mortgaging the financial asset, the Company can use it as a guarantee of the obligation to pay cash flows to the ultimate beneficiary.
  - C. The Company has the obligation to transfer all cash flows collected on behalf of the ultimate beneficiary to the ultimate beneficiary in a timely manner without any undue delay. The Company has no right to reinvest the cash flows, but this condition is deemed satisfied if the Company invests such cash flows in cash or cash equivalents for the short settlement period between the collection date and the transfer date required by the ultimate beneficiary and pays the gain on such investment to the ultimate beneficiary as agreed in the contract.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (b) Transfer of financial assets (continued)

When a financial asset is transferred, the Company assesses the degree of risks and rewards in retaining the ownership of the financial asset and treats it as follows:

- (1) If the Company has transferred almost all risks and rewards in the ownership of the financial asset, the financial asset is derecognized, and the rights and obligations generated or retained in the transfer are separately recognized as assets or liabilities.
- (2) If the Company has retained almost all risks and rewards in the ownership of the financial asset, it continues to recognize the financial asset.
- (3) If the Company neither transfers nor retains almost all risks and rewards in the ownership of the financial asset, the Company treats it as follows depending on whether it retains control over the financial asset:
  - A. If the Company does not retain control over the financial asset, the financial asset is derecognized, and the rights and obligations arising from or retained in the transfer are separately recognized as assets or liabilities.
  - B. If the Company retains control over the financial asset, it recognizes relevant financial asset to the extent of its continuing involvement in the transferred financial asset and recognizes relevant liabilities accordingly.

##### (c) Classification of financial assets

The Company classifies financial assets into the following three categories depending on its business mode of managing financial assets and the characteristics of contractual cash flows from financial assets:

- (1) Financial assets at amortized cost.
- (2) Financial assets at fair value through other comprehensive income (FVTOCI).
- (3) Financial assets at fair value through profit or loss (FVTPL).

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (c) Classification of financial assets (continued)

Financial assets that meet all of the following conditions are classified as financial assets at amortized cost:

- (1) The Company's business mode of managing the financial asset is to collect the contractual cash flows.
- (2) The contractual terms of the financial asset stipulate that the cash flow generated on a specific date is solely the payment of principal and interest based on the amount of outstanding principal.

Financial assets that meet all of the following conditions are classified as financial assets at FVTOCI:

- (1) The Company's business mode of managing the financial asset aims at both collecting the contractual cash flow and selling the financial asset.
- (2) The contractual terms of the financial asset stipulate that the cash flow generated on a specific date is solely the payment of principal and interest based on the amount of outstanding principal.

The Company classifies all financial assets other than those at amortized cost and those at FVTOCI as financial assets at FVTPL.

On initial recognition, the Company may elect to designate equity instrument investments not for trading purpose as financial assets at FVTOCI, and designation is not cancellable once made.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (c) Classification of financial assets (continued)

If a financial asset or financial liability meets any of the following conditions, it indicates that the Company holds the financial asset or assumes the financial liability for trading purpose:

- (1) The purpose of acquiring relevant financial asset or assuming relevant financial liability is mainly for sale or repurchase in the near future.
- (2) Relevant financial asset or financial liability is part of the identifiable portfolio of financial instruments under centralized management at the time of initial recognition, and there is objective evidence that there is a short-term profit pattern in the near future.
- (3) Relevant financial assets or financial liabilities are derivative instruments. However, derivatives that meet the definition of financial guarantee contracts and derivatives designated as effective hedging instruments are excluded.

On initial recognition, if accounting mismatch can be eliminated or significantly reduced, the Company may elect to designate financial assets as financial assets at FVTPL. The designation is not revocable once made.

##### (d) Classification of financial liabilities

Except for the following items, the Company classifies financial liabilities as financial liabilities at amortized cost:

- (1) Financial liabilities at FVTPL include financial liabilities held for trading (including derivatives that are financial liabilities) and financial liabilities designated at fair value through profit or loss.
- (2) Financial liabilities resulting from the transfer of financial assets that do not meet the conditions for derecognition or from continuing involvement in the transferred financial asset.

If a financial liability arises from contingent consideration recognized by the Company as the acquirer in a business combination not under common control, the financial liability is measured at FVTPL.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (d) Classification of financial liabilities (continued)

In order to provide more relevant accounting information on initial recognition, the Company may elect to designate a financial liability at FVTPL provided that any of the following conditions is satisfied:

- (1) The designation can eliminate or significantly reduce accounting mismatch.
- (2) Pursuant to the Company's risk management or investment strategy set out in an official written document, the management and performance evaluation of the financial liability portfolio or the portfolio of financial assets and financial liabilities are conducted at fair value, and reported to key management within the Company on this basis.

The designation is not revocable once made.

##### (e) Reclassification of financial instruments

When the Company changes its business mode of managing financial assets, it reclassifies all relevant financial assets affected thereby.

The Company does not reclassify any financial liability.

In case of reclassification of financial assets, the Company adopts the prospective method for relevant accounting treatment from the reclassification date, and does not retroactively adjust previously recognized gains, losses (including impairment losses or gains) or interests.

If the Company reclassifies a financial asset at amortized cost to a financial asset at FVTPL, it measures the asset at its fair value on the reclassification date. The difference between the original book value and the fair value is recorded in profit or loss.

If the Company reclassifies a financial asset at amortized cost to a financial asset at FVTOCI, it measures the financial asset at its fair value on the reclassification date. The difference between the original book value and the fair value is recorded in other comprehensive income. The reclassification of this financial asset does not affect the measurement of its effective interest rate and expected credit loss.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (e) Reclassification of financial instruments (continued)

If the Company reclassifies a financial asset at FVTOCI to a financial asset at amortized cost, it reverses the accumulated gains or losses previously recorded in other comprehensive income, adjusts the fair value of the financial asset on the reclassification date and uses the adjusted amount as its new book value, as if the financial asset has been measured at amortized cost from the very beginning. The reclassification of the financial asset does not affect the measurement of its effective interest rate and expected credit loss.

If the Company reclassifies a financial asset at FVTOCI to a financial asset at FVTPL, it continues to measure the financial asset at fair value. Meanwhile, the Company transfers accumulated gains or losses previously recorded in other comprehensive income from other comprehensive income to profit or loss.

If the Company reclassifies a financial asset at FVTPL to a financial asset at amortised cost, it uses the fair value on the reclassification date as the new book balance.

If the Company reclassifies a financial asset at FVTPL to a financial asset at FVTOCI, it continues to measure the financial asset at fair value.

##### (f) Measurement of financial instruments

The Company measures financial assets or financial liabilities at fair value on initial recognition. For financial assets and financial liabilities at FVTPL, relevant transaction costs are directly recorded in profit or loss; for other financial assets or financial liabilities, relevant transaction costs are recorded in the initial recognition amount. However, if accounts receivable initially recognized by the Company do not contain significant financing component or if the financing component of a contract for a term not exceeding one year is not considered, the financial asset or financial liability is initially measured at the transaction price.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (f) Measurement of financial instruments (continued)

The amortized cost of a financial asset or financial liability is determined on the basis of its initially recognized amount adjusted as follows:

- (1) Deducting any repaid principal.
- (2) Adding or subtracting the accumulated amortization of the difference between the amount initially recognized and the amount on the maturity date using the effective interest rate method.
- (3) Deducting accumulated allowance for loss (in case of a financial asset).

The Company recognizes interest income using the effective interest rate method. Interest income is calculated and determined by multiplying the book balance of a financial asset by the effective interest rate, except for the following:

- (1) For a purchased or originated financial asset that is credit-impaired, the Company calculates and determines its interest income by multiplying the amortized cost of the financial asset by the credit adjusted effective interest rate from the initial recognition.
- (2) For a purchased or originated financial asset that is not credit-impaired but is credit-impaired subsequently, the Company calculates and determines the interest income by multiplying the amortized cost by the effective interest rate in the subsequent period. Where the Company calculates the interest income by applying the effective interest rate method to the amortised cost of a financial asset as aforesaid, if the financial instrument is no longer credit-impaired subsequently due to improvement of its credit risk, and such improvement can be objectively related to an event occurring after the above provisions are applied (such as an upgrade to the debtor's credit rating), the Company then calculates and determines the interest income by multiplying the book balance of the financial asset by the effective interest rate.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (f) Measurement of financial instruments (continued)

A financial asset is credit-impaired when one or more events that have adverse impact on expected future cash flows of the financial asset. Evidences that a financial asset is credit-impaired include the following observable information:

- (1) The issuer or debtor has material financial difficulties;
- (2) The debtor violates the contract, such as default or overdue payment of interest or principal, etc.;
- (3) Creditors grant concessions that would not otherwise be granted to the debtor due to economic or contractual considerations related to the debtor's financial difficulties;
- (4) The debtor is likely to go bankrupt or undergo other financial reorganization;
- (5) An active market for the financial asset disappears as a result of financial difficulties of the issuer or debtor;
- (6) A financial asset is purchased or originated at a substantial discount which reflects the fact that credit loss has occurred.

If the Company revises or renegotiates the contract with the counterparty, which does not result in derecognition of the financial asset but results in a change in cash flows of the contract, the Company recalculates the carrying amount of the financial asset and records relevant gain or loss in profit or loss.

If the Company no longer reasonably expects contractual cash flows of a financial asset to be fully or partially recoverable, the book balance of the financial asset is directly written down. Such write-down constitutes derecognition of relevant financial asset.

The Company measures investments in equity instruments and contracts associated with such investments at fair value. However, under limited circumstances, if there is insufficient recent information to determine the fair value or a possible estimate of the fair value covers a wide range, and the cost represents the best estimate of the fair value within the range, then the cost may represent an appropriate estimate of the fair value within the range.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (g) Gain and loss

The Company recognises gain or loss on a financial asset or financial liability measured at fair value in profit or loss, unless the financial asset or financial liability fall under any of the following circumstances:

- (1) It is part of qualifying hedge.
- (2) It is an investment in equity instruments not for trading purpose, and the Company has designated it as a financial asset at FVTOCI.
- (3) It is a financial liability designated at FVTPL and changes in its fair value arising from credit risk of the Company are recorded in other comprehensive income.
- (4) It is classified as a financial asset at FVTOCI, and changes in its fair value other than impairment loss or gain and exchange gain or loss are recorded in other comprehensive income.

The Company recognizes dividend income in profit or loss only if all of the following conditions are met:

- (1) The Company's right to receive the dividends has been established;
- (2) Economic benefits related to the dividends are likely to flow into the company; and
- (3) The amount of dividends can be measured reliably.

Gains or losses arising from a financial asset that is measured at amortized cost and is not part of any hedging are recorded in profit or loss on derecognition, reclassification, amortization using the effective interest rate method or recognition of impairment according to the provisions of these standards.

Gains or losses arising from a financial liability that is measured at amortized cost and is not part of any hedging are recorded in profit or loss upon derecognition or upon amortization using the effective interest rate method.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.10 Financial instruments (continued)

##### (g) Gain and loss (continued)

Gains or losses arising from a financial liability designated at FVTPL are treated as follows:

- (1) Changes in fair value of the financial liability caused by changes in credit risk of the Company is recorded in other comprehensive income;
- (2) Other changes in fair value of the financial liability are recorded in profit or loss.

If the above treatment of the impact of changes in credit risk of the financial liability would cause or expand accounting mismatch in profit or loss, the Company records all gains or losses on the financial liability (including the impact of changes in credit risk of the Company) in profit or loss.

Upon derecognition of a financial liability, all accumulated gains or losses previously recorded in other comprehensive income are transferred from other comprehensive income to retained earnings.

Upon derecognition of an equity instrument investment not held for trading purpose that is designated at FVTOCI, all accumulated gains or losses previously recorded in other comprehensive income are transferred from other comprehensive income to retained earnings.

All gains or losses (other than impairment loss or gain and exchange gain or loss) on a financial asset classified at FVTOCI, are recorded in other comprehensive income till its derecognition or reclassification. However, interest income from the financial asset calculated using the effective interest rate method is recorded in profit or loss. The amount recorded in profit or loss of each period is equal to the amount recorded in profit or loss of such period assuming the financial asset has been measured at amortised cost. Upon derecognition of the financial asset, all accumulated gains or losses previously recorded in other comprehensive income are transferred from other comprehensive income to profit or loss.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.11 Determination and accounting of expected credit loss

**(a) Expected credit loss**

The Company accounts for impairment and recognizes loss allowance for the following items based on expected credit loss:

- (1) Financial assets at amortized cost and financial assets at FVTOCI.
- (2) Lease receivables.
- (3) Contract assets.

Expected credit loss refers to the average of credit loss on financial instruments weighted by the risk of default.

For financial assets classified at FVTOCI, the Company recognizes loss allowance in other comprehensive income, and records impairment loss or gain in profit or loss without reducing the book value of the financial assets shown in the balance sheet.

The Company's method for measuring expected credit loss on finance instruments reflects the following elements:

- (1) Unbiased probability weighted average determined by evaluating a series of possible results.
- (2) Time value of money.
- (3) Reasonable and reliable information on past events, current situation and future economic forecast that are available on the balance sheet date without unnecessary extra costs or efforts.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.11 Determination and accounting of expected credit loss (continued)

##### (b) Purchased or originated financial assets that are credit-impaired

For purchased or originated financial assets that are credit impaired, the Company recognizes accumulated changes in expected credit loss solely for the lifetime since initial recognition as loss allowance on the balance sheet date. On each balance sheet date, the Company takes the change in lifetime expected credit loss as impairment loss or gain and records it in profit or loss. Even if the lifetime expected credit loss determined on the balance sheet date is less than the amount of expected credit loss reflected in estimated cash flow at the time of initial recognition, the Company recognizes favorable changes in expected credit loss as impairment profit.

##### (c) Purchased or originated financial assets that are not credit impaired

- (1) For each of the following items, the Company always measures its loss allowance at an amount equivalent to the lifetime expected credit loss:
  - A. Receivables or contract assets arising from transactions under the Accounting Standards for Business Enterprises No.14 – Revenue, whether or not they contain any significant financing component;
  - B. Lease receivables arising from transactions under the Accounting Standards for Business Enterprises No.21 – Lease, including receivables under finance lease and receivables under operating lease.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.11 Determination and accounting of expected credit loss (continued)

##### (c) Purchased or originated financial assets that are not credit impaired (continued)

- (2) For purchased or originated financial assets (such as other receivables) that are not credit impaired other than those under (1) above, the Company evaluates whether the credit risk of relevant financial instruments has increased significantly since initial confirmation on each balance sheet date, and measures their loss allowance and recognizes their expected credit loss and changes thereof as follows:
- A. If the credit risk of the financial asset has increased significantly since initial confirmation, the Company measures its loss allowance at an amount equivalent to lifetime expected credit loss of the financial asset.
  - B. If the credit risk of the financial asset has not increased significantly since initial confirmation, the Company measures its loss allowance at an amount equivalent to expected credit loss of the financial asset over the next 12 months.

Any increase in or reversal of loss allowance arising on the basis of expected credit loss is recorded in profit or loss as impairment loss or gain.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.11 Determination and accounting of expected credit loss (continued)

(d) **Receivables arising from transactions under the Accounting Standards for Business Enterprises No.14 – Revenue**

On the balance sheet date, if expected credit loss 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 loss allowance on an individual basis. For the remaining receivables (excluding those among member companies covered under the consolidated financial statements), expected credit loss is estimated and loss allowance is recognized by aging on a collective basis at the following percentages, taking into consideration past experience, current conditions and future forecast:

(1) Accounts receivable

Aging	Accounts receivable proportion (%)
Within 1 year (inclusive)	0.50
Between 1-2 years	10.00
Between 2-3 years	20.00
Between 3-4 years	30.00
Between 4-5 years	50.00
Over 5 years	100.00

(2) Long-term receivables

Aging	Proportion (%)
Before due	0.50
Within 1 year past due	10.00
1-2 years past due	20.00
2-3 years past due	30.00
3-4 years past due	50.00
Over 4 years past due	100.00

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.11 Determination and accounting of expected credit loss (continued)

(e) **Contract assets arising from transactions under the Accounting Standards for Business Enterprises No.14 – Revenue**

On the balance sheet date, 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 (“the specific identification method”). The remaining contract assets are divided into two groups taking into consideration past experience, current conditions and future forecast, and expected credit loss is estimated and loss allowance is recognized as follows respectively:

- (1) Group 1: Contract assets not delivered to customers for use

For these contract assets, the Company recognizes loss allowance for contract assets at 0.5% of the balance.

- (2) Group 2: Contract assets delivered to customers for use

The Company recognizes loss allowance for the contract assets on the basis of aging analysis. The aging is calculated from the date of delivery and the loss allowance percentage is as follows:

Aging	Proportion (%)
Within 1 year (inclusive)	0.50
Between 1-2 years	10.00
Between 2-3 years	20.00
Between 3-4 years	30.00
Between 4-5 years	50.00
Over 5 years	100.00

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.12 Inventory

**(a) Inventory classification**

Inventory refers to finished products or commodities held for sale, work in progress of production, and materials consumed in the process of production or rendering of service in daily activities of the Company. It mainly includes contract assets, raw materials, work in process, commodity stock, 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.

**(b) Measurement of outgoing inventories**

The weighted average method is used to determine the actual cost of outgoing inventories.

**(c) Provision for impairment of inventories**

On the balance sheet date, inventories are measured at the lower of cost and net realizable value, and provision for impairment of inventories is recognized on an individual basis, but provision for impairment of inventories in large quantity and low unit price is made by the category of inventories.

**(d) Inventory system**

The Company adopts the perpetual inventory system.

**(e) Amortization method for low-value consumables and packaging materials**

Low-value consumables and packaging materials are amortized on a one-off basis.

#### 3.13 Contract assets and contract liabilities

**(a) Contract assets**

The Company presents as contract assets the right to receive consideration for goods or services that have been transferred to customers (and this right depends on factors other than the lapse of time). Loss allowance for contract assets are recognized based on expected credit loss. See Note 3.11 for details on determination and accounting treatment of expected credit loss on contract assets.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.13 Contract assets and contract liabilities (continued)

##### (b) Contract liabilities

Contract liabilities refer to the obligation to transfer goods or services to customers for the consideration received or receivable from customers. Contract assets and contract liabilities under the same contract are shown on a net basis.

#### 3.14 Long-term equity investment

##### (a) Determination of initial investment cost

The initial investment cost of a long-term equity investment, if acquired in business combination under common control, is determined based on the share of book value of owners' equity of the acquiree in the consolidated financial statements of the ultimate controller on the acquisition date, and if acquired in business combination not under common control, is determined based on the combination cost on the acquisition date. The initial investment cost of a long-term equity investment acquired by payment of cash is the acquisition price actually paid; the initial investment cost of a long-term equity investment acquired by issuance of equity securities is the fair value of the equity securities issued; the initial investment cost of a long-term equity investment acquired through debt restructuring is determined according to relevant provisions of the Accounting Standards for Business Enterprises No. 12 – Debt Restructuring; the initial investment cost of a long-term equity investment acquired through non-monetary asset exchange is determined according to relevant provisions of the Accounting Standards for Business Enterprises No. 7 – Non-monetary Asset Exchange.

##### (b) Subsequent measurement and gain or loss recognition

The Company accounts for long-term equity investments using the cost method if it can exercise control over the investee and accounts for long-term equity investments in associates and joint ventures using the equity method. The Company's equity investments in associates, if indirectly held through venture capital firms, mutual funds, trust companies or similar entities including investment-linked insurance funds, are accounted for according to the Accounting Standards for Business Enterprises No.22 – Recognition and Measurement of Financial Instruments whether or not the above entities have a significant influence on such investments, and are accounted for using the equity method if otherwise.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.14 Long-term equity investment (continued)

##### (c) Basis for determining joint control over and significant influence on the investee

Joint control over the investee means that any decision on activities having significant influence on the return of an arrangement is subject to prior unanimous consent of participants sharing the control, including the sales and purchase of goods or services, the management of financial assets, the acquisition and disposal of assets, research and development activities and financing activities. Significant influence on the investee means holding 20% to 50% voting capital of the investee, or (if holding less than 20% voting capital of the investee) falling into any of the following circumstances: being represented in the board of directors or similar authority of the investee; participating in policy-making of the investee; sending management personnel to the investee; being relied on by the investee for technology or technical data; occurrence of material transactions with the investee.

#### 3.15 Investment property

The Company's investment properties are classified into land use rights for lease, buildings for lease, and land use rights held for transfer after appreciation. Investment property is initially measured at cost, and subsequent measured using the cost model.

Among investment property of the Company, buildings for lease are depreciated on a straight line basis, details of which are the same as those for fixed assets. Among investment property of the Company, buildings for lease, and land use rights held for transfer after appreciation are depreciated on a straight line basis, details of which are the same as those for intangible assets.

#### 3.16 Fixed assets

##### (a) Determination of fixed assets

Fixed assets refer to tangible assets held for the sake of production of goods, rendering of services, lease or business management, with a service life of more than one financial year. A fixed asset is recognized when economic benefits related to the fixed asset are likely to flow into the Company and the cost of this fixed asset can be measured reliably.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.16 Fixed assets (continued)

##### (b) Classification and depreciation of fixed assets

The Company's fixed assets are mainly classified into houses and buildings, machinery and equipment, electronic equipment, and transportation equipment. Fixed assets are depreciated on a straight-line basis. Service life and estimated net residual value of fixed assets are determined based on the nature and usage of fixed assets, determine the. The service life, estimated net residual value and depreciation method of the fixed assets are reviewed at the end of each year, and adjusted accordingly if there is any difference from original estimates. The Company depreciates all fixed assets, except fixed assets that have been fully depreciated but are still in use and the land that is separately measured and recorded.

Estimated service life, estimated net residual value rate and annual depreciation rate of each fixed asset category are set out as follows:

Asset category	Estimated service life (year)	Estimated net residual value rate (%)	Annual depreciation rate (%)
Housing and buildings			
General housing and buildings	8-45 years	3.00, 5.00	2.11-12.13
Temporary facilities	2-3 years		33.33-50.00
Machinery and equipment	8-20 years	3.00, 5.00	4.75-12.13
Transportation equipment	5-14 years	3.00, 5.00	6.79-19.40
Office equipment and others	4-10 years	3.00, 5.00	9.50-24.25

##### (c) Determination and measurement of fixed assets under finance lease

Finance lease is a lease that all risks and rewards in the ownership of the asset have been essentially transferred. Fixed assets under finance lease are initially recorded at the lower of the fair value of the leased asset and the present value of minimum lease payment at the lease commencement date. Subsequently, depreciation and impairment provision of fixed assets under finance lease follows the same policies for owned fixed assets of the Company.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.17 Construction in progress

The Company's construction in progress is divided into projects under construction by the proprietor and projects under construction by the contractor. Construction in progress is transferred to fixed assets when the construction is completed and the conditions for intended use are reached. Reaching the conditions for intended use means any of the following circumstances: the substantial construction (including installation) has been finished completely or substantially; the result of trial production or operation shows that the asset can run normally or produce quality products stably or that the asset can function or operate normally; the fixed asset under construction incurs very little or essentially no further capital expenditure; the fixed asset purchased or built has reached or basically reached the designed or contractual requirements.

#### 3.18 Borrowing costs

##### (a) Principles for capitalised of borrowing costs

Borrowing costs incurred by the Company, which are directly attributable to the purchase, construction or production of qualifying assets, are capitalized into the cost of relevant assets; other borrowing costs are expensed when incurred. Qualifying refer to fixed assets, investment properties, inventories and other assets that require purchase, construction or production activities over a very long period to reach the conditions for intended use.

Capitalization period refers to the period from the time point when borrowing costs start capitalization to the time point when capitalization stops, excluding the period during which capitalization of borrowing costs is suspended. The capitalization of borrowing costs are suspended if purchase, construction or production activities are interrupted abnormally for more than 3 consecutive months.

Interest on specific-purpose borrowings is determined based on actual interest expenses incurred for the specific-purpose loan for the current period, minus interest income from depositing the unused portion with the bank or gain on temporary investment. If any general-purpose borrowing is used, interest is determined by multiplying the weighted average excess of accumulated asset expenditures over the amount of specific-purpose borrowings by the capitalization rate of utilized general-purpose borrowings. The capitalization rate is the weighted average interest rate of general-purpose borrowings. In case of discount or premium on the borrowing, the discount or premium is amortised during each financial period using the effective interest rate method and the interest amount for each amount is adjusted accordingly.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.18 Borrowing costs (continued)

##### (b) Calculation of capitalised amount

The effective interest rate method is a method to calculate the amortized discount or premium or interest expense at the effective interest rate of the loan. The effective interest rate is the rate that is used to discount expected future cash flows of the loan over its life to current book value of the loan.

#### 3.19 Intangible assets

##### (a) Measurement of intangible assets

Intangible assets are initially measured at cost. For purchased intangible assets, the actual cost is the actually paid price and related expenses. For intangible assets injected by investors, the actual cost is determined at the value agreed in the investment contract or agreement, or if the value agreed in the contract or agreement is unfair, at the fair value. The cost of intangible assets developed by the Company is the total expenditure incurred before reaching the conditions for intended use.

Subsequent measurement of intangible assets: The Company amortises intangible assets with a limited service life using the straight-line method, reviews the service life and amortization method of intangible assets at the end of each year, and makes adjustments if there is any difference from the original estimate. The Company does not amortise intangible assets with an indefinite service life, but review the service life at the end of each year, and estimates its service life and amortize it on a straight-line basis if there is conclusive evidence that the service life is limited.

##### (b) 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.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.19 Intangible assets (continued)

**(b) Basis for determining an indefinite service life (continued)**

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.

**(c) Specific criteria for defining research stage and development stage of in-house research and development projects, and specific criteria for development stage costs eligible for capitalization**

Specific criteria for defining research stage and development stage of in-house research and development projects:

Research stage costs of in-house research and development projects are expensed when incurred.

Development stage costs satisfying all of the following conditions are recognized as intangible assets:

- (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) It can be proved how the intangible asset will generate economic benefits;
- (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 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.19 Intangible assets (continued)

- (c) Specific criteria for defining research stage and development stage of in-house research and development projects, and specific criteria for development stage costs eligible for capitalization (continued)

Development stage costs not satisfying the above conditions are expensed when incurred. Development costs expensed in prior period will not be recognized as an asset in subsequent period. Capitalised development stage costs are shown as development costs in the balance sheet and transferred to intangible asset from the date on which it reaches the conditions for intended use.

Specific criteria for dividing research stage and development stage of in-house research and development projects: the development stage is defined as the planned study phase for acquiring new technologies and knowledge, which is characterized by planning and exploration. The development stage is defined as the stage before commercial production or use during which research results or other knowledge are applied to a certain plan or design to produce new or substantially improved materials, devices and products, and is characterized by and other stages, which are identified as the development stage. This stage has the characteristics of pertinence and greater possibility of generating results.

#### 3.20 Long-term asset impairment

Long-term equity investments, investment properties measured using the most model, fixed assets, construction in progress, intangible assets, goodwill and other long-term assets are tested for impairment if they show signs of impairment on the balance sheet date. If the result of impairment test shows that the recoverable amount of the asset is lower than its book value, the Company recognizes impairment provisions and impairment loss based on the difference.

The recoverable amount is the higher of the fair value of the asset net of disposal expenses and the present value of estimated future cash flows of the asset. Asset impairment provision is calculated and recognized on an asset-by-asset basis. If it is difficult to estimate the recoverable amount of a single asset, the Company estimate the recoverable amount of the asset group to which the asset belongs. An asset group is the smallest group of assets that can generate cash inflow independently.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.20 Long-term asset impairment (continued)

Goodwill separately shown in the financial statements is tested for impairment at least annually, regardless of whether there is sign of impairment. In the impairment test, the book value of goodwill is allocated to the asset group or asset group combination expected to benefit from the synergy effect of business combination. If the test results show that the recoverable amount of the asset group or the asset group combination containing the allocated goodwill is lower than its book value, impairment loss is recognized accordingly. The amount of impairment loss is firstly offset against the book value of goodwill allocated to the asset group or asset group combination, and then offset against the book value of other assets other than goodwill in the asset group or asset group combination in proportion to their book value.

Once recognized, impairment loss on the above-mentioned assets cannot be reversed to the extent that their value are recovered in future period.

#### 3.21 Long-term prepaid expenses

Long-term prepaid expenses refer to expenses that have been paid but have a benefiting period longer than one year (one year exclusive). Long-term prepaid expenses are amortized over the period benefiting from the expenses. If the long-term prepaid expense cannot benefit subsequent financial period, the amortized value of the item is fully charged to profit or loss.

#### 3.22 Employee benefits

Employee benefits refer to all kinds of remuneration or compensation paid by the Company for services provided by employees or for separation of employment. Employee benefits mainly include short-term compensation, post-service benefits, separation benefits and other long-term employee benefits.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.22 Employee benefits (continued)

##### (a) Short-term compensation

Over the financial period when employees provide services, the Company recognizes actually incurred short-term compensation as a liability and charge it to profit or loss, except where the same is included in the cost of an asset as required or permitted by the Accounting Standards for Business Enterprises. Actual employee benefits are charged to profit or loss or included in the cost of relevant asset when incurred. Non-monetary benefits are measured at fair value. Contribution to social security schemes including medical insurance, work injury insurance, and maternity insurance and housing provident fund for employees, as well as appropriation to trade union funds and employee education funds are calculated on required basis and at required percentage, recognized as relevant liability and charged to profit or loss or included in the cost of relevant asset over the period when employees provide services.

##### (b) Post-service benefits

Over the financial period when employees provide services, the Company recognizes a liability based on the amount payable under the defined contribution plan and record it in profit or loss or in the cost of related asset. Benefit obligations arising under the defined benefit plan are attributed to the period over which employees provide services using the project unit credit method, and recorded in profit or loss or in the cost of related asset.

##### (c) Separation benefits

When providing separation benefits to employees, the Company recognizes employee benefits payable arising from separation benefits and charges it to profit loss on the earlier of the following: When the Company cannot unilaterally withdraw separation benefits provided on the separation plan or the reduction proposal; When the Company recognizes the costs or expenses of reorganization involving the payment of separation benefits.

##### (d) Other long-term employee benefits

Other long-term employee benefits provided by the Company for employees that meet the conditions for defined contribution plan are treated in accordance with relevant regulations on defined contribution plan. In addition, net liabilities or net assets of other long-term employee benefits are recognized and measured according to relevant regulations on defined benefit plans.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.23 Estimated liabilities

When the Company assumes a present obligation related to a contingency, the performance of the obligation is likely to result in outflow of economic benefits, and the amount of the obligation can be measured reliably, the obligation is recognized as an estimated liability. The Company makes initial measurement based on best estimate of the amount required to perform relevant present obligation. If there is a continuous range of the amount and all results within the range carry the same probability, the median of the range is determined as the best estimate. If multiple items are involved, the best estimate is calculated and determined based on all possible results and relevant probabilities.

The book value of estimated liabilities is reviewed on the balance sheet date. If there is conclusive evidence that the book value cannot truly reflect the currently best estimate, the book value is adjusted to the currently best estimate.

#### 3.24 Share-based payment

Share-based payment includes equity-settled share-based payment and cash-settled share-based payment. Equity-settled share-based payments in exchange for services provided by employees, are measured at the fair value of equity instruments granted to employees. If there is an active market, the fair value is determined on the basis quotations in the active market; If there is no active market, the fair value is determined using valuation techniques shall be used to determine, including reference to the prices in recent market transactions between knowledgeable and willing parties, reference to the current fair values of other substantially identical financial instruments, discounted cash flow method, and option pricing model.

On each balance sheet date, based on latest information on changes in the number of vesting employees and the achievement of performance indicators, the Company revises the estimated number of exercisable stock options and then determine the amount of expenses allocable to each period. Option expenses that span over multiple financial periods are generally be allocated at the proportion of the length of the waiting period in a certain financial period to the length of the entire waiting period of the option.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.25 Preferred stock, perpetual bonds and other financial instruments

##### (a) Division of financial liabilities and equity instruments

Preferred shares, perpetual bonds (such as long-term option-embedded MTNs), stock options and convertible corporate bonds issued by the Company are classified as financial liabilities or equity instruments on the following principles:

- (1) Settlement through delivery of cash or other financial assets or exchange of financial assets or financial liabilities. If the Company cannot unconditionally avoid performing a contractual obligation by delivering cash or other financial assets, the contractual obligation satisfies the definition of a financial liability.
- (2) Settlement through its own equity instruments. If the financial instrument issued must be settled with or may be settled with equity instrument as a substitute for cash or other financial assets, the instrument constitutes a financial liability of the issuer. The instrument is the issuer's equity instrument if it is intended to enable the holder of the instrument to enjoy residual interests in the issuer's assets net of all liabilities.
- (3) Distinguish between derivative instruments and non-derivative instruments for the classification of financial instruments that need to be settled with or may be settled with equity instruments of the Company in the future. For a non-derivative instrument, if the issuer is not obligated to deliver a variable number of its own equity instruments for settlement in the future, the non-derivative instrument is an equity instrument; otherwise, the non-derivative instrument is a financial liability. For a derivative instrument, if the issuer can only settle it delivering a fixed number of its own equity instruments in exchange for a fixed amount of cash or other financial assets, the derivative instrument is an equity instrument; If the issuer exchanges a fixed amount of its own equity instruments for a variable amount of cash or other financial assets, or exchanges a variable amount of its own equity instruments for a fixed amount of cash or other financial assets, or exchanges a variable amount of its own equity instruments for a variable amount of cash or other financial assets with the conversion price fixed, the derivative instrument is recognized as a financial liability or financial asset.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.25 Preferred stock, perpetual bonds and other financial instruments (continued)

##### (b) Accounting treatment of preferred stock and permanent bond

The issuer accounts for financial instruments classified as financial liabilities in “debentures payable”, accruing interest and adjusting interest adjustment on the book over the life of the instrument in accordance with relevant regulations on financial instruments. The issuer accounts for financial instruments classified as equity instruments in “other equity instruments” and dividends (including interest on instruments classified as equity instruments) distributed over its life are treated as profit distribution.

#### 3.26 Revenue

##### (a) Recognition of revenue

The Company recognizes revenue when it has performed its contractual obligation, i.e. when the customer obtains control over relevant goods or services (hereinafter referred to as “goods”). Obtaining control over relevant goods means being able to dominate the use of the goods and obtain almost all the economic benefits therefrom. Contractual obligation refers to the Company’s commitment to transfer clearly distinguishable goods to the customer in the contract.

If the contract between the Company and the customer meets all of the following conditions at the same time, the Company recognizes revenue when the customer obtains the control over relevant goods:

- (1) Parties to the contract have approved the contract and promised to perform their respective obligations;
- (2) The contract specifies the rights and obligations of the parties related to the goods transferred or services rendered (hereinafter referred to as “goods transferred”);
- (3) The contract has clear payment terms related to the goods transferred;
- (4) The contract has commercial substance, that is, the performance of the contract will change the risk, time distribution or amount of the future cash flow of the Company;
- (5) The consideration that the Company is entitled to due to the transfer of goods to customers is likely to be recovered.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (a) Recognition of revenue (continued)

For contracts that do not conform to the aforesaid conditions on the contract commencement date, the Company will continuously evaluate them and make accounting treatment when they satisfy the conditions.

For contracts that do not conform to the above conditions, the Company recognizes the consideration received as revenue only when it no longer has the residual obligation to transfer goods to the customer and the consideration received from the customers does not need to be returned. Otherwise, the consideration received is accounted for as a liability. No revenue is recognized on non-monetary asset exchange without commercial substance.

Two or more contracts entered into by the Company and the same customer (or related parties to the customer) at the same time or successively at similar times are consolidated into one contract for accounting treatment in any of the following circumstances:

- (1) The two or more contracts are concluded for the same commercial purpose and constitute a package deal.
- (2) The amount of consideration under either of the two or more contracts depends on the pricing or performance of the other contracts.
- (3) The goods under the two or more contracts (or some goods under each contract) constitute a separate contractual obligation.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (a) Recognition of revenue (continued)

The Company accounts for contract changes by the following three circumstances:

- (1) If clearly distinguishable goods and contract price are added, and the additional contract price reflects separate selling price of the additional goods, the contract change is treated as a separate contract.
- (2) If the contract change does not fall under circumstances (1), and the goods or services already transferred (hereinafter referred to as “transferred goods”) and the goods or services not transferred (hereinafter referred to as “untransferred goods”) can be clearly distinguished on the date of contract change, the original contract is deemed to be terminated, and the unperformed part of the original contract and the contract change are merged into a new contract for the purpose of accounting treatment.
- (3) If the contract change does not fall under circumstances (1), and the transferred goods and the untransferred goods cannot be clearly distinguished on the date of contract change, and there is no clear distinction between the transferred goods and the non-transferred goods on the contract change date, the contract change is treated as an integral part of the original contract, and the revenue is adjusted for the impact of the contract change on the contract change date.

In any of the following circumstances, the contractual obligation is one performed within a certain period of time; or, it is a contractual obligation performed at a certain point in time:

- (1) While the Company performs the contractual obligation, the customer obtains and consumes economic benefits therefrom at the same time.
- (2) The customer can control the goods in progress while the Company performs the contractual obligation.
- (3) The goods produced by the Company in the performance of the contract have irreplaceable purposes, and the Company is entitled to payment for the portion performed to date over the entire term of the contract.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (a) Recognition of revenue (continued)

For a contractual obligation performed within a certain period of time, the Company recognizes revenue by the progress in performance over that period of time, except where the progress cannot be reasonably determined. Given the nature of goods, the Company adopts the output method or the input method to determine the progress in performance.

If the progress in performance cannot be reasonably determined, but the incurred costs are expected to be compensated, revenue is recognized on the basis of the incurred costs till the progress in performance can be reasonably determined.

For a contractual obligation performed at a certain point in time, the Company recognizes revenue when the customer obtains control over relevant goods. In determining whether the customer has obtained control over the goods, the Company considers the following signs:

- (1) The Company has the present right to receive payment for the goods, that is, the customer has the present obligation to pay for the goods.
- (2) The Company has transferred the legal ownership of the goods to the customer, that is, the customer has obtained the legal ownership of the goods.
- (3) The Company has physically transferred the goods to the customer, that is, the customer has physically taken possession of the goods.
- (4) The Company has transferred major risks and rewards in ownership of the goods to the customer, that is, the customer has obtained major risks and rewards in ownership of the goods.
- (5) The customer has accepted the goods.
- (6) Other signs indicating that the customer has obtained control over the goods.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (b) Measurement of revenue

The Company measures revenue based on the transaction price allocated to each individual contractual obligation.

Transaction price refers to the amount of consideration that the Company is expected to be entitled to for the transfer of goods to customers. Sums collected by the Company on behalf of third parties and sums expected to be returned to customers by the Company are treated as liabilities and are not included in the transaction price.

The Company determines the transaction price according to contract terms and taking into consideration past practices. In determining the transaction price, the Company takes into account the influence of variable consideration, significant financing component in the contract, non-cash consideration, consideration payable to customers and other factors.

If there is variable consideration under the contract, the Company determines the best estimate of variable consideration on the basis of the expected value or the most likely amount, but the transaction price including variable consideration should not exceed the accumulated recognized revenue that is highly probable not to be significantly reversed when relevant uncertainties are eliminated. The Company considers the possibility of revenue reversal and its proportion when evaluating whether it is highly probable that the accumulated recognized income will not be significantly reversed. On each balance sheet date, the Company should re-estimate the variable consideration amount to be included in the transaction price.

If there is a significant financing component in the contract, the Company determines the transaction price on the basis of the amount payable by the customer assuming that it makes payment in cash upon obtaining control over the goods. The difference between the transaction price and the contractual consideration is amortized using the effective interest rate method over the contract term.

The major financing components in the contract is not considered if on the commencement date of the contract, the Company expects the customer to payment within one year after it obtains control over the goods.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (b) Measurement of revenue (continued)

If the customer pays non-cash consideration, the Company determines the transaction price at the fair value of non-cash consideration. If the fair value of non-cash consideration cannot be reasonably estimated, the Company indirectly determines the transaction price by reference to the separate selling price at which it promises to transfer the goods to the customer. Any change in the fair value of non-cash consideration due to reasons other than the form of the consideration is treated as variable consideration.

If the Company needs to pay consideration to the customer (or a third party that purchases the goods of the Company from the customer), the transaction price is reduced by the consideration payables, and the revenue for the current period is also reduced by the consideration payable when relevant revenue is recognized or when the Company pays (or undertakes to pay) the consideration, whichever is later, except where the consideration is payable to the customer for obtaining other clearly distinguishable goods from the customer.

If the contract contains two or more contractual obligations, the Company on the commencement date of the Contract, allocates the transaction price to each single contractual obligation in proportion to its separate selling price promised by the Company.

Contractual discount is allocated to each single contractual obligation in proportion. If there is conclusive evidence that the contractual discount is related solely to one or more (but not all) contractual obligations, the Company allocates the contractual discount solely to such one or more contractual obligations.

For variable consideration and its subsequent changes, the Company allocate it to one or more relevant contractual obligations, or to one or more items among a series of clearly distinguishable goods that constitutes a single contractual obligation. For a contractual obligation that has been performed, revenue for the current period is adjusted by the amount of subsequent change in the variable consideration allocated to the contractual obligation.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (c) Application of gross basis and net basis

The Company judges whether it is acting as the principal or the agent when engaged in the transaction by whether it has control over the goods before transferring it to the customer. If the Company is able to control the goods before transferring it to the customer, the Company is the principal and recognizes the total amount of consideration received or receivable as the revenue; Otherwise, the Company acts as an agent and recognizes as revenue the amount of commissions or service fees that the Company is entitled to, which is determined by the amount of total consideration received or receivable net of the price payable to other relevant parties, or by the prescribed amount of percentage of commission.

The Company has control over the goods before transferring them to the customer in the following circumstances:

- (1) The Company obtains the control over the goods or other assets from a third party before transferring it to the customer.
- (2) The Company can dominate a third party to provide services to the customer on behalf of the Company.
- (3) After the control over the goods from a third party, the Company combines the goods with other goods into a combination output by providing significant service and transfers it to the customer.

In determining whether the Company has control over the goods before transferring it to the customer, the Company take into overall account of all relevant facts and circumstances, including:

- (1) The Company bears the main responsibility for transferring goods to the customer.
- (2) The Company assumes inventory risk of the goods before or after the transfer of the goods.
- (3) The Company has the discretion to set the price of the goods.
- (4) Other relevant facts and circumstances.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

##### (d) Specific revenue recognition policies for different types of engineering business

The Company's engineering and construction contracting business covers metallurgical industry, housing construction, highways, municipal works and other fields, and adopts multiple business modes including EPC, EP, PC, BT(Build Transfer) and PPP. For different business modes, the Company formulates rationalised revenue recognition policies for different business modes in accordance with requirements of the Accounting Standards for Business Enterprises No.14 – Revenue.

Under EPC, EP and PC business modes, if the customer invites bids for E(Engineering), P(Procurement) and C(Construction) separately, and the tendering result of one project is completely independent of other projects, the Company identifies each of E, P and C as a separate contractual obligation respectively. In other cases, the Company regards all of E, P and C as one contractual obligation.

Under BT mode, the Company deems that the contractual obligation contains a significant financing component.

Under PPP mode, the Company undertakes two contractual obligations, i.e. construction and operation, and allocates the contractual consideration in proportion to their fair value.

Under different business modes, for the contractual obligation of construction or an integrated contractual obligation containing construction, since the customer can control the goods in progress during the Company's performance, the Company regards it as a contractual obligations performed within a certain period of time, and uses the input method to determine the progress in performance at the percentage of accumulated actual contract cost in the total estimated contract cost.

In the engineering and construction contracting industry, it is a preferred choice to determine the progress in performance at the percentage of accumulated actual contract cost in the total estimated contract cost. The Company's method of determining the progress in performance is consistent with industry practice.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

**(d) Specific revenue recognition policies for different types of engineering business (continued)**

Determining the progress in performance requires a lot of estimates and judgments from the Company, including estimating total revenue, total cost, quantities of work, material or equipment consumption and unit price. In order to collect basic data for these estimates and judgments, the Company has been committed to establishing and maintaining a series of effective internal control systems, such as accounting methods, accounting practice standards, and financial management methods for projects, so as to strike a balance between ensuring quality of accounting information and reducing uncertainties in estimates and judgments and maintaining reasonable maintenance costs.

The contracts or agreements signed between the Company and the proprietor/customer, the confirmation by the proprietor/customer's representative and supervisor of the quantities of work and settlement amount, and the project settlement data between the Company and subcontractors are all important external evidences for the Company to determine the percentage of completion.

Determination of estimated total revenue: after the contract or agreement is signed, the financial department works operation departments to determine the initial estimated total revenue based on the amount agreed in the contract or agreement. Total contract revenue is adjusted for contract changes, claims and awards in execution of the project based on documents or supplementary agreements issued by the proprietor.

Determination of the estimated total cost: The Company's contract costs include direct labor, equipment or materials, subcontractor costs and machinery usage costs. At the beginning of bidding for the project, the Company estimates the estimated total cost of the project and evaluate its profit prospects by reference to tendering documents and past experience. After the contract or agreement is signed, the financial department works with the procurement department to review and confirm the estimated total cost based on information including the subcontracting contract or agreement, engineering or equipment design drawings, equipment or material suppliers' quotations and labor cost budget and submit it for approval step by step. In the construction process, the engineering control department, in conjunction with the financial department, the procurement department, the construction department and the manufacturing department, revises the detailed cost items as appropriate based on the confirmation of engineering or equipment changes, makes adjustments to the estimated total cost by reference to the recent price changes, and then submit it for approval step by step according to corresponding procedures.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.26 Revenue (continued)

**(d) Specific revenue recognition policies for different types of engineering business (continued)**

Collection of actual contract costs: the procurement department, together with the financial department, determines qualified suppliers and subcontractors through tendering for major outsourced cost items for construction of the project or equipment. Procurement staff signs contracts or orders with qualified suppliers according to the approved procurement plan. The warehousing department organizes the acceptance of physical items and the user department confirms the actual use of outsourced labor services. The construction department and manufacturing department applies for materials or equipment according to the approved production plan. The engineering control department and other departments settle accounts with subcontractors regularly or at important nodes to determine subcontractor cost for the current period. The project administration department prepares the labor cost budget according to the Company's remuneration policy, which subject to approval, is used as the standard for daily salary and bonus payment. The financial department, together with the warehousing department, the construction department and the manufacturing department, takes inventory of all kinds of materials onsite on a regular basis. After reviewing relevant original vouchers, the financial department records actual contract costs incurred in the current period.

Calculation of progress in progress and revenue and cost: At the end of each month, the financial department calculates progress in performance based on the reviewed estimated total revenue, estimated total cost and actual contract cost, prepares the revenue and cost calculation table, and after it is duly approved, recognize revenue and cost for the month. Under special circumstances where the progress in performance cannot be reasonably determined, the financial department, in conjunction with relevant departments, prudently assess whether the incurred costs are expected to be compensated. After the assessment result is duly approved according to the corresponding procedures, the financial department recognizes revenue and cost for the current month accordingly.

The Company believes that its current internal control system and accounting system are reasonably designed and operate effectively, and combined with important external evidence that are available, can ensure that the Company determines the progress in performance in a prudent and reasonable manner.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.27 Contract cost

The cost incurred by the Company in performing the contract, which does not fall under other accounting standards for business enterprises other than “the Accounting Standards for Business Enterprises No.14 – Revenue” and meets all of the following conditions, is treated as contract performance cost and recognized as an asset:

- (a) The cost is directly related to a current or expected contract, including direct labor, direct materials, manufacturing expenses (or similar expenses), costs definitely borne by the customer and other costs incurred solely as a result of the contract;
- (b) The cost increases the Company’s resources for performing its contractual obligations in the future;
- (c) The cost is expected to be recovered

Incremental cost incurred by the Company in obtaining the contract, if expected to be recovered, are is treated as contract acquisition cost and recognized as an asset. However, if the amortization period of the asset does not exceed one year, it is expensed when incurred.

Assets related to the contract cost are amortized on the same basis on which revenue from goods related to the asset is recognized, and charged to profit or loss.

The excess of the book value of the asset related to the contract cost over the difference between the following two items, is recognized as asset impairment loss and impairment provision is also recognized accordingly:

- (a) The remaining consideration that the Company is expected to obtain due to the transfer of goods related to the asset;
- (b) Estimated costs to be incurred for the transfer of the relevant goods.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.27 Contract cost (continued)

If due to subsequent changes in factors leading to impairment in prior period, the difference between (1) and (2) above is higher than the book value of the asset, the accrued asset impairment provision is reserved and recorded in profit or loss, provided that the book value after reversal does not exceed the book value of the asset on the reversal date assuming that no impairment provision is accrued.

In determining impairment loss of the asset related to the contract cost, the Company first determines the impairment loss of other assets related to the contract recognized in accordance with other relevant accounting standards for business enterprises other than the Accounting Standards for Business Enterprises No.14 – Revenue, and then determines the impairment loss of the asset related to the contract cost following the aforesaid method.

#### 3.28 Government subsidy

##### (a) Types of government subsidy

Government subsidy refers to monetary assets or non-monetary assets (excluding capital injected by the government as an owner) obtained by the Company free of charge from the government, which are mainly classified into government subsidy related to assets and government subsidy related to income

##### (b) Accounting for government subsidy

Government subsidies related to assets are recognized as deferred income. The amount recognized as deferred income is credited to profit or loss in a reasonable and systematic method over the service life of the relevant asset. Among them, those related to daily activities of the Company are included in other income, while those unrelated to daily activities of the Company are included in non-operating income.

Government subsidies measured in nominal amount are directly credited to profit or loss.

Government subsidies related to income are treated as follows: Government subsidies intended to cover related expenses or losses to be incurred by the Company in future periods are recognized as deferred income, and credited to profit or loss for the period when the related expenses are recognized. Government subsidies intended to cover related expenses or losses already incurred by the Company are directly credited to profit or loss. Those related to daily activities of the Company are included in other income, while those unrelated to daily activities of the Company are included in non-operating income

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.28 Government subsidy (continued)

**(c) Specific criteria for distinguishing asset-related government subsidies from revenue-related government subsidies**

Government subsidies obtained by the Company for purchasing, constructing or otherwise forming long-term assets are recognized as government subsidies related to assets, and government subsidies other than those related to assets are recognized as government subsidies related to income.

**(d) Time point for determining government subsidy**

Government subsidy measured at receivable amount is recognized at the end of the period when conclusive evidence shows that the Company can satisfy relevant conditions set forth in the fiscal support policy and expects to receive the subsidy. Other government subsidies other than those measured at receivable amount are recognized when the subsidy amount is actually received.

**(e) Accounting for government subsidy for interest**

- (1) If the fiscal authority allocates the subsidy for interest to the lending bank which grants loan to the Company at a preferential policy rate, the Company records the borrowing at the amount actually received from the bank and calculates relevant borrowing costs based on the principal of the loan and the preferential policy rate.
- (2) If the fiscal authority directly allocates the subsidy for interest to the Company, the Company offsets it against relevant borrowing costs.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.29 Deferred tax assets and deferred tax liabilities

- (a) Based on the difference between the book value of assets and liabilities and their tax basis (if tax basis of items not recognized as assets or liabilities can be determined according to the tax law, the tax basis is determined as the difference), deferred tax assets or deferred tax liabilities are calculated and recognized at the tax rate applicable to the period during which the assets or liabilities are expected to be recovered or settled.
- (b) Deferred tax assets is recognized to the extent that taxable income is likely to be available to offset against deductible temporary differences. On the balance sheet date, deferred tax assets not recognized in prior period are recognized if there is conclusive evidence that sufficient taxable income is likely to be obtained in the future period to offset against deductible temporary differences. If it is likely that sufficient taxable income will not be available to utilize against deferred tax assets in the future period, the book value of the deferred tax assets is written down.
- (c) Deferred tax liabilities are recognized for taxable temporary differences related to investments in subsidiaries and associates, unless the Company can control the timing of reversal of temporary differences and the temporary differences are unlikely to be reversed in the foreseeable future. Deferred tax assets are recognized for deductible temporary differences related to investments in subsidiaries and associates when the temporary differences are likely to be reversed in the foreseeable future and taxable income is likely to be available in future to offset against the deductible temporary differences.

#### 3.30 Lease

**(a) The Company as lessee**

On the lease commencement date, the Company recognizes the right of use asset and lease liabilities for the lease, except for short-term leases and low-value asset leases subject to simplified treatment.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.30 Lease (continued)

##### (a) The Company as lessee (continued)

- (1) The right of use assets is initially measured at cost. The cost includes:
  - A. Initial measured amount of the lease liabilities;
  - B. In case of any lease incentive for lease payment made on or before the lease commencement date, the amount of lease incentive is deducted;
  - C. Initial direct expenses incurred by the lessee;
  - D. Costs expected to be incurred by the lessee for dismantling and removing the leased asset, restoring the premise where the leased asset is located to its original conditions or restoring the leased asset to the conditions agreed upon in the lease terms.

After the lease commencement date, the Company depreciates the right of use assets in accordance with regulations on depreciation specified in Note 3.15.

In accordance with provisions of the “Accounting Standards for Business Enterprises No.8 – Asset Impairment”, the Company determines whether the right of use asset is impaired, and accounts for any impairment loss identified.

- (2) Lease liabilities is initially measured at the present value of lease payments unpaid on the lease commencement date.

In calculating the present value of the lease payment, the Company adopts the interest rate on incremental loan as the discount rate.

The Company calculates interest expense of the lease liabilities for each period in the lease term at the above discount rate, and charges it to profit or loss.

- (3) The Company elects not to recognize right of use assets and lease liabilities for short-term lease and low-value asset lease.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.30 Lease (continued)

##### (b) The Company as lessor

###### (1) Lessor's accounting for finance lease

On the lease commencement date, the Company recognizes a receivable under finance and derecognizes the asset under finance lease.

The Company initially measures the receivable under finance lease at the net lease investment.

The net rental investment is the sum of the unsecured residual value and the present value of the lease receipts that have not yet been received on the lease commencement date discounted at the interest rate implicit in lease.

The Company calculates and recognizes interest income for each period in the lease term at the above discount rate.

###### (2) Lessor's accounting for operating lease

Over each period in the lease term, the Company recognizes lease receipts from operating leases as rental income using the straight-line method or other systematic and reasonable methods.

Initial direct expenses incurred by the Company in connection with operating leases are capitalized and allocated and expensed over the lease term on the same basis that rental income is recognized.

The Company depreciates fixed assets under operating lease following depreciation policies for similar assets, and depreciates assets under operating lease in a systematic and reasonable manner according to accounting standards applicable to such assets.

The Company determines whether the asset under operating lease is impaired and accounts for the impairment according to provisions of the Accounting Standards for Business Enterprises No.8 – Asset Impairment”.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.31 Segment information

The Company determines business segments based on its internal organizational structure, management requirements and internal reporting system, and determines reporting segments and discloses segment information on the basis of business segments.

An operating segment refer to a component of the Company that meet all of the following conditions:

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

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

#### 3.32 Special reserve

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, the Company makes appropriation to production safety fee which is ear marked for improving production safety conditions of the Company.

According to relevant national regulations, the Company makes appropriation to production safety fee and other fees of similar nature, which is separately shown within “special reserve” between “less: treasury stock” and “surplus reserve” in owners’ equity. Production safety fee is included in the cost of related products or charged to profit or loss when incurred, and special reserves is increased accordingly. When the Company uses production safety fee, expensed items directly reduces the special reserves, while capitalized items are collected in construction in progress and recognized as fixed asset when the safety project is completed reaches the conditions for intended use. Meanwhile, the special reserve is reduced by the capitalized amount of production safety fee and depreciation is recognized in the same amount. The fixed asset will not be depreciated in future periods.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.33 Non-monetary asset exchange

Non-monetary asset change are 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 book value is recorded in profit of loss.

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

#### 3.34 Held-for-sale and discontinued operation

The Company classifies non-current assets or disposal groups that meet all of the following conditions as held-for-sale: First, they are ready for sale in current conditions based on the practice of selling such assets or disposal groups in similar transaction; Secondly, the disposal is very likely to happen, that is, the Company has already made resolution on a disposal plan and has obtained a definite purchase promise, and the disposal is expected to be completed within one year. If relevant regulations require prior approval from relevant authority or regulator of the disposal, such disposal should have been obtained.

Upon initial measurement or re-measurement of a held-for-sale non-current asset or disposal group, if its book value is higher than its fair value net of disposal expenses, the book value is written down to the fair value net of disposal expenses, and the write-down amount is charged to profit or loss, and impairment provision is recognized for the held-for-sale asset.

Non-current assets held for sale or assets in the disposal group held for sale are shown as held-for-sale assets in the balance sheet, and liabilities in the disposal group held for sale are shown as held-for-sale liabilities.

A discontinued operation is a separately distinguishable component that meets any one of the following conditions and has been disposed of or classified as held for sale by the Company:

- (a) This component represents an independent major business or a separate major business region;
- (b) This component is part of an associated plan to dispose of an independent major business or a separate major business region;
- (c) This component is a subsidiary acquired specifically for resale.



## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.35 Key assumptions and uncertainties used in important judgements and accounting estimates made in applying accounting policies

In applying the accounting policies described in Note 3, the Company needs to make judgements, estimates and assumptions in relation to the book value of financial statement items that cannot be accurately measured. These judgments, estimates and assumptions are based on management's past experience and other relevant factors. The actual results may deviate from the Company's estimates. Key assumptions and uncertainties in the Company's accounting estimates that are likely to lead to significant adjustments to the book value of assets and liabilities in future periods are set out below:

**(a) Revenue recognition on engineering construction contract work**

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.

**(b) Receivable and contract asset impairment provision**

The Company accounts for impairment of and makes loss allowance 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.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.35 Key assumptions and uncertainties used in important judgements and accounting estimates made in applying accounting policies (continued)

##### (c) 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.

##### (d) Retirement and early 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.

#### 3.36 Description of changes in major accounting policies and accounting estimates

##### (a) Basis for accounting policy changes

- (1) The Ministry of Finance issued the Notice on Revising and Issuing the Accounting Standards for Business Enterprises No.21 – Lease on 7 December 2018 (Cai Kuai [2018] No.35), which has been adopted by the Company as of 1 January 2019. Based on the convergence provisions of these accounting standards, the Company prudently evaluates relevant facts and circumstances, and then retroactively adjusts financial statements as at beginning of this reporting period.

## SECTION 12 FINANCIAL REPORT

### 3. SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (CONTINUED)

#### 3.36 Description of changes in major accounting policies and accounting estimates (continued)

##### (a) Basis for accounting policy changes (continued)

- (2) In April 2019, the Ministry of Finance issued the Notice on Revising and Issuing the Format of Financial Statements for General Enterprises for 2019 (Cai Kuai [2019] No.6) (hereinafter referred to as the “format of financial statement”). Enterprises adopting the Accounting Standards for Business Enterprises shall prepare financial statements in accordance with the Accounting Standards for Business Enterprises and requirements of the Notice.

##### (b) Impact of accounting policy changes

- (1) Impact of adopting revised accounting standards for lease:

Items on consolidated financial statements	As at 31 December 2018	Impact	As at 1 January 2019
Assets:			
Prepayment	1,154,443,987.85	-307,698.19	1,154,136,289.66
Right-of-use assets	-	28,531,409.02	28,531,409.02
Liabilities:			
Non-current liabilities due within one year	1,353,597,500.02	11,653,295.64	1,365,250,795.66
Lease liabilities	-	16,570,415.19	16,570,415.19

- (2) Impact of adopting revised format of financial statements

As per requirement of the format of financial statements, the Company splits “notes receivable and accounts receivable” into “notes receivable” and “accounts receivable”, and split “notes payable and accounts payable” into “notes payable” and “accounts payable”. The Company has retrospectively adjusted the financial statements for comparable period. The change in accounting policies does not have impact on consolidated profit and owners’ equity, and profit and owner’s equity of the parent.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES

#### 4.1 Major taxes and tax rates

Tax	Tax basis	Tax rate
Value added tax	Taxable value added (equals to the product of taxable sales and applicable tax rate minus VAT input deductible for the current period)	3%, 5%, 6%, 9%(10%), 13% (16%)
Urban maintenance and construction tax	The sum of VAT actually paid	1%, 5% and 7%
Educational surcharge	The sum of VAT actually paid	3%
Corporate income tax	Taxable income	16.50% (HK), 25% (except preferential treatments set out in Note 4.2)

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

Taxpayer	Income tax rate
China Aluminum International Engineering Corporation Ltd.	15.00%
China Nonferrous Metals Processing Technology Co., Ltd.	15.00%
Luoyang Jincheng Construction Supervision Co., Ltd.	10.00%
Luoyang Foyang Decoration Engineering Co., Ltd.	25.00%
Suzhou Nonferrous Metal Materials Deyuan Environmental Protection Co., Ltd.	25.00%
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	15.00%
Sixth Metallurgical Luoyang Construction Co., Ltd.	25.00%
Sixth Metallurgical Luoyang Mechanical and Electrical Installation Co., Ltd.	25.00%
Sixth Metallurgical (Zhengzhou) Technology Heavy Industry Co., Ltd.	25.00%
Henan Sixth Metallurgical Trading Co., Ltd.	25.00%
Panzhou Haohong Project Management Co., Ltd.	25.00%
Tongchuan Hao Tong Construction Co., Ltd.	25.00%
China Aluminum Great Wall Construction Co., Ltd.	25.00%
Huaian Tong Yun Construction Co., Ltd.	25.00%
Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	15.00%
Changsha Clinqsoft Info Tech Co., Ltd.	15.00%
Hunan Huachu Project Management Co., Ltd.	25.00%
Hunan Changye Construction Drawing Examination Co., Ltd.	25.00%
Huachu High-Tech (Hunan) Co., Ltd.	25.00%

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.1 Major taxes and tax rates (Continued)

Taxpayer	Income tax rate
China Aluminum International South Engineering Co., Ltd.	25.00%
Wenzhou Tongrun Construction Co., Ltd.	25.00%
Wenzhou Tonghui Construction Co., Ltd.	25.00%
Ninth Metallurgical Construction Co., Ltd.	15.00%
Henan Ninth Metallurgical Construction Co., Ltd.	25.00%
Zhengzhou Ninth Metallurgical Sanwei Chemical Machinery Co., Ltd.	15.00%
Hanzhong Ninth Metallurgical Construction Co., Ltd.	25.00%
Ankang Ninth Metallurgical Changjiali Concrete Co., Ltd.	25.00%
Xinjiang Ninth Metallurgical Construction Co., Ltd.	25.00%
Xianyang Ninth Metallurgical Steel Structure Co., Ltd.	25.00%
Mian County Ninth Metallurgical Kindergarten	25.00%
Ninth Metallurgical Hanzhong Construction Design Institute Co., Ltd.	25.00%
Shaanxi Zhong Mian Investment Company Limited	25.00%
Shenyang Aluminum & Magnesium Design Institute Co., Ltd.	15.00%
Shenyang Boyu Technology Co., Ltd.	15.00%
Shenyang Aluminum & Magnesium Technology Co., Ltd.	15.00%
Shenyang Aluminum & Magnesium Engineering & Research Institute Construction Supervision Co., Ltd.	25.00%
Beijing Huayu Aerospace Control High-Tech Co., Ltd.	15.00%
China Nonferrous Metals Industry's Twelfth Metallurgical Construction Co., Ltd.	15.00%
China Nonferrous Metals Industry's Twelfth Metallurgical Chongqing Energy Savings Technology Co., Ltd.	15.00%
Shanxi Nonferrous Metal Twelfth Metallurgical Supplies Co., Ltd.	25.00%
Shanxi Longye Construction Labor Service Co., Ltd.	10.00%
China Aluminum International 12MCC Construction Co., Ltd.	25.00%
China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	15.00%
Shenzhen Changkan Survey and Design Co., Ltd.	25.00%
Changsha Tongxiang Construction Co., Ltd.	25.00%
Hunan Tongdu Investment and Development Co., Ltd.	25.00%
China Aluminum International Engineering & Equipment Co., Ltd.	25.00%
China Aluminum International Shandong Chemical Industry Co., Ltd.	25.00%
China Aluminum International Logistic (Tianjin) Co., Ltd.	25.00%
Shanghai China Aluminum International Supply Chain Management Co., Ltd.	25.00%

## SECTION 12 FINANCIAL REPORT

## 4 TAXES (CONTINUED)

## 4.1 Major taxes and tax rates (Continued)

Taxpayer	Income tax rate
Chalieco Hong Kong Corporation Limited	16.50%
Chalieco Malaysia Sdn.Bhd.	25.00%
Shanghai Chalieco Fengyuan Equity Investment Fund Partnership (Limited Partner)	25.00%
China Aluminum International Investment Management (Shanghai) Co., Ltd.	25.00%
Chalieco (Tianjin) Construction Co., Ltd.	25.00%
Xinchengtong (Tianjin) Construction Engineering Co., Ltd.	25.00%
China Aluminum International Technology Development Co., Ltd.	15.00%
China Aluminum International Engineering (India) Private Limited	30.00%
Beijing Zichen Investment Development Corporation Limited	25.00%
Duyun Development Zone Tongda Construction Co., Ltd.	15.00%
Guiyang Aluminum and Magnesium Design Institute Co., Ltd.	15.00%
Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd	25.00%
Guiyang Zhenxing Aluminum & Magnesium Technological Development Co., Ltd.	15.00%
Guizhou Light Metal Innovation Research and Equipment Process Co., Ltd.	15.00%
Guiyang Xinyu Construction Supervision Co., Ltd.	10.00%
Guizhou Yundu Properties Company Limited	25.00%
Guizhou Shunan Mechanical and Electric Equipment Co., Ltd.	15.00%
Guangxi Tongrui Investment Construction Co., Ltd.	25.00%
China Aluminum International Aluminum Technological Development Co., Ltd.	25.00%
Shanxi Nonferrous Metal Twelfth Metallurgical Advanced Materials Co., Ltd.	25.00%
Qingdao Xinfu Gongchuang Asset Management Company Limited	25.00%
Chalco Shandong Engineering Technology Co., Ltd.	15.00%
Chalco Wancheng Shandong Construction Co., Ltd.	25.00%
Kunming Survey and Design institute Co., Ltd. of China Nonferrous Metals industry	15.00%
Kunming Technology Development Co., Ltd.	10.00%
Chinalco Southwest Construction Investment Co., Ltd.	25.00%
Yunnan Miyu Expressway Investment and Development Co., Ltd.	25.00%

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents

##### (a) Tax preferences applicable to high-tech companies

- (1) China Aluminum International Engineering Corporation Limited received the High-tech Enterprise Certificate on 1 December 2016 (Certificate number: GR201611000733, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.

China Aluminum International Engineering Corporation Limited received the High-tech Enterprise Certificate on 15 July 2019 (Certificate number: GR201911000702, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2019.

- (2) Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy received the High-tech Enterprise Certificate on 3 December 2018 (Certificate number: GR201843001648, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (3) Changsha Clinqsoft Info Tech Co., Ltd. (formerly known as "Changsha Hua Heng Yuan Info Tech Co., Ltd.", formalities for renaming completed on 21 November 2019) received the High-tech Enterprise Certificate on 3 December 2018 (Certificate number: GR201843001122, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (4) China Nonferrous Metals Processing Technology Co., Ltd. received the High-tech Enterprise Certificate on 1 December 2017 (Certificate number: GF201741001058, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (a) Tax preferences applicable to high-tech companies (Continued)

- (5) Guiyang Aluminum and Magnesium Design Institute Co., Ltd. received the High-tech Enterprise Certificate on 15 November 2016 (Certificate number: GR201652000070, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.

Guiyang Aluminum and Magnesium Design Institute Co., Ltd. received the High-tech Enterprise Certificate on 29 September 2019 (Certificate number: GR201952000376, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2019.

- (6) Guizhou Shunan Mechanical and Electric Equipment Co., Ltd. received the High-tech Enterprise Certificate on 1 August 2018 (Certificate number: GR201852000341, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (7) Guiyang Zhenxing Aluminum & Magnesium Technological Development Co., Ltd. received the High-tech Enterprise Certificate on 1 August 2018 (Certificate number: GR201852000125, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (8) Guizhou Light Metal Innovation Research and Equipment Process Co., Ltd. received the High-tech Enterprise Certificate on 1 August 2018 (Certificate number: GR201852000306, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.



## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (a) Tax preferences applicable to high-tech companies (Continued)

- (9) Shenyang Aluminum & Magnesium Design Institute Co., Ltd. received the High-tech Enterprise Certificate on 8 August 2017 (Certificate number: GR201721000245, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (10) Shenyang Boyu Technology Co., Ltd. received the High-tech Enterprise Certificate on 12 October 2018 (Certificate number: GR201821000333, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (11) Shenyang Aluminum & Magnesium Technology Co., Ltd. received the High-tech Enterprise Certificate on 1 December 2017 (Certificate number: GR201721000728, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (12) Beijing Huayu Aerospace Control High-Tech Co., Ltd. received the High-tech Enterprise Certificate on 22 December 2016 (Certificate number: GR201611005805, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018.

Beijing Huayu Aerospace Control High-Tech Co., Ltd. received the High-tech Enterprise Certificate on 2 December 2019 (Certificate number: GR201911005085, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2019.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (a) Tax preferences applicable to high-tech companies (Continued)

- (13) China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd. received the High-tech Enterprise Certificate on 3 December 2018 (Certificate number: GR201843001632, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (14) Shenzhen Changkan Survey and Design Co., Ltd. received the High-tech Enterprise Certificate on 31 October 2017 (Certificate number: GR201744201825, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (15) Sixth Metallurgical Construction Company of China Nonferrous Metals Industry received the High-tech Enterprise Certificate on 1 December 2016 (Certificate number: GR201641000042, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (16) Ninth Metallurgical Construction Co., Ltd. received the High-tech Enterprise Certificate on 6 December 2016 (Certificate number: GR201661000344, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (a) Tax preferences applicable to high-tech companies (Continued)

- (17) China Aluminum International Aluminum Technological Development Co., Ltd. received the High-tech Enterprise Certificate on 6 December 2017 (Certificate number: GR201711008284, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (18) China Nonferrous Metals Industry's Twelfth Metallurgical Construction Co., Ltd. received the High-tech Enterprise Certificate on 1 December 2016 (Certificate number: GR201614000045, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (19) Kunming Survey and Design institute Co., Ltd. of China Nonferrous Metals industry received the High-tech Enterprise Certificate on 14 November 2016 (Certificate number: GR201853000051, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.
- (20) Chalco Shandong Engineering Technology Co., Ltd. received the High-tech Enterprise Certificate on 30 November 2018 (Certificate number: GR201837000515, 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 is a high-tech enterprise vigorously supported by the State, the Company is entitled to a preferential corporate income tax at 15% for 2018 and 2019.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (b) 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-Value Added Tax (Cai Shui [2013] No.106), China Aluminum International Engineering Corporation Ltd. 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 Changing Business Tax to VAT ([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 Aluminum & Magnesium Technological Development 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%.
- (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 Light Metal Innovation Research and Equipment Process 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 Twelfth 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 old projects and sales of real estate obtained prior to 30 April 2016.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (b) Value added tax (Continued)

- (6) China Nonferrous Metals Industry's Twelfth 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), as of 1 May 2016, domestic entities and individuals are exempted from VAT in rendering construction services overseas.
- (7) Shanxi Longye Construction Labor Service Co., Ltd. ("Longye") completed the formalities for registration of simplified taxation for general VAT payers on 1 October 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), Longye may elect to apply the preferential policy of simplified taxation for construction service provided under clear contracting agreement.
- (8) Pursuant to the Notice of the Ministry of Finance and the State Administration of Taxation on the Policy of Applying Low VAT Rates and Simplified VAT Levy Measures to Some Goods (Cai Shui [2009] No. 9) and the Notice of the Ministry of Finance and the State Administration of Taxation on the Policy of Simplifying VAT Rates (Cai Shui [2014] No. 57), in disposing its fixed assets reaching retirement conditions in 2019, China Aluminum International South Engineering Co., Ltd. is entitled to the preferential policy that "in selling fixed assets having been used by itself, a general VAT payer is entitled to a reduced levy rate of 2% in respect of the 3% levy rate under the simplified taxation measures.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (c) Tax preferences applicable to the western development program

- (1) Guiyang Xinyu Construction Supervision Co., Ltd. complies with provisions of the Notice of the Ministry of Finance, the General Administration of Customs and the State Administration of Taxation on Tax Policy Issues Concerning the Further Implementation of the Western Development Strategy (Cai Shui [2011] No. 58), pursuant to which enterprises need to complete formalities for registration for corporate income tax reduction and exemption and encouraged enterprises incorporated in western region are entitled to a preferential income tax rate of 15% from May 2018.
- (2) Pursuant to the Notice of the Ministry of Finance, the General Administration of Customs and the State Administration of Taxation on Tax Policy Issues Concerning the Further Implementation of the Western Development Strategy (Cai Shui [2011] No. 58) and the Announcement on Corporate Income Tax Issues in Further Implementation of the Western Development Strategy (Announcement of the State Administration of Taxation No. 12 of 2012), as of 15 April 2012, Duyun Development Zone Tongda Construction Co., Ltd. ("Duyun Company") needs to complete formalities for registration for a reduced corporate income tax rate at 15%. Duyun Company had completed such formalities and is entitled to the preferential rate of 15% for 2019.

##### (d) Tax preferences for small and micro enterprises

- (1) Shanxi Longye Construction Labor Service Co., Ltd. complies with the provisions of the Notice on Applying Inclusive Tax Relief Policies to Small and Micro Enterprises (Cai Shui [2019] No.13), pursuant to which for the period from 1 January 2019 to 31 December 2021, for small and micro enterprises, the portion of annual taxable income not exceeding RMB1 million is subject to a corporate tax rate of 20% on the basis of 25% of this portion of its taxable income, and the portion of annual taxable income exceeding RMB1 million but not exceeding RMB3 million is subject to corporate tax rate of 20% on the basis of 50% of this portion of its taxable income.

## SECTION 12 FINANCIAL REPORT

### 4 TAXES (CONTINUED)

#### 4.2 Important tax preferences and approval documents (Continued)

##### (d) Tax preferences for small and micro enterprises (Continued)

- (2) Guiyang Xinyu Construction Supervision Co., Ltd. complies with the provisions of the Notice on Applying Inclusive Tax Relief Policies to Small and Micro Enterprises (Cai Shui [2019] No.13), pursuant to which for the period from 1 January 2019 to 31 December 2021, for small and micro enterprises, the portion of annual taxable income not exceeding RMB1 million is subject to a corporate tax rate of 20% on the basis of 25% of this portion of its taxable income, and the portion of annual taxable income exceeding RMB1 million but not exceeding RMB3 million is subject to corporate tax rate of 20% on the basis of 50% of this portion of its taxable income.
- (3) Kunming Technology Development Co., Ltd. complies with the provisions of the Notice on Applying Inclusive Tax Relief Policies to Small and Micro Enterprises (Cai Shui [2019] No.13), pursuant to which for the period from 1 January 2019 to 31 December 2021, for small and micro enterprises, the portion of annual taxable income not exceeding RMB1 million is subject to a corporate tax rate of 20% on the basis of 25% of this portion of its taxable income, and the portion of annual taxable income exceeding RMB1 million but not exceeding RMB3 million is subject to corporate tax rate of 20% on the basis of 50% of this portion of its taxable income.
- (4) Luoyang Jincheng Construction Supervision Co., Ltd. complies with the provisions of the Notice on Applying Inclusive Tax Relief Policies to Small and Micro Enterprises (Cai Shui [2019] No.13), pursuant to which for the period from 1 January 2019 to 31 December 2021, for small and micro enterprises, the portion of annual taxable income not exceeding RMB1 million is subject to a corporate tax rate of 20% on the basis of 25% of this portion of its taxable income, and the portion of annual taxable income exceeding RMB1 million but not exceeding RMB3 million is subject to corporate tax rate of 20% on the basis of 50% of this portion of its taxable income.
- (5) Hunan Huachu Project Management Co., Ltd. complies with the provisions of the Notice on Applying Inclusive Tax Relief Policies to Small and Micro Enterprises (Cai Shui [2019] No.13), pursuant to which for the period from 1 January 2019 to 31 December 2021, for small and micro enterprises, the portion of annual taxable income not exceeding RMB1 million is subject to a corporate tax rate of 20% on the basis of 25% of this portion of its taxable income, and the portion of annual taxable income exceeding RMB1 million but not exceeding RMB3 million is subject to corporate tax rate of 20% on the basis of 50% of this portion of its taxable income.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## 5.1 Monetary fund

Items	Closing balance	Opening balance
Cash on hand	4,371,601.61	1,697,167.35
Cash at bank	9,169,931,009.29	5,902,794,245.22
Other monetary fund	851,622,754.17	906,545,031.66
<b>Total</b>	<b>10,025,925,365.07</b>	6,811,036,444.23
Including: total amount deposited abroad	2,704,259,965.57	415,870,188.11

Notes:

- (a) As at 31 December 2019, monetary funds included restricted cash of RMB905,429,914.91, including bank deposits secured for bank guarantees and acceptance bills and frozen deposits;
- (b) As at 31 December 2019, the Company a total of RMB2,636,858,841.15 deposited with Chinalco Finance Company Limited ("Chinalco Finance"), a related non-banking financial institution under common control of China Aluminum Group.

## 5.2 Derivative financial assets

Category	Closing balance	Opening balance
Currency swaps	–	188,760.00
<b>Total</b>	<b>–</b>	188,760.00



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.3 Notes receivable

Category	Closing balance	Opening balance
Bank's acceptance bills	<b>569,959,008.85</b>	500,252,044.57
Commercial acceptance bills	—	24,004,691.20
Less: loss allowance	—	—
<b>Total</b>	<b>569,959,008.85</b>	524,256,735.77

Notes:

- (a) As at 31 December 2019, bank's acceptance bills pledged but not yet due amounted to RMB22,183,705.80;
- (b) As at 31 December 2019, bank's acceptance bills discounted but not yet due amounted to RMB329,271,434.68;
- (c) As at 31 December 2019, bank's acceptance bills endorsed but not yet due amounted to RMB1,409,749,951.43.

## 5.4 Accounts receivable

## (a) Accounts receivable disclosed by category

Category	Closing balance			
	Carrying Amount		Loss allowance	
	Amount	Percentage (%)	Amount	Percentage (%)
Accounts receivable tested for impairment on an individual basis	<b>498,565,838.27</b>	<b>3.08</b>	<b>225,581,334.55</b>	<b>45.25</b>
Accounts receivable tested for impairment on a collective basis	<b>15,681,985,515.16</b>	<b>96.92</b>	<b>1,670,754,199.31</b>	<b>10.65</b>
Including, Group 1: aging analysis group	<b>15,681,985,515.16</b>	<b>96.92</b>	<b>1,670,754,199.31</b>	<b>10.65</b>
Subtotal	<b>15,681,985,515.16</b>	<b>96.92</b>	<b>1,670,754,199.31</b>	<b>10.65</b>
Total	<b>16,180,551,353.43</b>	<b>100.00</b>	<b>1,896,335,533.86</b>	<b>11.72</b>

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.4 Accounts receivable (Continued)

## (a) Accounts receivable disclosed by category (Continued)

Category	Carrying Amount		Opening balance	
	Amount	Percentage (%)	Amount	Percentage (%)
Accounts receivable tested for impairment on an individual basis	176,704,336.97	1.11	150,938,798.18	85.42
Accounts receivable tested for impairment on a collective basis	15,729,282,278.42	98.89	1,446,802,916.13	9.20
Including, Group 1: aging analysis group	15,729,282,278.42	98.89	1,446,802,916.13	9.20
Subtotal	15,729,282,278.42	98.89	1,446,802,916.13	9.20
Total	15,905,986,615.39	100.00	1,597,741,714.31	10.04

Note: As at 31 December 2019, the amount of pledged accounts receivable was RMB1,048,124,169.87.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.4 Accounts receivable (Continued)

## (a) Accounts receivable disclosed by category (Continued)

- (1) Accounts receivable tested for impairment on an individual basis as at the end of the period

Debtor	Carrying Amount	Loss allowance amount	Loss allowance percentage (%)	Reason for loss allowance
Debtor 1	212,855,167.01	46,509,365.45	21.85	In dispute. Expected not to be recoverable.
Debtor 2	73,210,673.67	29,284,269.47	40.00	In dispute. Expected not to be recoverable.
Debtor 3	24,378,464.00	24,378,464.00	100.00	Party A in bad operating conditions. Requested repayment repeatedly but failed. Expected not to be recoverable.
Debtor 4	18,900,000.00	–	–	Balance of continuing involvement in ABS
Debtor 5	18,507,525.30	3,701,505.06	20.00	In dispute. Expected not to be recoverable.
Debtor 6	17,755,000.00	17,755,000.00	100.00	In dispute. Expected not to be recoverable.
Debtor 7	14,650,020.00	14,650,020.00	100.00	In dispute. Expected not to be recoverable.
Debtor 8	14,087,796.89	7,043,898.45	50.00	Party A in bad operating conditions. Requested repayment repeatedly but failed. Expected not to be recoverable.
Debtor 9	13,712,240.01	6,856,120.01	50.00	Party A in bad operating conditions. Requested repayment repeatedly but failed. Expected not to be recoverable.
Debtor 10	12,197,670.21	3,764,301.06	30.86	Party A in bad operating conditions. Requested repayment repeatedly but failed. Expected not to be recoverable.
Total	420,254,557.09	153,942,943.50	–	–

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.4 Accounts receivable (Continued)

## (a) Accounts receivable disclosed by category (Continued)

(2) Accounts receivable tested for impairment on a collective basis

Group 1: aging analysis group:

Aging	Closing balance			Opening balance		
	Carrying Amount	Loss allowance percentage (%)	Loss allowance amount	Carrying Amount	Loss allowance percentage (%)	Loss allowance amount
Within 1 year	9,345,313,338.82	0.50	46,726,349.28	10,367,869,581.60	0.50	51,839,348.18
Between 1-2 years	3,241,282,352.75	10.00	324,128,235.35	1,913,494,503.68	10.00	191,349,450.48
Between 2-3 years	872,078,017.05	20.00	174,415,603.31	1,649,695,932.00	20.00	329,939,186.35
Between 3-4 years	1,121,126,642.77	30.00	336,337,992.92	1,107,224,668.94	30.00	332,167,400.78
Between 4-5 years	626,078,291.19	50.00	313,039,145.87	298,980,124.10	50.00	149,490,062.24
Over 5 years	476,106,872.58	100.00	476,106,872.58	392,017,468.10	100.00	392,017,468.10
Total	15,681,985,515.16	-	1,670,754,199.31	15,729,282,278.42	-	1,446,802,916.13

## (b) Addition to or recovery or reversal of loss allowance

For the reporting period, addition to loss allowance was RMB440,259,565.01, and recovered or reversed loss allowance was RMB15,711,109.71.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.4 Accounts receivable (Continued)

## (c) Significant accounts receivables written off for the reporting period

Accounts receivables written off for the reporting period amounted to RMB51,669,230.26.

Significant accounts receivables written off for the reporting period:

Debtor	Nature	Written-off Amount	Reason for Write-off	Write-off Procedures	Arising from Connected Transaction or Not
Debtor 1	Project payment	14,840,000.00	Debtor cancelled its registration with the industry and commerce authority	GM regular meeting	Yes
Debtor 2	Equipment payment	10,810,327.98	Debtor bankrupt and reorganized.	GM regular meeting	No
Debtor 3	Equipment payment	10,659,617.23	Balance outstanding upon bankruptcy and liquidation for the debtor.	GM regular meeting	No
Debtor 4	Project payment	5,443,851.74	Quantities of work in dispute. Debt reduced or exempted.	GM regular meeting	No
Total	–	41,753,796.95	–	–	–

## (d) Top five debtors of accounts receivable as at the end of the period

Debtor	Closing balance	Percentage in total accounts receivable (%)	Loss allowance balance
No. 1	608,237,199.15	3.76	31,449,764.53
No. 2	539,491,000.53	3.33	33,216,797.54
No. 3	465,767,119.83	2.88	2,785,546.63
No. 4	432,286,607.88	2.67	2,161,433.04
No. 5	426,886,938.55	2.64	64,540,336.21
Total	2,472,668,865.94	15.28	134,153,877.95

## SECTION 12 FINANCIAL REPORT

### 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### 5.4 Accounts receivable (Continued)

##### (e) Receivables derecognized on financial assets transfer

During the reporting period, the Company sold part of its accounts receivable (hereinafter referred to as “underlying assets”) to an ABS plan, and the Company a portion of subordinated asset-backed securities therein. As the asset manager, the Company provided service for the ABS plan, including asset management, asset recovery, change in underlying assets and other service. In 2019, the balance of accounts receivable sole by the Company to the ABS plan was RMB1,315,891,234.76, resulting in a gain of RMB19,337,105.40.

As it does not have substantial control over the ABS plan, the Company does not need to consolidate the ABS plan into its financial statements. Meanwhile, since the Company neither transferred nor retained almost all risks and rewards in the ownership of the underlying assets, the Company continues to recognize relevant financial asset to the extent of its continuing involvement in the underlying asset, and recognizes relevant liability accordingly. As of 31 December 2019, the Company’s recognized asset of RMB18,900,000.00 relation to the continuing involvement.

#### 5.5 Prepayments

##### (a) Prepayments presented by aging

Aging	Closing balance		Opening balance	
	Amount	Percentage (%)	Amount	Percentage (%)
Within 1 year	309,883,486.47	82.40	900,345,521.12	78.01
Between 1-2 years	60,835,502.56	0.86	165,014,939.89	14.30
Between 2-3 years	3,247,250.64	0.86	31,833,083.47	2.76
Above 3 years	2,099,264.70	0.56	56,942,745.18	4.93
Total	376,065,504.37	100.00	1,154,136,289.66	100.00

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.5 Prepayments (Continued)

## (a) Prepayments presented by aging (Continued)

Significant prepayments aged over 1 year

Debtee	Debtor	Closing balance	Aging	Reason for unsettlement
China Aluminum International Shandong Chemical Industry Co., Ltd.	Supplier 1	18,646,871.20	Between 1-2 years	Goods not delivered yet.
China Aluminum International Shandong Chemical Industry Co., Ltd.	Supplier 2	22,363,256.37	Between 1-2 years	Goods not delivered yet.
Headquarter of China Aluminum International Engineering Corporation Limited	Supplier 3	6,872,000.00	Between 2-3 years	Goods not delivered yet.
Total	–	47,882,127.57	–	–

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.5 Prepayments (Continued)

## (b) Top 5 debtors of prepayments

Debtor	Closing balance	Percentage in total prepayments (%)
No. 1	24,390,793.00	6.49
No. 2	22,363,256.37	5.95
No. 3	18,646,871.20	4.96
No. 4	16,919,396.00	4.50
No. 5	13,000,000.00	3.46
Total	95,320,316.57	25.35

## 5.6 Other receivables

Category	Closing balance	Opening balance
Interest receivable		
Dividends receivable	<b>1,815,949.86</b>	199,941.87
Other receivables	<b>3,128,012,009.73</b>	2,911,261,441.57
Less: loss allowance	<b>776,537,973.50</b>	713,579,271.34
Total	<b>2,353,289,986.09</b>	2,197,882,112.10

## (a) Dividends receivable

Classification of dividends receivable

Item	Closing balance	Opening balance
Investee 1	<b>199,941.87</b>	199,941.87
Investee 2	<b>1,616,007.99</b>	
Total	<b>1,815,949.86</b>	199,941.87



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.6 Other receivables (Continued)

## (b) Other receivables:

Category	Closing balance			
	Carrying Amount		Loss Allowance	
	Amount	Percentage (%)	Amount	Percentage (%)
Other receivable tested for impairment on an individual basis	899,506,250.48	28.76	379,953,934.72	42.24
Other receivable tested for impairment on a collective basis	2,228,505,759.25	71.24	396,584,038.78	17.80
Including, Group 1: aging analysis group	2,228,505,759.25	71.24	396,584,038.78	17.80
Subtotal	2,228,505,759.25	71.24	396,584,038.78	17.80
Total	3,128,012,009.73	100.00	776,537,973.50	24.83

Category	Opening balance			
	Carrying Amount		Loss Allowance	
	Amount	Percentage (%)	Amount	Percentage (%)
Other receivable tested for impairment on an individual basis	714,029,370.95	24.53	343,672,835.95	48.13
Other receivable tested for impairment on a collective basis	2,197,232,070.62	75.47	369,906,435.39	16.84
Including: Group 1: aging analysis group	2,197,232,070.62	75.47	369,906,435.39	16.84
Subtotal	2,197,232,070.62	75.47	369,906,435.39	16.84
Total	2,911,261,441.57	100.00	713,579,271.34	24.51

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.6 Other receivables (Continued)

## (b) Other receivables: (Continued)

- (1) Other receivables tested for impairment on an individual basis as at the end of the period

Debtor	Carrying amount	Loss allowance	Loss allowance percentage (%)	Reason for loss allowance
Debtor 1	672,621,550.00	302,815,050.00	45.02	Debtor in bad operating conditions. Expected not to be recoverable in full
Debtor 2	184,873,251.81	54,737,746.09	29.61	Debtor in bad operating conditions. Expected not to be recoverable in full
Debtor 3	29,783,850.23	11,913,540.09	40.00	Debtor in bad operating conditions. Expected not to be recoverable in full
Total	887,278,652.04	369,466,336.18	-	-

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.6 Other receivables (Continued)

## (b) Other receivables: (Continued)

- (2) Other receivables tested for impairment on a collective basis

Group 1: aging analysis portfolio

Aging	Carrying amount	Closing balance		Opening balance		
		Loss allowance percentage (%)	Loss allowance	Carrying amount	Loss allowance percentage (%)	Loss allowance
Within 1 year	1,043,235,331.06	0.50	5,216,821.42	823,213,650.11	0.50	4,116,195.63
Between 1-2 years	279,206,877.45	10.00	27,920,687.79	367,897,889.88	10.00	36,789,789.09
Between 2-3 years	249,425,531.58	20.00	49,885,106.26	533,046,529.31	20.00	106,609,305.87
Between 3-4 years	433,745,087.87	30.00	130,123,526.40	298,374,428.65	30.00	89,512,328.59
Between 4-5 years	78,910,068.96	50.00	39,455,034.58	83,641,512.97	50.00	41,820,756.51
Over 5 years	143,982,862.33	100.00	143,982,862.33	91,058,059.70	100.00	91,058,059.70
Total	2,228,505,759.25	-	396,584,038.78	2,197,232,070.62	-	369,906,435.39

- (3) Addition to or recovery or reversal of loss allowance

For the reporting period, addition to loss allowance was RMB108,712,366.67, and recovered or reversed loss allowance was RMB208,000.00.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.6 Other receivables (Continued)

## (b) Other receivables: (Continued)

- (4) Significant other receivables written-off for the reporting period

For the reporting period, other receivables of RMB45,317,597.45 were written off.

Significant loss allowance written off for the reporting period:

Debtor	Nature	Written-off Amount	Reason of Write-off	Write-off Procedures	Arising from Connected Transaction or Not
Debtor 1	Advance	26,270,664.56	Outstanding balance as ruled by the court	GM regular meeting	No
Debtor 2	Advance	10,684,550.10	Debtor bankrupt.	GM regular meeting	No
Total	–	36,955,214.66	–	–	–

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.6 Other receivables (Continued)

## (b) Other receivables: (Continued)

## (5) Other receivables by nature

Nature	Closing balance	Opening balance
Financing provided to Party A and its related parties	<b>1,236,464,451.81</b>	1,236,464,451.81
Retention funds or deposits	<b>912,172,830.86</b>	1,047,218,865.75
Advance	<b>756,784,858.83</b>	464,333,810.54
Imprest	<b>37,791,005.63</b>	19,801,878.63
Others	<b>184,798,862.60</b>	143,442,434.84
Sub-total	<b>3,128,012,009.73</b>	2,911,261,441.57
Less: loss allowance	<b>776,537,973.50</b>	713,579,271.34
Total	<b>2,351,474,036.23</b>	2,197,682,170.23

Note: In order to actively expand the market and share a win-win result with proprietors, the Company signs a capital arrangement agreement with some proprietors of the engineering contracting projects. In addition to general engineering construction services, the Company also provide the proprietors with a certain amount of financing in support of their completion of designated construction projects. Meanwhile, the Company charges a financing fee at agreed interest rate. As of 31 December 2019, the Company had failed to collect the financing fee or principal due on several capital arrangement agreements, and is actively negotiating with the proprietors and relevant parties. The Company has made judgment based on current progress of relevant construction contracting projects, guarantees provided by the proprietors and relevant parties, as well as negotiations between the Company and the proprietors and relevant parties, and has accrued loss allowance for relevant receivables. The Company believes that such provisions fully reflect the expected credit loss.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.6 Other receivables (Continued)

## (b) Other receivables: (Continued)

(6) Top five debtors of other receivables as at the end of the period

Debtor	Closing balance	Aging	Percentage in total other receivables at end of the year (%)	Loss allowance balance
No. 1	672,635,250.00	Within 5 years	21.50	302,815,118.50
No. 2	398,211,424.26	Between 2-5 years	12.73	117,454,627.28
No. 3	185,003,251.81	Over 2 years	5.91	54,867,746.09
No. 4	139,771,212.20	Between 1-2 years	4.47	13,977,121.22
No. 5	95,600,000.00	Within 1 year	3.06	478,000.00
Total	1,491,221,138.27	–	47.67	489,592,613.09

## 5.7 Inventories

## (1) Classification of inventories

Category	Carrying Amount	Closing balance Provisions for Impairment	Book Value
Raw materials	219,442,424.87	2,840,957.06	216,601,467.81
Work-in-process	1,339,456,781.82	74,779,798.07	1,264,676,983.75
Finished goods	1,157,061,592.23	31,619,690.66	1,125,441,901.57
Revolving materials and spare parts	211,431,546.46	–	211,431,546.46
Properties under development	292,240,483.30	–	292,240,483.30
Total	3,219,632,828.68	109,240,445.79	3,110,392,382.89

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.7 Inventories (Continued)

## (1) Classification of inventories (Continued)

Category	Carrying Amount	Opening balance Provisions for Impairment	Book Value
Raw materials	289,193,841.26	2,840,957.06	286,352,884.20
Work-in-process	1,368,846,122.83	75,938,056.86	1,292,908,065.97
Finished goods	1,051,568,139.50	60,431,165.66	991,136,973.84
Turnover materials and spare parts	151,952,485.07	–	151,952,485.07
Properties under development	710,504,438.00	–	710,504,438.00
Total	3,572,065,026.66	139,210,179.58	3,432,854,847.08

## (2) Additions and reductions to provision for impairment of inventories

Category	Opening balance	Additions	Reductions		Closing balance
			Reversal	Write-off	
Raw materials	2,840,957.06	–	–	–	2,840,957.06
Work-in-process	75,938,056.86	3,653,800.00	–	4,812,058.79	74,779,798.07
Finished goods	60,431,165.66	860,165.48	–	29,671,640.48	31,619,690.66
Total	139,210,179.58	4,513,965.48	–	34,483,699.27	109,240,445.79

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.8 Contract assets

## (1) Particulars of contract assets

Item	Carrying amount	Closing balance	
		Loss allowance	Book value
Contract assets tested for impairment on an individual basis	855,618,081.11	110,629,983.11	744,988,098.00
Contract assets tested for impairment on a collective basis	12,399,791,056.91	136,466,973.92	12,263,324,082.99
Group 1: contract assets not delivered to customers for use	12,121,569,710.14	60,608,129.51	12,060,961,580.63
Group 2: contract assets delivered to customers for use	278,221,346.77	75,858,844.41	202,362,502.36
<b>Total</b>	<b>13,255,409,138.02</b>	<b>247,096,957.03</b>	<b>13,008,312,180.99</b>

Item	Carrying amount	Opening balance	
		Loss allowance	Book value
Contract assets tested for impairment on an individual basis	413,412,844.06	50,528,936.08	362,883,907.98
Contract assets tested for impairment on a collective basis	10,821,591,142.17	117,926,609.16	10,703,664,533.01
Group 1: contract assets not delivered to customers for use	10,549,543,402.88	52,747,717.01	10,496,795,685.87
Group 2: contract assets delivered to customers for use	272,047,739.29	65,178,892.15	206,868,847.14
<b>Total</b>	<b>11,235,003,986.23</b>	<b>168,455,545.24</b>	<b>11,066,548,440.99</b>



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.8 Contract assets (Continued)

## (b) Loss allowance for contract assets

Item	Opening balance	Additions	Reductions	Closing balance
Contract assets tested for impairment on an individual basis	50,528,936.08	62,561,088.07	2,460,041.04	110,629,983.11
Contract assets tested for impairment on a collective basis	117,926,609.16	18,540,364.76	–	136,466,973.92
Group 1: contract assets not delivered to customers for use	52,747,717.01	7,860,412.50	–	60,608,129.51
Group 2: contract assets delivered to customers for use	65,178,892.15	10,679,952.26	–	75,858,844.41
<b>Total</b>	<b>168,455,545.24</b>	<b>81,101,452.83</b>	<b>2,460,041.04</b>	<b>247,096,957.03</b>

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.9 Non-current assets due within a year

Item	Closing balance	Opening balance
Long-term receivables due within a year	<b>430,833,366.90</b>	1,064,887,662.06
Less: loss allowance	<b>25,429,980.68</b>	15,150,955.90
<b>Total</b>	<b>405,403,386.22</b>	1,049,736,706.16

## 5.10 Other current-assets

Item	Closing balance	Opening balance
Deductible VAT input	<b>612,425,331.95</b>	596,944,946.62
Prepaid income tax	<b>43,912,283.74</b>	45,257,668.72
Wealth management products	–	156,481,560.00
<b>Total</b>	<b>656,337,615.69</b>	798,684,175.34

## 5.11 Long-term receivables

Item	Closing balance	Opening balance
Repurchase payment under BT contract	<b>666,804,575.95</b>	930,160,256.65
Long-term receivables from customers	<b>1,745,344,124.39</b>	1,791,921,147.93
Less: loss allowance	<b>95,773,028.70</b>	24,665,700.53
<b>Total book value</b>	<b>2,316,375,671.64</b>	2,697,415,704.05
– Current portion of long-term receivables	<b>405,403,386.22</b>	1,049,736,706.16
<b>– presented in long-term receivables</b>	<b>1,910,972,285.42</b>	1,647,678,997.89

Note: Pursuant to the engineering project contracting agreement or financing agreement signed between the Company and the proprietor or its related parties, the Company, in addition to general engineering construction service, provides a certain amount of financing to the proprietor and its related parties in support of their preliminary expenditures of designated construction projects. The above-mentioned financing will be repaid within a certain period of time.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.12 Long-term equity investment

Investee	Opening balance	Increase in investments	Decrease in investment	Investment gain or loss recognized under equity method	Increase/decrease			Cash dividends or profit declared	Provision for impairment	Closing balance	Provision for impairment Closing balance
					Adjustments to other comprehensive income	Other equity changes	Others				
1. Joint ventures											
Shanghai Fengtong Equity Investment Fund Partnership (Limited Partner)	9,125,439.61	-	-	-185,542.23	-	-	-	-	-	8,939,897.38	-
China Aluminum South Aluminum (Fujian) Aluminum Structure Technology Co., Ltd.	54,854,476.70	-	-	2,768,807.43	-	-	-	-	-	57,623,284.13	-
Zhongji Sunward Technology Co., Ltd.	33,517,343.75	-	-	2,676,497.17	-	-	-	-	-	36,193,840.92	-
Sub-total	97,497,260.06	-	-	5,259,762.36	-	-	-	-	-	102,757,022.42	-

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.12 Long-term equity investment (Continued)

Investee	Opening balance	Increase in investments	Decrease in investment	Investment gain or loss recognized under equity method	Increase/decrease			Provision for impairment	Closing balance	
					Adjustments to other comprehensive income	Other equity changes	Cash dividends or profit declared			
									Provision for impairment Closing balance	
2. Associates										
Zhuzhou Tianqiao Cane Co., Ltd.	-	171,835,516.27	-	1,665,144.23	-	-	-	-	173,530,660.50	-
Taikang Haowen Construction Co., Ltd.	79,661,247.06	28,640,000.00	-	389,314.93	-	-	-	-	108,690,561.99	-
Yunnan Ning Yong Expressway Co., Ltd.	30,000,000.00	-	-	-	-	-	-	-	30,000,000.00	-
Yunnan Lin Yun Expressway Co., Ltd.	30,000,000.00	-	-	-	-	-	-	-	30,000,000.00	-
Yunnan Lin Shuang Expressway Co., Ltd.	-	30,000,000.00	-	-	-	-	-	-	30,000,000.00	-
Luoyang Hui Zhong Aluminium Co., Ltd.	27,896,390.34	-	-	-121,954.30	-	-	-	-	27,844,436.04	-
China Environmental Protection and Energy Saving Technology (Hunan) Co., Ltd.	-	24,000,000.00	-	-10,320,403.06	-	-	-	-	13,479,596.94	-
Sichuan Chuanan Rail Transit Operation Co., Ltd.	-	28,000,000.00	-	-1,806.03	-	-	-	-	27,998,193.97	-
Xinzhong Investment Management (Tianjin) Co., Ltd.	18,267,607.02	-	-	87,067.40	-	-	-2,467,988.35	-	15,886,686.07	2,467,988.35
Jiangsu Nonferrous Metal Refractory Industrial Co., Ltd.	16,990,060.49	-	-	-3,283,037.82	-	-	-	-	13,697,022.67	-
Guizhou Tongye Construction Development Co., Ltd.	11,419,810.56	-	-	10,413,645.22	-	-	-	-	21,833,455.78	-
China Intelligent (Heilongjiang) Safety Science Research Institute Co., Ltd.	-	11,013,159.00	-	-5,041,533.24	-	-	-	-	5,971,625.76	-
China Construction Aluminum-Advanced Material Henan Co., Ltd.	10,228,250.46	-	-	925,571.56	-	-	-	-	11,153,822.02	-
China Environmental Protection and Ecological Technology (Hunan) Co., Ltd.	-	7,350,748.02	-	-3,350,989.31	-	-	-	-	3,999,758.71	-
Shaanxi Zhonghang Construction and Installation Co., Ltd.	13,522,665.48	-	-	-2,589,972.83	-	-	-	-	11,560,027.15	-
Chaco Steering Intelligent Technology Co., Ltd.	10,864,976.66	-	-	-5,263,202.52	631,334.50	-	-	-	5,601,774.14	-
Others	134,104,738.08	-	-	6,637,200.01	28,735.78	-4,488,686.32	-	-	136,362,088.55	8,665,256.17
Sub-total	383,025,746.15	300,838,423.29	-	-10,038,955.75	660,070.28	-4,488,686.32	-2,467,988.35	-	667,549,710.30	11,133,244.52
Total	480,523,006.21	300,838,423.29	-	-4,779,193.39	660,070.28	-4,488,686.32	-2,467,988.35	-	770,306,732.72	11,133,244.52

## SECTION 12 FINANCIAL REPORT

### 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### 5.12 Long-term equity investment (Continued)

Notes:

- (1) Shanghai Fengtong Equity Investment Fund Partnership (Limited Partner)(hereafter “Shanghai Fengtong Fund”) was established by Shanghai Ample Harvest Equity Investments Management Company Limited(hereafter “Harvest Equity”) as a general partner in 2013. Harvest Equity made capital contribution of RMB10,000,000.00; The parent company of Harvest Equity, Harvest Capital Management Company Limited (“Harvest Capital”) as a limited partner, made capital contribution of RMB2,000,000,000.00; the Company as a limited partner, made capital contribution of RMB40,000,000.00; Another limited partner made capital contribution of RMB50,000,000.00. During the year of 2014, the Company signed a series of supplemental contracts with other relevant parties and obtained jointly control over Shanghai Fengtong Fund because that the decision about the main activities of the partnership required the unanimous consent of the Company and the other parties. As agreed, Harvest Capital will withdraw its capital contribution within three years. During the three-year investment period of Harvest Capital, return on investment will be distributed in the following order: Shanghai Fengtong Fund will give priority to the payment of interest at 8.30% annualized rate of return to Harvest Capital, and then distribute expected return at 8.30% annualized rate to limited partners. Any residual return upon Harvest Capital’s withdrawal will be distributed to Harvest Equity and the Company on a 1:1 basis as to debt investments and on a 3:7 basis as to equity investments. If Shanghai Fengtong Fund fails to pay the principal and expected return to Harvest Capital as agreed above, the Company must immediately make up for the unpaid portion, upon which the Company has the right to receive liquidity support from Harvest Equity. As of the reporting date of this report, Shanghai Fengtong Fund has returned the capital contribution of Harvest Capital, and the Company has been discharged from the obligation to make up for any deficiency. Meanwhile, The Group is considering the withdrawal from Shanghai Fengtong Fund whereas the relevant work is in progress. The Company measures the long-term equity investment at the end of the period at the best estimate of the share of assets expected to be received upon its withdrawal from the partnership.
- (2) In February 2015, Zhongji Sunward Technology Co., Ltd. (“Zhongji Sunward”) was jointly established by the Company and Sunward Intelligent Equipment Co., Ltd. The Company holds 49% equity and voting right in Zhongji Sunward. According to the articles of association of Zhongji Sunward, decisions on its major issues and activities require two-third majority approval at the board of directors and the general meeting, so the Company has joint control over Zhongji Sunward.
- (3) In October 2016, the Company and Fujian South Aluminum Engineering Corporation Limited established China Aluminum South Aluminum (Fujian) Aluminum Structure Technology Co., Ltd. (“China Aluminum South Aluminum (Fujian)”). The Company paid in capital contribution of RMB50,000,000.00 in January 2018 and held 50% equity and voting right in it. According to the articles of association, decisions on its major issues and activities require two-third majority approval at the board of directors and the general meeting, so the Company and Fujian South Aluminum Engineering Corporation Limited has joint control over China Aluminum South Aluminum (Fujian).
- (4) Though holding less than 20% equity in Luoyang Hua Zhong Aluminum Co., Ltd., the Company has assigned one or more directors and has significant influence over it. So, Luoyang Hua Zhong Aluminum Co., Ltd. is regarded as an associate of the Company.
- (5) Mr. WANG Yonghong, Vice President of the Company, has been a director of Zhuzhou Tianqiao Crane Co., Ltd. since November 2019. As the Company can exert a significant influence on it, the Company shifts to the equity method to account for its equity investment.
- (6) In 2019, the Company appointed Beijing Zhongtonghua Asset Evaluation Co., Ltd. to assess the market value of 19 patented technologies of its subsidiary Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy. The appraised value was RMB24 million (Appraisal Report No.: Zhong Tong Hua Ping Bao Zi (2019) No.020874). The Company made capital contribution with the above patented technologies to establish Chinalco Environmental Protection and Energy Saving Technology (Hunan) Co., Ltd. jointly with Chinalco Environmental Protection and Energy Saving Group. The Company holds 49% equity and voting rights and has significant influence, so it is an associate of the Company.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.12 Long-term equity investment (Continued)

- (7) In 2019, the Company appointed Woxen (Beijing) International Asset Evaluation Co., Ltd. to assess market value of the intelligent information asset group of its subsidiary, China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.. The appraised value was RMB11.0132 million (Appraisal Report No.: Woxen Ping Bao Zi [2019] No.1052). The Company made capital contribution with the above asset group to establish Chinalco Intelligent (Hangzhou) Safety Science Research Institute Co., Ltd. jointly with Chinalco Intelligent Technology Development Co., Ltd. The Company holds 49% equity and voting rights and has significant influence, so it is an associate of the Company.
- (8) In 2019, the Company appointed Beijing Zhongtonghua Asset Evaluation Co., Ltd. to assess the market value of some electronic equipment and intangible assets of its subsidiary Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy. The appraised value was RMB7.3507 million (Appraisal Report No.: Zhong Tong Hua Ping Bao Zi (2019) No.020967). The Company made capital contribution with the ownership over the above assets to establish Chinalco Environmental Protection and Ecological Technology (Hunan) Co., Ltd. jointly with Chinalco Environmental Protection and Energy Saving Group. The Company holds 49% equity and voting rights and has significant influence, so it is an associate of the Company.

The impact of non-monetary capital contribution in the above (6), (7) and (8) and inter-company unrealized profit involving associates was eliminated in proportion to our shareholding when adjusting profit or loss using the equity method.

## 5.13 Other equity instrument investments

Item	Closing balance			Opening balance		
	Carrying amount	Provision for impairment	Book value	Carrying amount	Provision for impairment	Book value
Zhuzhou Tianqiao Crane Co., Ltd.	-	-	-	158,907,452.35	-	158,907,452.35
Guizhou Aerospace Wujiang Electromechanical Equipment Co., Ltd.	14,067,464.80	-	14,067,464.80	14,781,358.91	-	14,781,358.91
Others	31,355,499.06	-	31,355,499.06	33,966,062.67	-	33,966,062.67
Total	45,422,963.86	-	45,422,963.86	207,654,873.93	-	207,654,873.93

## 5.14 Other non-current financial assets

Category	Closing balance	Opening balance
Subordinated shares in China Securities – CHALIECO 2019 Accounts Receivable ABS Plan	18,900,000.00	-
Total	18,900,000.00	-

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.15 Investment property

## (a) Investment property measured at cost

Item	Housings and buildings	Land use right	Total
I. Original value			
1. As at beginning of year	181,971,971.89	111,697,629.35	293,669,601.24
2. Additions	211,039,868.63	70,124,519.44	281,164,388.07
(1) Arising from consolidation of new subsidiaries	129,802,314.03	70,124,519.44	199,926,833.47
(2) Transferred from inventories, fixed assets or CIP	81,237,554.60	–	81,237,554.60
3. Reductions	315,250.87	–	315,250.87
(1) Disposal	–	–	–
(2) Others	315,250.87	–	315,250.87
4. As at end of the year	392,696,589.65	181,822,148.79	574,518,738.44
II. Accumulated depreciation and accumulated amortization			
1. As at beginning of the year	59,356,497.57	21,864,546.32	81,221,043.89
2. Additions	11,034,405.10	4,460,104.26	15,494,509.36
(1) Depreciation or amortization	6,604,050.13	2,331,575.04	8,935,625.17
(2) Arising from business combination	4,430,354.97	2,128,529.22	6,558,884.17
3. Reductions	299,488.33	–	299,488.33
(1) Disposal	–	–	–
(2) Others	299,488.33	–	299,488.33
4. As at end of the year	70,091,414.34	26,324,650.58	96,416,064.92
III. Provision for impairment			
1. As at beginning of the year	–	–	–
2. Additions	–	–	–
3. Reductions	–	–	–
4. As at end of the year	–	–	–
IV. Book value			
1. As at end of the year	322,605,175.31	155,497,498.21	478,102,673.52
2. As at beginning of the year	122,615,474.32	89,833,083.03	212,448,557.35

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.16 Fixed assets

Category	Closing balance	Opening balance
Fixed assets	<b>2,314,891,145.04</b>	2,082,418,489.51
Fixed assets pending disposal	–	–
Less: provision for impairment	<b>1,058,216.90</b>	1,058,216.90
Total	<b>2,313,832,928.14</b>	2,081,360,272.61

## (a) Details of fixed assets

Item	Housings and buildings	Machinery equipment	Transportation vehicles	Office equipment and others	Total
I. Original value					
1. As at beginning of the year	2,186,094,662.18	834,468,108.25	256,644,733.87	339,171,217.70	3,616,378,722.00
2. Additions	306,232,946.81	46,362,940.52	9,641,767.36	42,170,633.33	404,408,288.02
(1) Purchased	121,275,479.17	43,751,267.75	9,373,045.38	36,466,378.14	210,866,170.44
(2) Transferred from CIP	164,933,647.65	2,611,672.77	–	4,497,020.77	172,042,341.19
(3) Arising from business combination	–	–	268,721.98	1,207,234.42	1,475,956.40
(4) Other additions	20,023,819.99	–	–	–	20,023,819.99
3. Reductions	5,025,692.62	30,982,034.88	15,080,862.59	6,258,101.52	57,346,691.61
(1) Disposal or scraping	5,025,692.62	30,982,034.88	14,725,881.39	5,716,771.03	56,450,379.92
(2) Arising from disposal of subsidiaries	–	–	–	72,334.63	72,334.63
(3) Other reductions	–	–	354,981.20	468,995.86	823,977.06
4. As at end of the year	2,487,301,916.37	849,849,013.89	251,205,638.64	375,083,749.51	3,963,440,318.41



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.16 Fixed assets (Continued)

## (a) Details of fixed assets (Continued)

Item	Housings and buildings	Machinery equipment	Transportation vehicles	Office equipment and others	Total
II. Accumulated depreciation					
1. As at beginning of the year	551,844,588.14	576,150,833.02	174,558,834.57	231,405,976.76	1,533,960,232.49
2. Additions	74,296,879.91	50,348,651.48	15,452,584.22	24,743,015.77	164,841,131.38
(1) Depreciation	74,296,879.91	50,348,651.48	15,452,584.22	24,743,015.77	164,841,131.38
3. Reductions	4,786,911.73	29,154,721.57	11,514,170.87	4,796,386.33	50,252,190.50
(1) Disposal or scraping	4,786,911.73	29,154,721.57	11,364,196.31	4,459,282.68	49,765,112.29
(2) Other reductions	-	-	149,974.56	337,103.65	487,078.21
4. As at end of the year	621,354,556.32	597,344,762.93	178,497,247.92	251,352,606.20	1,648,549,173.37
III. Provision for impairment					
1. As at beginning of the year	231,752.96	685,113.94	141,350.00	-	1,058,216.90
2. Additions	-	-	-	-	-
3. Reductions	-	-	-	-	-
4. As at end of the year	231,752.96	685,113.94	141,350.00	-	1,058,216.90
IV. Book value					
1. As at end of the year	1,865,715,607.09	251,819,137.02	72,567,040.72	123,731,143.31	2,313,832,928.14
2. As at beginning of the year	1,634,018,321.08	257,632,161.29	81,944,549.30	107,765,240.94	2,081,360,272.61

## (b) Fixed asset for which the title certificate has not been obtained

Item	Book balance	Reason
Housings and buildings	203,894,592.75	In progress
Transportation vehicles	497,171.03	In progress
Total	204,391,763.78	-

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.16 Fixed assets (Continued)

## (c) Fixed fully depreciated but still in use

Category	Original value	Accumulated depreciation	Impairment provision	Book value
Housings and Buildings	71,226,426.02	68,668,198.14	231,752.96	2,326,474.92
Machinery equipment	277,852,607.46	264,946,651.12	685,113.94	12,220,842.40
Transportation vehicles	82,212,855.49	78,031,629.13	–	4,181,226.36
Office equipment and others	125,153,917.35	118,871,048.12	–	6,282,869.23
<b>Total</b>	<b>556,445,806.32</b>	<b>530,517,526.51</b>	<b>916,866.90</b>	<b>25,011,412.91</b>

## 5.17 Construction in progress

Category	Closing balance	Opening balance
CIP items	<b>300,722,025.12</b>	413,812,227.65
Construction materials	–	–
Less: impairment provision	–	32,759,000.00
<b>Total</b>	<b>300,722,025.12</b>	<b>381,053,227.65</b>

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.17 Construction in progress (Continued)

## (a) CIP items

## (1) Basic information on CIP items

Item	Closing balance			Opening balance		
	Book balance	Impairment provision	Book value	Book balance	Impairment provision	Book value
CNPT Suzhou Industrial Park	-	-	-	105,088,417.15	32,759,000.00	72,329,417.15
Changkan R&D Center	-	-	-	113,553,906.15	-	113,553,906.15
Yue Liang Wan Health Project	269,584,039.83	-	269,584,039.83	144,538,311.70	-	144,538,311.70
Changsha Office Building for Shandong Construction's Relocation	-	-	-	32,874,539.27	-	32,874,539.27
Others	31,137,985.29	-	31,137,985.29	17,757,053.38	-	17,757,053.38
<b>Total</b>	<b>300,722,025.12</b>	<b>-</b>	<b>300,722,025.12</b>	<b>413,812,227.65</b>	<b>32,759,000.00</b>	<b>381,053,227.65</b>

## (2) Significant changes in CIP

Item	Budgeted investment	Opening balance	Additions	Transferred to			Closing balance
				Transferred to fixed assets	intangible assets	Other reductions	
CNPT Suzhou Industrial Park	118,660,000.00	72,329,417.15	213,384.44	-	-	72,542,801.59	-
Changkan R&D Center	144,000,000.00	113,553,906.15	18,883,765.05	132,437,671.20	-	-	-
Yue Liang Wan Health Project	498,000,000.00	144,538,311.70	125,045,728.13	-	-	-	269,584,039.83
Changsha Office Building for Shandong Construction's Relocation	40,000,000.00	32,874,539.27	4,373,644.07	33,438,659.54	3,809,523.80	-	-
<b>Total</b>	<b>800,660,000.00</b>	<b>363,296,174.27</b>	<b>148,516,521.69</b>	<b>165,876,330.74</b>	<b>3,809,523.80</b>	<b>72,542,801.59</b>	<b>269,584,039.83</b>

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.17 Construction in progress (Continued)

## (a) CIP items (Continued)

## (2) Significant changes in CIP (Continued)

Item	Completion of budgeted investment (%)	Percentage of completion (%)	Accumulated capitalized interest	Including: interest capitalized for the year	Capitalization rate of interest for the year (%)	Source of funds
CNPT Suzhou Industrial Park	-	-	-	-	-	Funded by the Company
Changkan R&D Center	100.00	100.00	-	-	-	Funded by the Company
Yue Liang Wan Health Project	54.13	54.13	-	-	-	Funded by the Company
Changsha Office Building for Shandong Construction's Relocation	100.00	100.00	-	-	-	Funded by the Company
Total	-	-	-	-	-	-

Note: As the Company disposed of all its equity in Suzhou Nonferrous Metal Materials Co., Ltd. during the year, the Company no longer consolidates its financial statements and transferred out its "CIP – CNPT Suzhou Industrial Park".

## (3) CIP impairment provision

Item	Opening balance	Addition	Reduction	Closing balance	Reason
CNPT Suzhou Industrial Park (Note)	32,759,000.00	-	32,759,000.00	-	Reduction on disposal of a subsidiary
Total	32,759,000.00	-	32,759,000.00	-	-

Note: As the Company disposed of all its equity in Suzhou Nonferrous Metal Materials Co., Ltd. during the year, the Company no longer consolidates its financial statements and transferred out its impairment provision of RMB32,759,000.00RMB for CNPT Suzhou Industrial Park.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.18 Right-of-use assets

Item	Opening balance	Additions	Reductions	Closing balance
I. Original value	28,531,409.02	11,796,804.73	1,066,664.94	39,261,548.81
– Housings and buildings	26,948,423.58	11,796,804.73	–	38,745,228.31
– Machines and transportation and office equipment	1,582,985.44	–	1,066,664.94	516,320.50
II. Accumulated depreciation and accumulated amortization	–	12,275,144.86	–	12,275,144.86
– Housings and buildings	–	12,072,960.07	–	12,072,960.07
– Machines, transportation vehicles and office equipment	–	202,184.79	–	202,184.79
III. Book balance	28,531,409.02	–	–	26,986,403.95
– Housing and buildings	26,948,423.58	–	–	26,672,268.24
– Machines and transportation and office equipment	1,582,985.44	–	–	314,135.71
IV. Provision for impairment	–	–	–	–
– Housing and buildings	–	–	–	–
– Machines and transportation and office equipment	–	–	–	–
V. Book value	28,531,409.02	–	–	26,986,403.95
– Housing and buildings	26,948,423.58	–	–	26,672,268.24
– Machines and transportation and office equipment	1,582,985.44	–	–	314,135.71

Note: The Company charged short-term lease expense and low-value asset lease expense totaling RMB32,859,963.49 to profit or loss.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.19 Intangible assets

## Details of intangible assets

Item	Land Use Right	Patent Right	Software	Others	Total
I. Original value					
1. As at beginning of the year	862,963,812.24	261,000,384.77	119,072,115.53	223,121,552.35	1,466,157,864.89
2. Additions	51,130,269.38	10,890.00	11,860,780.02	137,719,529.10	200,721,468.50
(1) Purchased	32,449,408.58	10,890.00	10,234,714.05	9,321.39	42,704,334.02
(2) Arising from in-house R&D	-	-	1,603,773.66	-	1,603,773.66
(3) Arising from business combination	-	-	22,292.31	-	22,292.31
(4) Other additions	18,680,860.80	-	-	137,710,207.71	156,391,068.51
3. Reductions	45,525,407.97	137,525.51	23,938.77	-	45,686,872.25
(1) Disposal	14,804,315.93	137,525.51	5,938.77	-	14,947,780.21
(2) Reduced on disposal of a subsidiary	30,721,092.04	-	-	-	30,721,092.04
(3) Other reductions	-	-	18,000.00	-	18,000.00
4. As at end of the year	868,568,673.65	260,873,749.26	130,908,956.78	360,841,081.45	1,621,192,461.14
II. Accumulated depreciation	-	-	-	-	-
1. As at beginning of the year	164,748,745.97	227,090,396.51	91,822,282.85	11,038,422.98	494,699,848.31
2. Additions	19,630,673.74	17,948,346.01	6,959,610.03	1,901,892.42	46,440,522.20
(1) Depreciation	19,630,673.74	17,948,346.01	6,954,222.70	1,901,892.42	46,435,134.87
(2) Arising from business combination	-	-	5,387.33	-	5,387.33
3. Reductions	6,797,921.51	-	7,138.77	-	6,805,060.28
(1) Disposal	2,344,092.43	-	5,938.77	-	2,350,031.20
(2) Reduction on disposal of a subsidiary	4,453,829.08	-	-	-	4,453,829.08
(3) Other reductions	-	-	1,200.00	-	1,200.00
4. As at end of the year	177,581,498.20	245,038,742.52	98,774,754.11	12,940,315.40	534,335,310.23
III. Provision for impairment					
1. As at beginning of the year	-	-	-	-	-
2. Additions	-	-	-	-	-
3. Reductions	-	-	-	-	-
4. As at end of the year	-	-	-	-	-
IV. Book value					
1. As at end of the year	690,987,175.45	15,835,006.74	32,134,202.67	347,900,766.05	1,086,857,150.91
2. As at beginning of the year	698,215,066.27	33,909,988.26	27,249,832.68	212,083,129.37	971,458,016.58

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.20 Development cost

Item	Opening balance	Additions		Reductions		Closing balance
		Internal development cost	Others	Charged to profit or loss	Recognized as intangible assets	
Spare product and spare part service platform	780,349.13	1,214,013.20	-	-	-	1,994,362.33
Attached Steel and Aluminum Scaffold Project	302,890.74	-	-	-	-	302,890.74
Total	1,083,239.87	1,214,013.20	-	-	-	2,297,253.07

## 5.21 Long-term prepaid expense

Category	Opening balance	Additions	Amortization	Other Reductions	Closing balance
Rental cost of the underground garage of Twelfth Metallurgical Company	9,999,111.16	-	249,977.76	-	9,749,133.40
Others	15,446,260.91	14,997,049.86	9,901,507.40	3,152,685.49	17,389,117.88
Total	25,445,372.07	14,997,049.86	10,151,485.16	3,152,685.49	27,138,251.28

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.22 Deferred tax assets and deferred tax liabilities

## (a) Deferred tax assets and deferred tax liabilities, not on a netting basis

Item	Closing balance	
	Deferred Tax Assets/Liabilities	Deferred Tax Assets/Liabilities
Deferred tax assets:		
Retirement and termination benefits	131,116,515.22	679,935,000.00
Asset impairment provisions	624,637,922.98	3,048,672,369.54
Deductible loss	28,209,344.96	147,126,784.60
Changes in fair value of other equity instrument investment	1,730,759.26	11,538,395.05
Others	45,620,384.75	296,620,140.51
Subtotal	831,314,927.17	4,183,892,689.70
Deferred tax liabilities:		
Appreciation on asset evaluation	73,564,855.47	378,787,509.38
Changes in fair value of other equity instrument investment	721,304.85	4,808,698.91
Others	49,675,380.23	496,753,802.30
Sub-total	123,961,540.55	880,350,010.59



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.22 Deferred tax assets and deferred tax liabilities (Continued)

## (a) Deferred tax assets and deferred tax liabilities, not on a netting basis (Continued)

Item	Opening balance	
	Deferred Tax Assets/Liabilities	Deferred Tax Assets/Liabilities
Deferred tax assets:		
Retirement and termination benefits	159,323,200.00	819,082,000.00
Asset impairment provisions	528,374,593.46	2,561,340,911.19
Deductible loss	39,767,665.84	194,130,349.62
Changes in fair value of other equity instrument investment	1,222,506.49	8,150,043.22
Others	37,719,625.39	243,388,867.66
Sub-total	766,407,591.18	3,826,092,171.69
Deferred tax liabilities:		
Appreciation on asset evaluation	88,733,428.39	478,463,628.47
Changes in fair value of other equity instrument investment	22,828,876.69	152,192,511.27
Others	52,684,400.00	526,844,000.02
Sub-total	164,246,705.08	1,157,500,139.76

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.22 Deferred tax assets and deferred tax liabilities (Continued)

## (b) Deferred tax assets and deferred tax liabilities, on a netting basis

Item	Netting of deferred tax assets or liabilities as at end of the year	Deferred tax assets or liabilities as at end of the year, on a netting basis	Netting of deferred tax assets or liabilities as at beginning of the year	Deferred tax assets or liabilities as at beginning of the year, on a netting basis
Deferred tax assets	48,671,271.68	782,643,655.49	89,424,892.08	676,982,699.10
Deferred tax liabilities	48,671,271.68	75,290,268.87	89,424,892.08	74,821,813.00

## (c) Details of unrecognized deferred tax assets

Item	Closing balance	Opening balance
Deductible temporary difference	105,272,742.53	142,998,847.80
Deductible loss	1,038,652,299.37	448,776,699.77
Total	1,143,925,041.90	591,775,547.57

## (d) Deductible loss on unrecognized deferred tax assets will be due in:

Year	Closing balance	Opening balance	Remarks
2019	55,334,300.68	97,994,158.70	–
2020	59,459,377.33	59,459,377.33	–
2021	–	–	–
2022	32,061,940.20	32,061,940.20	–
2023	259,261,223.54	259,261,223.54	–
2024	632,535,457.62	–	–
Total	1,038,652,299.37	448,776,699.77	–

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.23 Other non-current assets

Item	Closing balance	Opening balance
Investment in construction of Highway PPP project	<b>2,505,671,962.22</b>	–
VAT input deductible one year later	<b>107,004,700.82</b>	–
Prepayment for property purchase	<b>38,581,060.00</b>	38,300,000.00
Prepaid investment	–	8,000,000.00
Others	<b>130,469.16</b>	851,469.16
Long-term contract asset	<b>799,919,319.88</b>	997,270,877.52
Less: loss allowance	<b>5,927,964.68</b>	4,986,354.38
Subtotal	<b>3,445,379,547.40</b>	1,039,435,992.30
– Current portion	–	–
Total	<b>3,445,379,547.40</b>	1,039,435,992.30

Notes:

1. The Company consolidates the financial statements of a new subsidiary Yunnan Miyu Expressway Investment and Development Co., Ltd. As the subsidiary remained in a construction and investment stage as at 31 December 2019, its profit loss for the year is recognized as long-term contract asset and shown in other non-current assets.
2. As at 31 December 2019, the Company had made prepayment for property purchase of RMB38,581,060.00 to Shandong Qianhong Industrial Park.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.24 Short-term loans

## Classification of short-term loans

Terms of Loan	Closing balance	Opening balance
Bank loans	–	–
– Pledge loans	150,000,000.00	105,000,000.00
– Mortgage loans	250,000,000.00	110,000,000.00
– Guarantee loans	1,354,004,560.55	1,379,567,293.35
– Credit loans	4,439,160,200.00	6,177,976,823.09
Subtotal	6,193,164,760.55	7,772,544,116.44
Loans from non-bank financial institutions	1,000,517,480.01	1,139,500,000.00
– Entrusted loans	–	140,000,000.00
Subtotal	7,193,682,240.56	9,052,044,116.44
Interest expense accrued prior to the contractual interest payment date	4,613,028.47	–
Total	7,198,295,269.03	9,052,044,116.44

## Notes:

- As at 31 December 2019, pledge loans from banks amounted to RMB150,000,000.00, with pledge over accounts receivable of RMB250,000,000.00 of the Company;
- As at 31 December 2019, mortgage loans from banks amounted to RMB250,000,000.00, with mortgage over property of the Company;
- As at 31 December 2019, guarantee loans from banks amounted to RMB1,354,004,560.55, for which the Company and its subsidiaries have provided joint liability guarantee.
- As at 31 December 2019, the Company received pledge loan of RMB438,500,000.00 from Chinalco Commercial Factoring (Tianjin) Co., Ltd. (a non-bank financial institution), with pledge over accounts receivable of RMB763,388,240.77, received pledge loan of RMB10,859,178.85 from Shenzhen Bailinhui Commercial Factoring Co., Ltd. (a non-bank financial institution), with pledge over accounts receivable of RMB10,859,178.85, and received pledge loan of RMB1,158,301.16 from Beifang Yuanda Commercial Factoring Co., Ltd. (a non-bank financial institution) with pledge over accounts receivable of RMB1,158,301.16.
- As at 31 December 2019, guarantee loans from Chinalco Finance Company Limited (a non-bank financial institution) amounted to RMB110,000,000.00, for which the Company and its subsidiaries have provided joint liability guarantee.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 6.25 Derivative financial liabilities

Category	Closing balance	Opening balance
Futures	–	22,500.00
Total	–	22,500.00

## 5.25 Notes receivable

Item	Closing balance	Opening balance
Bank's acceptance bill	930,726,218.53	752,425,989.46
Commercial acceptance bill	26,540,000.00	–
Total	957,266,218.53	752,425,989.46

## 5.27 Accounts payable

## (a) By aging

Item	Closing balance	Opening balance
Within 1 year (inclusive)	11,250,983,352.35	11,431,211,481.39
Over 1 year	4,486,953,798.91	3,885,034,603.77
Total	15,737,937,151.26	15,316,246,085.16

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.27 Accounts payable (Continued)

## (b) Significant accounts payable aged over 1 year

Creditor	Closing balance	Reason of non-payment
Creditor 1	305,700,800.00	Payment conditions not satisfied yet
Creditor 2	275,665,945.31	Payment conditions not satisfied yet
Creditor 3	167,327,720.38	Payment conditions not satisfied yet
Creditor 4	145,233,415.90	Payment conditions not satisfied yet
Creditor 5	134,896,183.87	Payment conditions not satisfied yet
Creditor 6	116,934,684.45	Payment conditions not satisfied yet
Creditor 7	115,475,750.48	Payment conditions not satisfied yet
Creditor 8	111,408,402.81	Payment conditions not satisfied yet
Creditor 9	108,648,915.51	Payment conditions not satisfied yet
Creditor 10	96,473,552.77	Payment conditions not satisfied yet
Total	1,577,765,371.48	–

## 5.28 Contract liabilities

Item	Closing balance	Opening balance
Within 1 year (inclusive)	2,216,769,397.00	2,601,836,828.89
Over 1 year	164,622,412.44	114,980,855.99
Total	2,381,391,809.44	2,716,817,684.88

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.28 Contract liabilities

## Significant contract liabilities aged over 1 year

Creditor	Closing balance	Reason
Customer 1	93,336,351.75	Advance received from customers, but the goods under contract not transferred yet.
Customer 2	58,629,336.87	Advance received from customers, but the goods under contract not transferred yet.
Customer 3	41,164,807.39	Advance received from customers, but the goods under contract not transferred yet.
Total	193,130,496.01	–

## 5.29 Employee benefits payable

## (a) Employee benefits payable by category

Item	Opening balance	Additions	Reductions	Closing balance
Short-term employee benefits	145,610,883.72	1,987,985,483.59	2,020,015,544.29	113,580,823.02
Post-service benefits-				
defined contribution plans	4,303,873.54	264,026,089.23	261,694,283.49	6,635,679.28
Termination benefits	105,210,000.00	65,650,526.02	90,413,526.02	80,447,000.00
Other benefits due				
within one year	–	–	–	–
Total	255,124,757.26	2,317,662,098.84	2,372,123,353.80	200,663,502.30

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.29 Employee benefits payable (Continued)

## (b) Short-term employee benefits

Item	Opening balance	Additions	Reductions	Closing balance
Salary, bonus, allowance and subsidy	92,932,538.67	1,485,303,050.36	1,496,231,049.40	82,004,539.63
Employee welfare	–	105,071,002.23	105,071,002.23	–
Contribution to social security funds	3,077,643.76	127,252,276.10	126,368,608.95	3,961,310.91
– Medical insurance fund	2,805,647.46	109,323,824.28	108,527,410.90	3,602,060.84
– Work injury insurance fund	111,387.22	11,133,408.03	11,007,484.22	237,311.03
– Maternity insurance fund	160,609.08	6,795,043.79	6,833,713.83	121,939.04
Contribution to housing provident fund	3,286,752.65	139,286,892.56	138,767,030.30	3,806,614.91
Trade union fee and employee education fee	35,484,852.38	26,841,221.78	43,503,363.24	18,822,710.92
Other short-term benefits	10,829,096.26	104,231,040.56	110,074,490.17	4,985,646.65
Total	145,610,883.72	1,987,985,483.59	2,020,015,544.29	113,580,823.02

## (3) Defined contribution plan

Item	Opening balance	Additions	Reductions	Closing balance
Contribution to basic pension fund	3,542,322.95	202,926,038.36	201,860,557.29	4,607,804.02
Contribution to unemployment insurance fund	755,683.33	7,254,839.72	7,329,723.61	680,799.44
Contribution to enterprise annuity plan	5,867.26	53,845,211.15	52,504,002.59	1,347,075.82
Total	4,303,873.54	264,026,089.23	261,694,283.49	6,635,679.28



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.30 Taxes and surcharges payable

Tax	Closing balance	Opening balance
VAT	71,302,289.53	154,753,267.56
Corporate income tax	153,317,654.02	126,403,078.95
House property tax	1,694,760.41	1,581,474.15
Land use tax	1,296,336.27	1,498,668.25
Land appreciation tax	1,779,520.81	1,838,212.49
Individual income tax	10,639,813.15	9,556,605.70
Urban maintenance and construction tax	10,615,431.14	12,635,284.31
Educational surcharges	7,158,998.18	8,574,637.03
Others	9,253,937.70	7,258,908.35
Total	267,058,741.21	324,100,136.79

## 5.31 Other payables

Category	Closing balance	Opening balance
Interest payables	–	17,471,084.13
Dividends payables	30,000,000.00	30,000,000.00
Other payables	4,949,140,933.59	1,647,116,447.48
Total	4,979,140,933.59	1,694,587,531.61

## (a) Dividends payable

Item	Closing balance	Opening balance	Reason for non-payment
Dividends on ordinary stock	–	–	–
Interest on other equity instruments	30,000,000.00	30,000,000.00	–
Total	30,000,000.00	30,000,000.00	–

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.31 Other payables (Continued)

## (b) Other payables

(1) Other payables by nature

Nature	Closing balance	Opening balance
Sums payable for perpetual bonds redemption	2,511,257,595.00	–
Retention funds and deposits payable	1,051,550,721.03	737,915,978.34
Temporary collection	619,313,038.40	237,454,178.90
Correspondence	287,485,269.74	432,474,715.02
Others	479,534,309.42	239,271,575.22
<b>Total</b>	<b>4,949,140,933.59</b>	1,647,116,447.48

(2) Significant other payments aged over 1 year

Creditor	Closing balance	Reason for Nonpayment
Creditor 1	23,425,466.52	Not due yet
Creditor 2	15,000,000.00	Not due yet
<b>Total</b>	<b>38,425,466.52</b>	–

## 5.32 Current portion of non-current liabilities

Item	Closing balance	Opening balance
Long-term loans due within one year	859,157,001.87	635,600,000.00
Interest expense unpaid but accrued on long-term loans due within one year	1,635,519.74	–
Debentures payable due within one year	–	717,997,500.02
Lease obligations due within one year	12,153,554.05	11,653,295.64
<b>Total</b>	<b>872,946,075.66</b>	1,365,250,795.66

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.33 Other current liabilities

Item	Closing balance	Opening balance
Pending VAT output	<b>1,560,745,950.85</b>	1,344,399,651.43
Short-term debentures payable	<b>1,016,916,666.67</b>	–
Liabilities on continuing involvement in ABS	<b>18,900,000.00</b>	–
<b>Total</b>	<b>2,596,562,617.52</b>	1,344,399,651.43

## Changes in short-term debentures payable

Bond Name	Face Value	Issued on	Term	Amount Issued
19 Zhong Lv Guo Gong SCP001	1,000,000,000.00	11 July 2019	270 days	1,000,000,000.00
<b>Total</b>	1,000,000,000.00	–	–	1,000,000,000.00

Bond Name	Opening balance	Issued	Interest Accrued on Face Value	Amortization of Premium or Discount	Repaid	As at 31 December 2019
19 Zhong Lv Guo Gong SCP001	–	1,000,000,000.00	16,916,666.67	–	–	1,016,916,666.67
<b>Total</b>	–	1,000,000,000.00	16,916,666.67	–	–	1,016,916,666.67

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.34 Long-term loans

## (a) Long-term loans by category

Terms of Loan	Closing balance	Opening balance
Bank loans	–	–
Pledge loans	–	–
– Mortgage loans	20,000,000.00	20,000,000.00
Guarantee loans	1,030,324,000.00	1,252,000,000.00
Credit loans	2,201,612,778.00	1,280,000,000.00
Subtotal	3,251,936,778.00	2,552,000,000.00
Loans from non-bank financial institutions	273,718,449.09	306,600,000.00
Entrusted loans	2,000,000,000.00	
Less: long-term loans due within one year	859,157,001.87	635,600,000.00
Total	4,666,498,225.22	2,223,000,000.00

## Notes:

- As at 31 December 2019, mortgage loans from banks amounted to RMB20,000,000.00, with mortgage over property of the Company;
- As at 31 December 2019, guarantee loans from banks amounted to RMB1,030,324,000.00, for which the Company and its subsidiaries have provided joint liability guarantee.
- As at 31 December 2019, entrusted loans amounted to RMB2,000,000,000.00, for which the Company and its subsidiaries have provided joint liability guarantee.
- As at 31 December 2019, guarantee loans from Chinalco Finance Company Limited (a non-bank financial institution) amounted to RMB251,000,000.00, for which the Company and its subsidiaries have provided joint liability guarantee.
- As at 31 December 2019, the Company received pledge loan of RMB11,773,007.66 from Shenzhen Qianhai Yifang Commercial Factoring Co., Ltd. (a non-bank financial institution), with pledge over accounts receivable of RMB11,773,007.66, received pledge loan of RMB6,004,545.38 from Shenzhen Bailinhui Commercial Factoring Co., Ltd. (a non-bank financial institution), with pledge over accounts receivable of RMB6,004,545.38, received pledge loan of RMB2,999,248.21 from Shenzhen Qianhai Lianyirong Commercial Factoring Co., Ltd. (a non-bank financial institution), with pledge over accounts receivable of RMB2,999,248.21 and received pledge loan of RMB1,941,647.84 from Shenzhen Lianhe Factoring Co., Ltd. (a non-bank financial institution) with pledge over accounts receivable of RMB1,941,647.84.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.34 Long-term loans (Continued)

## (b) Payment term of long-term loans over 1 year

Payment Term	Closing balance		Opening balance	
	Loans from bank	Loans from non-bank financial institution	Loans from bank	Loans from non-bank financial institution
Between 1-2 years	1,503,000,000.00	212,561,447.22	1,110,000,000.00	213,000,000.00
Between 2-5 years	567,524,000.00	2,000,000,000.00	900,000,000.00	-
Over 5 years	383,412,778.00	-	-	-
Total	2,453,936,778.00	2,212,561,447.22	2,010,000,000.00	213,000,000.00

## 5.35 Lease obligations

Item	Closing balance	Opening balance
Lease payment	28,342,211.27	30,177,888.59
Less: unrecognized financing expense	2,279,255.57	1,954,177.76
Less: lease obligations due within one year	12,153,554.04	11,653,295.64
Total	13,909,401.66	16,570,415.19

## 5.36 Long-term payables

Nature	Closing balance	Opening balance
Long-term payables	-	-
Special payables	4,598,530.23	5,606,227.87
Total	4,598,530.23	5,606,227.87

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.36 Long-term payables (Continued)

Including: special payables

Item	Opening balance	Addition	Reduction	Closing balance	Reason
Study on coking performance of petroleum coke during calcination in tank furnace	–	195,000.00	–	195,000.00	China Aluminum Group New Project Funds for Young Talents
Others	5,606,227.87	550,000.00	1,752,697.64	4,403,530.23	–
Total	5,606,227.87	745,000.00	1,752,697.64	4,598,530.23	–

## 5.37 Long-term employee benefits payable

(a) Long-term employee benefits payable

Category	Closing balance	Opening balance
Long-term employee benefits payable	<b>679,935,000.00</b>	819,081,000.00
Less: current portion	<b>80,447,000.00</b>	105,210,000.00
Total	<b>599,488,000.00</b>	713,871,000.00

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.37 Long-term employee benefits payable (Continued)

## (b) Changes in defined benefit plan

DBP net liabilities (net assets)

Item	2019	2018
1. Opening balance	<b>819,081,000.00</b>	981,783,638.55
2. Net interest	<b>24,942,786.21</b>	36,893,000.00
3. Benefits paid	<b>-118,637,554.17</b>	-121,758,198.78
4. Actuarial loss (gain)	<b>21,880,317.65</b>	46,349,751.69
5. Past service cost	<b>-68,471,349.69</b>	-125,057,191.46
6. Current service cost	<b>1,139,800.00</b>	870,000.00
7. Closing balance	<b>679,935,000.00</b>	819,081,000.00

Note: The above obligations were determined based on actuarial valuations performed by an independent qualified actuarial firm, Towers Watson Consulting Company Limited, using the projected unit credit actuarial cost method.

The material actuarial assumptions used in valuing these obligations are as follows:

- (i) Discount rate adopted (per annum)

	At 31 December 2019	At 31 December 2018
Discount rate	<b>3.00%</b>	3.25%

- (ii) Mortality: Average life expectancy of residents in the PRC;  
 (iii) Average medical expense increase rate: 8%;  
 (iv) Cost of living adjustment (COLA) for beneficiaries: 4.5%; and  
 (v) Medical costs paid to early retirees are assumed to continue until the death of the retirees.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.38 Deferred income

## (a) Deferred income presented by category

Item	Opening balance	Addition	Reduction	Closing balance	Reason
Government subsidy	40,813,744.29	20,280,971.16	8,058,290.18	53,036,425.27	Benefiting period not expired
Total	40,813,744.29	20,280,971.16	8,058,290.18	53,036,425.27	–

## 2. Details of government subsidies

Item	Opening balance	Addition	Recorded in P&L	Other Changes	Closing balance	Related to asset or income
Reduction in and exemption of Wugang land grant premium	14,987,730.51	–	356,144.16	–	14,631,586.35	Asset
Land subsidy for factory building of Technology Heavy Industry	6,000,000.00	–	400,000.00	–	5,600,000.00	Asset
Preparation process of high pollution-resistant hollow fiber membrane clean energy	5,250,001.00	–	583,333.00	–	4,666,668.00	Asset
Government subsidy for overall relocation of Shandong project	–	16,000,000.00	–	–	16,000,000.00	Asset
Others	14,576,012.78	4,280,971.16	6,718,813.02	–	12,138,170.92	Asset
Total	40,813,744.29	20,280,971.16	8,058,290.18	–	53,036,425.27	–



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.39 Share capital

Items	Opening balance	New shares issued	Increase/Decrease (+, -)			Subtotal	Closing balance
			Bonus shares	Shares converted from capital reserve	Others		
Total number of shares	2,959,066,667.00	-	-	-	-	-	2,959,066,667.00
China Aluminum Group Limited	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
HK listed H shareholders	363,160,000.00	-	-	-	-	-	363,160,000.00
Public ordinary shareholders	295,906,667.00	-	-	-	-	-	295,906,667.00

## 5.40 Other equity instruments

Outstanding financial instruments	Opening balance		Addition		Reduction		Closing balance	
	Number	Carrying amount	Number	Carrying amount	Number	Carrying amount	Number	Carrying amount
16 Zhong Gong Y1 Renewable Corporate Bond	12,080,000.00	1,202,301,886.79	-	-	12,080,000.00	1,202,301,886.79	-	-
17 Zhong Gong Y1 Renewable Corporate Bond	5,000,000.00	497,500,000.00	-	-	-	-	5,000,000.00	497,500,000.00
19 Zhong Gong Y1 Renewable Corporate Bond	-	-	15,000,000.00	1,498,584,905.65	-	-	15,000,000.00	1,498,584,905.65
Industrial Bank Trust Loan	-	-	1,000,000,000.00	1,000,000,000.00	-	-	1,000,000,000.00	1,000,000,000.00
Total	-	1,699,801,886.79	-	2,498,584,905.65	-	1,202,301,886.79	-	2,996,084,905.65

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.41 Capital reserve

Category	Opening balance	Addition	Reduction	Closing balance
1. Share premium	854,180,385.99	–	66,977,858.34	787,202,527.65
2. Other capital reserve	–	8,139,282.04	–	8,139,282.04
Total	854,180,385.99	8,139,282.04	66,977,858.34	795,341,809.69

## Notes

- Capital reserve – share premium recorded a reduction of RMB66,977,858.34 for the year. Specifically, (1) the Company and its subsidiary Chalico Hong Kong Corporation Limited declared redemption of perpetual bonds recorded in non-controlling interests, leading to a RMB62,347,404.64 decrease in “capital reserve – share premium”, and (2) our subsidiary China Nonferrous Metals Processing Technology Co., Ltd. acquired Luoyang Foyang Decoration Engineering Co., Ltd. through incremental capital contribution, which constituted business combination under common control, leading to a RMB4,630,453.70 decrease in “capital reserve – share premium”.
- Capital reserve – other capital reserve recorded an addition of RMB8,139,282.04, including RMB8,110,546.26 arising from incremental capital contribution from non-controlling interests of our subsidiary Shaanxi Zhong Mian Investment Company Limited, and (2) RMB28,735.78 arising from incremental capital contribution from another shareholder of our subsidiary Guiyang Aluminum and Magnesium Design Institute Co., Ltd.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.42 Other comprehensive income

Item	Opening balance	OCI for the year, pretax	Less: recorded in OCI in earlier period but transferred to P&L for the year	2019		OCI attributable to the parent company, after tax	OCI attributable to non-controlling interest, after tax	Closing balance
				Less: recorded in OCI in earlier period but transferred to retained earnings	Less: income tax			
1. OCI not to be reclassified to P&L	70,799,191.26	-15,825,711.45	-	-13,478,602.20	-26,724,292.26	11,302,806.97	-404,226.16	95,680,600.43
- Change on DBP remeasurement	122,075,758.82	-26,079,317.65	-	-	-4,108,467.65	-21,322,270.25	-648,579.75	100,753,488.57
- OCI not to be transferred to P&L under equity method	-	-	-	-	-	-	-	-
- Change in fair value of other equity instrument investment	-51,276,567.56	10,253,606.20	-	-13,478,602.20	-22,615,824.61	32,625,077.22	244,353.59	-5,172,888.14
- Change in fair value arising from credit risk of the Company itself	-	-	-	-	-	-	-	-
2. OCI to be reclassified into P&L	126,486,916.00	1,759,213.56	-	-	-	1,759,213.56	-	128,246,129.56
- OCI to be transferred to P&L under equity method	-	-	-	-	-	-	-	-
- Change in fair value of other debt investment	-	-	-	-	-	-	-	-
- OCI on financial assets reclassification	-	-	-	-	-	-	-	-
- Allowance for credit loss on other debt investment	-	-	-	-	-	-	-	-
- Cashflow hedging reserve	-	-	-	-	-	-	-	-
Foreign currency translation difference	126,486,916.00	1,759,213.56	-	-	-	1,759,213.56	-	128,246,129.56
Total OCI	197,286,107.26	-14,066,497.89	-	-13,478,602.20	-26,724,292.26	13,062,020.53	-404,226.16	223,826,729.99

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.43 Special reserve

Category	Opening balance	Addition	Reduction	Closing balance	Reason for Change
Production safety fee	64,767,607.84	309,410,046.04	249,272,420.71	124,905,233.17	Appropriation and usage
Total	64,767,607.84	309,410,046.04	249,272,420.71	124,905,233.17	-

## 5.44 Surplus reserve

Category	Opening balance	Addition	Reduction	Closing balance
Statutory surplus reserve	188,914,615.74	12,671,982.36	-	201,586,598.10
Total	188,914,615.74	12,671,982.36	-	201,586,598.10

## 5.45 Undistributed profit

Item	Closing balance	
	Amount	Percentage
Unadjusted undistributed profit as at end of the previous year	<b>4,194,677,085.74</b>	-
Adjustments to undistributed profit as at beginning of the year ("+" for increase, and "-" for decrease)	-	-
Adjusted undistributed profit as at beginning of the year	<b>4,194,677,085.74</b>	-
Add: net profit attributable to owners of the parent company	<b>34,852,562.55</b>	-
Less: appropriation to statutory surplus reserve	<b>12,671,982.36</b>	-
Dividends payable to perpetual bond holders	<b>90,400,000.00</b>	-
Dividends payable to ordinary shareholders	<b>91,731,066.68</b>	-
Transfer from other comprehensive income to retained earnings	<b>13,478,602.20</b>	-
Undistributed profit at end of the year	<b>4,021,247,997.05</b>	-

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.46 Operating revenue and operating cost

## Operating revenue and operating cost by segment

Item	2019		2018	
	Revenue	Cost	Revenue	Cost
1. Subtotal of principal business	<b>30,772,696,282.38</b>	<b>27,565,400,172.51</b>	33,367,194,470.93	30,114,794,295.36
Engineering contracting	<b>20,774,891,423.68</b>	<b>18,529,178,330.91</b>	21,558,636,118.83	19,355,363,739.45
Engineering design and consultancy	<b>2,558,231,571.09</b>	<b>1,857,432,952.00</b>	2,361,045,959.18	1,605,884,105.15
Equipment manufacturing	<b>1,720,426,035.79</b>	<b>1,576,551,038.39</b>	1,496,419,871.44	1,357,905,447.45
Trading business	<b>5,944,081,746.43</b>	<b>5,823,597,765.73</b>	8,295,672,311.76	8,138,869,707.09
Less: inter-segment elimination	<b>224,934,494.61</b>	<b>221,359,914.53</b>	344,579,790.28	343,228,703.78
2. Subtotal of other business	<b>287,095,329.25</b>	<b>214,287,313.64</b>	267,656,724.39	245,399,440.16
Material sales	<b>129,921,860.81</b>	<b>112,521,769.64</b>	182,508,017.29	190,171,687.39
Lease	<b>82,730,421.79</b>	<b>20,848,325.27</b>	46,761,925.44	14,102,345.10
Others	<b>85,446,576.79</b>	<b>80,937,908.39</b>	41,584,115.13	41,125,407.67
Less: inter-segment elimination	<b>11,003,530.14</b>	<b>20,689.66</b>	3,197,333.47	–
Total	<b>31,059,791,611.63</b>	<b>27,779,687,486.15</b>	33,634,851,195.32	30,360,193,735.52

## 5.47 Taxes and surcharges

Item	2019	2018
Urban maintenance and construction tax	<b>24,991,780.60</b>	17,350,178.47
Educational surcharge	<b>18,942,434.72</b>	14,342,537.74
Others	<b>60,814,095.75</b>	42,663,047.87
Total	<b>104,748,311.07</b>	74,355,764.08

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.48 Sales expense

Item	2019	2018
Employee benefits	<b>74,921,977.51</b>	54,429,705.64
Travel expense	<b>17,546,605.43</b>	19,041,671.68
Warehousing and logistics	<b>5,237,644.44</b>	3,152,235.75
Entertainment expense	<b>7,346,085.14</b>	5,666,544.39
Others	<b>20,395,139.70</b>	16,768,367.37
Total	<b>125,447,452.22</b>	99,058,524.83

## 5.49 Administrative expense

Item	2019	2018
Employee benefits	<b>630,950,194.08</b>	547,801,835.08
Depreciation and amortization	<b>116,656,820.38</b>	132,040,512.51
Office expense	<b>157,458,051.43</b>	139,600,755.08
Travel expense	<b>39,591,923.57</b>	44,276,501.67
Intermediary expense	<b>31,015,680.30</b>	33,895,784.41
Entertainment expense	<b>17,673,140.95</b>	18,118,965.95
Party development expense	<b>8,942,520.59</b>	11,444,782.91
Others	<b>64,655,867.82</b>	51,113,844.41
Total	<b>1,066,944,199.12</b>	978,292,982.02

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.50 R&amp;D expense

Item	2019	2018
Employee benefits	<b>283,663,172.16</b>	284,403,099.40
Raw materials and main materials	<b>182,991,600.92</b>	100,059,862.38
Fuel and power	<b>1,624,394.02</b>	45,876,760.49
Depreciation and amortization	<b>13,451,071.02</b>	14,239,503.64
Outsourced R&D expense	<b>18,128,815.50</b>	9,617,040.78
Auxiliary expense	<b>3,096,929.69</b>	6,454,966.93
Other expenses	<b>21,360,762.19</b>	22,346,984.31
Total	<b>524,316,745.50</b>	482,998,217.93

## 5.51 Financial expense

Item	2019	2018
Interest expense	<b>738,061,865.69</b>	691,464,678.22
Less: interest income	<b>210,652,452.70</b>	226,773,538.16
Exchange loss	<b>688,825,982.59</b>	729,130,105.27
Less: exchange gain	<b>698,068,662.46</b>	739,748,730.61
Commission fee	<b>47,607,745.46</b>	55,542,062.32
Other expenses	<b>7,345,166.31</b>	4,346,018.51
Total	<b>573,119,644.89</b>	513,960,595.55

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.52 Other gains

Item	2019	2018	Related to assets/income
Income related	<b>37,444,713.76</b>	11,846,013.74	Income
Asset related	<b>2,220,143.84</b>	5,850,556.27	Assets
Total	<b>39,664,857.60</b>	17,696,570.01	–

## 5.53 Gain on investment

Category	2019	2018
Gain on long-term equity investment accounted for using equity method	<b>–4,779,193.39</b>	3,983,314.95
Gain on disposal of a subsidiary	<b>11,343,057.12</b>	124,801,633.82
Gain on disposal of financial assets at FVTPL	<b>22,500.00</b>	–
Gain on holding other equity instrument investment	<b>2,780,255.19</b>	3,599,962.47
Gain or loss on derecognition of financial assets at amortized cost	<b>19,337,105.40</b>	–
Gain on investment in wealth management products	<b>21,306,074.27</b>	8,168,153.15
Total	<b>50,009,798.59</b>	140,553,064.39

## 5.54 Gain on change in fair value

Source of gain on change in fair value	2019	2018
Derivative instruments	<b>164,450.00</b>	166,260.00
Total	<b>164,450.00</b>	166,260.00



## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.55 Expected credit loss

Item	2019	2018
Expected credit loss on accounts receivable	<b>-424,548,455.30</b>	-273,543,379.46
Expected credit loss on other receivables	<b>-108,504,366.67</b>	-198,828,740.33
Expected credit loss on long-term receivables	<b>-72,247,951.56</b>	-12,979,719.80
Expected credit loss on contract assets	<b>-81,594,626.20</b>	-37,607,263.04
Total	<b>-686,895,399.73</b>	-522,959,102.63

## 5.56 Asset impairment loss

Item	2019	2018
Inventory impairment loss	<b>-4,513,965.48</b>	5,852,211.17
Long-term equity investment impairment loss	<b>-2,467,988.35</b>	-4,900,506.21
Fixed asset impairment loss	-	-9,077,229.79
CIP impairment loss	-	-32,759,000.00
Intangible asset impairment loss	-	-4,997,638.80
Total	<b>-6,981,953.83</b>	-45,882,163.63

## 5.57 Gain on asset disposal

Item	2019	2018
Gain on disposal of fixed assets	<b>18,916,695.49</b>	1,644,533.99
Gain on disposal of intangible assets	<b>26,770,887.78</b>	-
Total	<b>45,687,583.27</b>	1,644,533.99

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.58 Non-operating income

Item	2019	2018	Amount included in non-recurring gain or loss for the year
Government subsidies not related to daily activities	<b>10,236,127.37</b>	7,429,700.00	10,236,127.37
Gain on debt restructuring	<b>845,432.55</b>	1,693,437.16	845,432.55
Compensation income	<b>14,903,589.70</b>	4,105,010.32	14,903,589.70
Approved payables impossible to be paid	<b>52,918,958.05</b>	33,476,123.21	52,918,958.05
Others	<b>10,497,582.98</b>	4,607,716.86	10,497,582.98
<b>Total</b>	<b>89,401,690.65</b>	51,311,987.55	89,401,690.65

## 5.59 Non-operating expense

Item	2019	2018	Amount included in non-recurring gain or loss for the year
Loss on debt restructuring	<b>3,857,474.35</b>	2,157,684.28	3,857,474.35
Compensation expense	<b>7,328,901.79</b>	57,952,937.47	7,328,901.79
Net expense related to "Three Supplies and One Property"	<b>48,542,574.98</b>	41,208,133.04	48,542,574.98
Other	<b>12,076,595.37</b>	9,222,322.38	12,076,595.37
<b>Total</b>	<b>71,805,546.49</b>	110,541,077.17	71,805,546.49

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.60 Income tax expense

## (a) Details of income tax expense

Item	2019	2018
Income tax expense for the year calculated according to the tax law and relevant regulations	201,827,956.67	199,076,818.80
Deferred income tax expense	-79,579,455.53	-52,404,064.09
Total	122,248,501.14	146,672,754.71

## (b) Reconciliation of accounting profit and income tax expense

Item	Amount
Total profit	344,773,252.74
Income tax expense calculated at statutory/applicable tax rate	51,715,987.91
Impact of subsidiaries applying different tax rates	-32,235,362.32
Impact of adjustments to income tax for prior period	7,837,216.77
Impact of non-taxable income	-12,689,653.24
Impact of non-deductible cost, expense and loss	54,274,049.51
Impact of utilizing deductible temporary difference or deductible loss on which no deferred tax asset was recognized in prior period	-7,006,306.75
Impact of deductible temporary difference or deductible loss on which no deferred tax asset is recognized in current period	97,189,478.34
Income tax impact of interest on perpetual bonds recorded in equity	-22,528,600.54
Others	-14,308,308.54
Income tax expense	122,248,501.14

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.61 Statement of cash flows

## (a) Other cash received or paid related to operating activities

Item	2019	2018
Other cash received related to operating activities	<b>291,405,782.93</b>	477,586,488.77
– Cash received for payment on behalf	<b>55,478,990.28</b>	56,028,723.20
Interest on demand deposits received	<b>98,999,329.42</b>	88,439,036.04
Withdrawal of retention funds and deposits	<b>79,534,812.67</b>	238,652,320.73
Government subsidy related to income received	<b>40,552,293.63</b>	90,726,425.10
Decrease in restricted cash	<b>14,025,013.38</b>	–
Other cash paid related to investing activities	<b>574,222,505.44</b>	476,757,176.34
– R&D expense and intermediary fee paid	<b>253,033,632.04</b>	42,863,984.21
Office expense paid	<b>151,100,218.49</b>	77,236,573.54
Travel expense paid	<b>90,273,628.93</b>	83,164,463.63
Bank charges paid	<b>39,562,469.44</b>	59,641,080.83
Entertainment expense paid	<b>27,487,978.10</b>	23,175,235.75
Litigation loss paid	<b>8,077,909.07</b>	80,749,487.22
Increase in restricted cash	–	72,832,509.69

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.61 Statement of cash flows (Continued)

## (b) Other cash received or paid related to investing activities

Item	2019	2018
Other cash received related to investing activities	35,393,806.67	–
– Difference of cash paid for acquisition of a subsidiary below cash held by the subsidiary on acquisition date	20,393,806.67	–
Withdrawal of margin on futures	15,000,000.00	–
Other cash paid related to investing activities	–	15,000,000.00
Payment of margin on futures	–	15,000,000.00

## (c) Other cash received or paid related to financing activities

Item	2019	2018
Other cash received related to financing activities	–	152,163,656.00
– Cash received from note financing	–	152,163,656.00
Other cash paid related to financing activities	1,292,861,926.69	678,441,247.74
– redemption of perpetual bonds recorded in other equity instruments	1,208,000,000.00	–
Cash paid in business combination under common control	67,474,379.80	–
Payment of principal and interest of lease obligation	11,753,766.49	–
Bond and perpetual bond issuance cost	5,333,405.71	–
Liquidation payment to other shareholders upon cancellation of a subsidiary	300,374.69	–
Repayment under note financing	–	647,573,656.00
A share issuance cost	–	30,867,591.74

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.62 Supplementary details for cash flow statement

## (a) Supplementary details for cash flow statement

Item	2019	2018
1. Reconciliation of net profit to cash flows from operating activities	–	–
Net profit	<b>222,524,751.60</b>	511,308,693.19
Add: Asset impairment provision	<b>6,981,953.83</b>	45,882,163.63
Credit impairment loss	<b>686,895,399.73</b>	522,959,102.63
Depreciation of fixed assets, depreciation of right-of-use assets and depreciation of investment properties	<b>184,808,027.50</b>	176,970,929.61
Amortization of intangible assets	<b>46,435,134.87</b>	48,971,765.85
Amortization of long-term prepaid expense	<b>10,151,485.16</b>	14,291,169.19
Loss on disposal of fixed assets, intangible assets and other long-term assets (“–” for gain)	<b>–45,687,583.27</b>	–1,644,533.99
Loss on scraping of fixed assets (“–” for gain)	<b>–363,857.39</b>	786,203.39
Loss on net exposure netting (“–” for gain)	<b>–164,450.00</b>	–166,260.00
Finance expense (“–” for income)	<b>527,409,412.99</b>	588,200,002.96
Investment loss (“–” for gain)	<b>–30,672,693.19</b>	–140,553,064.39
Decrease in deferred tax assets (“–” for increase)	<b>–105,660,956.39</b>	–67,983,919.52
Increase in deferred tax liabilities (“–” for decrease)	<b>468,455.87</b>	8,570,897.50
Decrease in inventories (“–” for increase)	<b>322,462,464.19</b>	–399,051,879.02
Decrease in contract assets (“–” for increase)	<b>–1,941,763,740.00</b>	–2,708,322,001.76
Decrease in operating receivables (“–” for increase)	<b>134,496,988.01</b>	–2,480,815,100.58
Increase in operating payables (“–” for decrease)	<b>1,077,656,054.57</b>	4,445,482,091.55
Others		
Net cashflow from operating activities	<b>1,095,976,848.08</b>	564,886,260.24

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.62 Supplementary details for cash flow statement (Continued)

## (a) Supplementary details for cash flow statement (Continued)

Item	2019	2018
2. Significant investing and financing activities not involving cash payment or receipt	–	–
Conversion from debt to capital	–	–
Current portion of convertible corporate bonds	–	–
Fixed asset under finance lease	–	–
3. Net change in cash and cash equivalents	–	–
Cash at end of the year	<b>9,120,495,450.16</b>	5,831,581,515.94
Less: cash at beginning of year	<b>5,831,581,515.94</b>	6,287,736,811.70
Add: cash equivalents at end of the year	–	–
Less: cash equivalents at beginning of the year	–	–
Net increase in cash and cash equivalents	<b>3,288,913,934.22</b>	–456,155,295.76

## (b) Net cash paid during the year for acquisition of a subsidiary

Item	Amount
Cash or cash equivalents paid during the year from business combination during the year	486,995,600.00
– Luoyang Kaiying Technology Co., Ltd.	180,395,600.00
Yunnan Miyu Expressway Investment and Development Co., Ltd.	306,600,000.00
Less: cash and cash equivalents held by a subsidiary on the acquisition date	326,995,246.87
– Luoyang Kaiying Technology Co., Ltd.	1,440.20
Yunnan Miyu Expressway Investment and Development Co., Ltd.	326,993,806.67
Total	160,000,353.13
Add: reclassification of net cash inflow from acquisition of Miyu to other cash related to investing activities	20,393,806.67
Net cash paid for acquisition of a subsidiary	180,394,159.80

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.62 Supplementary details for cash flow statement (Continued)

## (c) Net cash received from disposal of subsidiaries during the year

Item	Amount
Cash and cash equivalent received during the year from disposal of a subsidiary during the year	56,366,180.00
– Suzhou Nonferrous Metal Materials Co., Ltd.	166,180.00
– Tianjin Xintong Real Estate Co., Ltd.	56,200,000.00
Less: Cash and cash equivalents held by a subsidiary on the date of losing control	43,486,235.06
– Suzhou Nonferrous Metal Materials Co., Ltd.	81,144.89
– Tianjin Xintong Real Estate Co., Ltd.	43,405,090.17
Add: cash or cash equivalents received during the year from disposal of a subsidiary in prior years	89,770,800.00
– Suzhou Nonferrous Metal Design and Research Institute Co., Ltd.	89,770,800.00
Net cash received from disposal of subsidiaries	102,650,744.94

## (d) Cash and cash equivalents

Item	Closing balance	Opening balance
1. Cash	<b>9,120,495,450.16</b>	5,831,581,515.94
Including: cash on hand	<b>4,371,601.61</b>	1,697,167.35
Cash at bank	<b>9,169,931,009.29</b>	5,902,794,245.22
Other monetary fund	<b>851,622,754.17</b>	906,545,031.66
Less: time deposits with maturities over three months	–	–
Restricted cash	<b>905,429,914.91</b>	979,454,928.29
2. Cash equivalents	–	–
Including: time deposit maturing within three months	–	–
3. Cash and cash equivalents at end of the year	<b>9,120,495,450.16</b>	5,831,581,515.94



## SECTION 12 FINANCIAL REPORT

### 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### 5.63 “Others” in the statement of changes in owners’ equity

##### (a) “Others” in the statement of changes in owners’ equity for 2019

- (1) Under “other equity instruments”, the RMB-1,202,301,886.79 change in “Others” represent the balance of the redeemed 16 Zhong Gong Y1 prior to redemption.
- (2) Under “capital reserve”, the RMB-58,838,576.3 change in “Others” was caused by five matters. Specifically, RMB-5,698,113.21 was the impact of the redemption of “16 Zhong Gong Y1” bond upon its maturity; RMB-56,649,291.43 was the impact of the fact that our subsidiary Chalieco Hong Kong Corporation Limited declared redemption of perpetual bonds recorded in non-controlling interests; RMB-4,630,453.70 was the impact of the acquisition of Luoyang Foyang Decoration Engineering Co., Ltd. by our subsidiary CNPT through incremental capital contribution, which constituted a business combination under common control; RMB8,110,546.26 was the impact of incremental capital contribution from the non-controlling shareholder of our subsidiary, Shaanxi Zhong Mian Investment Company Limited; RMB28,735.78 was the impact of incremental capital contribution from another shareholder of our subsidiary, Guiyang Aluminum and Magnesium Design Institute Co., Ltd.
- (3) Under “non-controlling interests”, the change in “Others” was RMB-1,551,597,174.08. Specifically, RMB4,630,453.70 was the impact of the acquisition by our subsidiary CNPT of Luoyang Foyang Decoration Engineering Co., Ltd. through incremental capital contribution; RMB-2,018,949.51 was the impact of our subsidiary CNPT’s disposal of its partially-owned subsidiary, Suzhou Nonferrous Metal Materials Co., Ltd.; RMB-300,374.69 was the impact of the fact that our subsidiary Sixth Metallurgical Company cancelled the registration of its subsidiary Henan Haxin Real Estate Co., Ltd.; RMB-2,454,608,303.57 was the impact of perpetual bond redemption by Chalieco Hong Kong Corporation Limited; RMB900,700,000.00 was the change in non-controlling interests due to our acquisition of Yunnan Miyu not under common control during the year.

##### (b) “Others” in the statement of changes in owners’ equity for 2018

- (1) Under “perpetual bond”, the change of RMB-200,429,372.30 in “Others” represents the impact of the Company’s redemption of perpetual bonds;
- (2) Under “capital reserve”, the change of RMB-8,000,974.02 in “Others” was caused by two matters. Specifically, RMB429,372.30 resulted from the redemption of perpetual bonds, and RMB-8,430,346.32 was the impact of consideration paid by Kunkan Institute in business combination under common control;
- (3) Under “non-controlling interests”, the change of RMB2,007,582.48 in “Others” is the impact of CNPT’s disposal of its subsidiary Suzhou Institute.

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.64 Restricted assets

Item	Book value as at 31 December 2019	Reason for restriction
Monetary fund	<b>905,429,914.91</b>	Frozen, pledged
Notes receivable	<b>22,183,705.80</b>	Pledged
Accounts receivable	<b>1,048,124,169.87</b>	Pledged
Fixed assets	<b>256,302,620.33</b>	Mortgaged
Investment properties	<b>43,764,357.85</b>	Mortgaged
Total	<b>2,275,804,768.76</b>	–

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.65 FCY monetary items

## (a) FCY monetary items

Item	Closing balance in FCY	Exchange rate	Closing balance in RMB
Monetary fund	–	–	3,473,032,903.97
Including: USD	<b>495,194,593.00</b>	6.9762	3,454,576,519.69
VND	<b>10,710,654,271.84</b>	0.0003	3,224,497.41
INR	<b>47,967,145.00</b>	0.0978	4,691,929.29
Accounts receivable			856,551,452.64
Including: USD	<b>118,561,432.35</b>	6.9762	827,108,264.36
VND	<b>88,965,693,901.00</b>	0.0003	26,783,578.54
INR	<b>27,190,070.00</b>	0.0978	2,659,609.74
Accounts payable			81,527,182.95
Including: USD	<b>8,893,248.75</b>	6.9762	62,041,081.93
VND	<b>60,304,392,915.00</b>	0.0003	18,154,946.85
INR	<b>2,853,994.60</b>	0.0978	279,164.85
Short-term borrowings	–	–	26,612,170.55
Including: USD	<b>3,814,708.66</b>	6.9762	26,612,170.55

## (b) Functional currency of significant overseas entities

Significant overseas entity	Principal place of business	Functional currency	Basis
Chalieco Hong Kong Corporation Limited	Hong Kong	USD	Revenue from daily activities

## SECTION 12 FINANCIAL REPORT

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 5.66 Government subsidy credited to profit or loss

Item	2019	2018	Related to asset/ income
2019 special fund for fin-tech development	3,000,000.00	–	Income
Land compensation from the fiscal account ear-marked for land compensation of Pingba District of Anshun City	2,265,200.00	–	Income
R&D funds specially for innovation-driven development programs in Guangxi	3,600,000.00	–	Income
Tax incentives for Guiyang National High-tech Industrial Development Zone	–	1,696,019.38	Income
Standardization bonus from Guiyang Guanshanhu District Bureau of Industry and Information Technology	1,000,000.00	–	Income
Subsidy under declaration policy for construction enterprises	–	3,500,000.00	Income
Bonus for development of independent innovation demonstration zone granted by Luoyang High-tech Zone Administrative Committee	–	2,456,000.00	Income
Employment stabilization subsidy from unemployment insurance fund	3,481,822.07	1,366,076.39	Income
Business development funds from Tianjin Port Free Trade Zone Finance Bureau	–	1,670,000.00	Income
Fiscal subsidiary for R&D	–	1,033,600.00	Income
Subsidy from Changsha Yuhua District Finance and Treasury Management Bureau	2,265,000.00	–	Income
Chinalco New Science and Technology Development Fund	3,000,000.00	–	Income
Others:	31,288,962.90	13,404,574.24	–
– Income related	29,068,819.06	29,068,819.06	Income
– Asset related	2,220,143.84	2,220,143.84	Asset
<b>Total</b>	<b>49,900,984.97</b>	25,126,270.01	–

## SECTION 12 FINANCIAL REPORT

## 6 CHANGE IN SCOPE OF CONSOLIDATION

## 6.1 Business combination not under common control during the reporting period

## (a) Basic information on business combination

Acquiree	Equity obtained on	Equity acquisition cost	Percentage of equity (%)	Equity obtained through	Acquisition date
Yunnan Miyu Expressway Investment and Development Co., Ltd.	31 August 2019	376,600,000.00	53.80	Business combination not under common control	31 August 2019

(Continued)

Acquiree	Basis for determining the acquisition date	Acquiree's revenue for the period from acquisition date to the end of the year	Acquiree's net profit for the period from acquisition date to the end of the year
Yunnan Miyu Expressway Investment and Development Co., Ltd.	Resolution adopted by shareholders of the investee, and consideration paid by CHALIECO	–	–

## (b) Combination cost and goodwill

Combination cost	Yunnan Miyu Expressway Investment and Development Co., Ltd.
Cash	376,600,000.00
Fair value of non-cash assets	–
Fair value of debts issued or assumed	–
Fair value of equity securities issued	–
Fair value of contingent consideration	–
Fair value of equity held prior to the acquisition date on the acquisition date	–
Others	–
Total combination cost	306,600,000.00
Less: share of fair value of net identifiable assets obtained	306,600,000.00
Goodwill/amount of combination cost below share of fair value of net identifiable assets obtained	–

## SECTION 12 FINANCIAL REPORT

## 6 CHANGE IN SCOPE OF CONSOLIDATION (CONTINUED)

## 6.1 Business combination not under common control during the reporting period (continued)

## (c) Identifiable assets and liabilities of the acquiree on the acquisition date

Acquiree	Yunnan Miyu Expressway Investment and Development Co., Ltd.	
	Fair value on acquisition date	Book value on acquisition date
Assets:	1,903,984,309.12	1,903,984,309.12
Monetary fund	326,993,806.67	326,993,806.67
Receivables	40,000.00	40,000.00
Prepayments	544,552,995.63	544,552,995.63
Fixed assets	683,173.73	683,173.73
Intangible assets	17,648.06	17,648.06
Other non-current assets (investment in construction stage of highway PPP project)	1,031,696,685.03	1,031,696,685.03
Liabilities:	696,684,309.12	696,684,309.12
Borrowings	600,000,000.00	600,000,000.00
Payables	96,684,309.12	96,684,309.12
Net assets:	1,207,300,000.00	1,207,300,000.00
Less: non-controlling interests	900,700,000.00	900,700,000.00
Share attributable to the acquirer	306,600,000.00	306,600,000.00

## SECTION 12 FINANCIAL REPORT

## 6 CHANGE IN SCOPE OF CONSOLIDATION (CONTINUED)

## 6.2 Business combination under common control during the reporting period

## (a) Business combination under common control during the reporting period

Acquiree	Percentage of equity obtained (%)	Basis for business combination under common control	Combination date	Basis for determining the combination date
Luoyang Foyang Decoration Engineering Co., Ltd.	51.22 (Note)	Both acquire and acquirer under control of China Aluminum Group before and after the combination	31 May 2019	Effective control over the acquirer

Acquiree	Acquiree's revenue for the period from the beginning of the year to the combination date	Acquiree's net profit for the period from the beginning of the year to the combination date	Acquiree's revenue for comparative period	Acquiree's net profit for comparative period
Luoyang Foyang Decoration Engineering Co., Ltd.	15,693,685.29	1,057,684.02	109,481,205.85	4,782,471.37

Note: The Company indirectly holds a 51.22% equity in Luoyang Foyang Decoration Engineering Co., Ltd., the acquiree, through China Nonferrous Metals Processing Technology Co., Ltd., a partially-owned subsidiary of the Company.

## (b) Combination cost

Combination cost	Luoyang Foyang Decoration Engineering Co., Ltd.
Cash	12,915,000.00

## SECTION 12 FINANCIAL REPORT

## 6 CHANGE IN SCOPE OF CONSOLIDATION (CONTINUED)

## 6.2 Business combination under common control during the reporting period (continued)

## (c) Book value of the acquiree's assets and liabilities on the combination date

Item	Luoyang Foyang Decoration Engineering Co., Ltd.	
	Combination date	As at 31 December 2018
Assets:	57,246,525.59	42,988,978.50
Monetary fund	11,481,336.21	2,055,509.75
Receivables	19,873,317.61	17,520,636.48
Fixed assets	785,927.19	829,536.95
Liabilities:	27,714,685.29	26,930,121.09
Short-term borrowings	—	5,000,000.00
Payables	14,879,905.33	12,709,184.14
Equity:	29,531,840.30	16,058,857.41
Less: non-controlling interests	14,405,631.70	8,225,346.77
Share attributable to the acquirer	15,126,208.60	7,833,510.64



## SECTION 12 FINANCIAL REPORT

### 6 CHANGE IN SCOPE OF CONSOLIDATION (CONTINUED)

#### 6.3 Disposal of equity in subsidiaries during reporting period

##### 1. Losing control of a subsidiary through disposal in a single transaction

Subsidiary	Disposal price	Percentage of equity disposed of (%)	Way of disposal	Time point of losing control
Tianjin Xintong Real Estate Co., Ltd.	56,200,000.00	100.00 (Note 2)	Sale	31 December 2019
Suzhou Nonferrous Metal Materials Co., Ltd.	166,180.00	70.00 (Note 3)	Sale	30 June 2019

Subsidiary	Basis for determining time point of losing control	Difference between disposal price and share of net assets of the subsidiary in the consolidated financial statement
Tianjin Xintong Real Estate Co., Ltd.	Control transferred	26,200,000.00
Suzhou Nonferrous Metal Materials Co., Ltd.	Control transferred	-14,856,942.88

##### Notes

- The Company directly holds 100.00% equity in Tianjin Xintong Real Estate Co., Ltd. through Chalieco (Tianjin) Construction Co., Ltd., a wholly-owned subsidiary of the Company.
- The Company directly holds 70% equity in Suzhou Nonferrous Metal Materials Co., Ltd. through China Nonferrous Metals Processing Technology Co., Ltd., a partially-owned subsidiary of the Company.

#### 6.4 Other reasons for changes in the scope of consolidation of financial statements

Tier-3 subsidiaries added in the reporting period: During the reporting period, our subsidiary CNPT acquired all equity in Luoyang Kaiying Technology Co. Ltd. from Chinalco Henan Aluminum Co., Ltd., a related party under common control with the Company. As Luoyang Kaiying Technology Co. Ltd. did not constitute a business operation on the acquisition date, this acquisition is not a business combination though the Company has consolidated the financial statements of Luoyang Kaiying Technology Co. Ltd. as from the acquisition date.

Tier-3 subsidiaries excluded in the reporting period: During the reporting period, the Company cancelled the registration of Henan Haoxin Real Estate Co., Ltd. and excluded it from the consolidated financial statements.

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES

## 7.1 Equity in subsidiaries

## 1. Composition of Group

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
1	China Nonferrous Metals Processing Technology Co., Ltd.	1	High-tech Zone, Luoyang City	115,150,000.00	Luoyang, Henan	Technical development and equipment sales	73.50	-	2
2	Luoyang Jincheng Construction Supervision Co., Ltd.	1	Jianxi District, Luoyang City	5,000,000.00	Luoyang, Henan	Construction supervision	-	100.00	2
3	Luoyang Foyang Decoration Engineering Co., Ltd.	1	High-tech Zone, Luoyang City	20,500,000.00	Luoyang, Henan	Other construction and installation industry	-	51.22	2
4	Suzhou Nonferrous Metal Materials Deyuan Environmental Protection Co., Ltd.	1	Suzhou High-tech Zone	25,000,000.00	Suzhou, Jiangsu	Environmental protection technology development and sales	-	62.50	1
5	Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	1	Huaihe Road, Zhengzhou City	1,796,165,278.44	Zhengzhou, Henan	Construction projects	100.00	-	2
6	Sixth Metallurgical Luoyang Construction Co., Ltd.	1	Jianxi district, Luoyang City	16,597,999.94	Luoyang, Henan	Construction projects	-	100.00	1
7	Sixth Metallurgical Luoyang Mechanical and Electrical Installation Co., Ltd.	1	Jianxi district, Luoyang City	11,173,295.18	Luoyang, Henan	Construction projects	-	100.00	1
8	Sixth Metallurgical (Zhengzhou) Technology Heavy Industry Co., Ltd.	1	Industrial Agglomeration Area, Xinmi City	85,000,000.00	Zhengzhou, Henan	Engineering machinery manufacturing	-	100.00	1
9	Henan Sixth Metallurgical Trading Co., Ltd.	1	Zhengzhou Economic and Technological Development Zone	30,000,000.00	Zhengzhou, Henan	Trading business	-	100.00	1
10	Panzhou Hachong Project Management Co., Ltd.	1	Lupanshui City, Guizhou Province	-	Guiyang, Guizhou	Construction projects	-	30.00	1

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## 1. Composition of Group (continued)

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
11	Tongchuan Hao Tong Construction Co., Ltd.	1	Tongchuan City, Shaanxi Province	120,000,000.00	Tongchuan, Shaanxi	Construction projects	-	80.00	1
12	China Aluminum Great Wall Construction Co., Ltd.	1	Shangjie District, Zhengzhou City	263,536,261.10	Henan	Engineering and construction contracting	-	100.00	2
13	Huaian Tong Yun Construction Co., Ltd.	1	Huaiyin District, Huai'an City	100,777,300.00	Jiangsu	Construction projects	-	100.00	1
14	Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	1	Furong District, Changsha City	708,838,200.00	Changsha, Hunan	Survey and design	100.00	-	2
15	Changsha Cinqsoft Info Tech Co., Ltd.	1	Changsha High-tech Industrial Development Zone	2,000,000.00	Changsha	Software development and technical service	-	100.00	2
16	Hunan Huachu Project Management Co., Ltd.	1	Furong District, Changsha City	6,000,200.00	Hunan	Consultancy and supervision service	-	100.00	2
17	Hunan Changye Construction Drawing Examination Co., Ltd.	1	Furong District, Changsha City	3,299,900.00	Hunan	Construction drawing examination	-	100.00	2
18	Huachu High-Tech (Hunan) Co., Ltd.	1	Jiuhua Demonstration Zone, Xiangtan	35,000,000.00	Xiangtan	Equipment sales	-	100.00	1
19	China Aluminum International South Engineering Co., Ltd.	1	Nanding Town, Zibo	152,900,000.00	Shandong	Construction and installation	-	100.00	2
20	Wenzhou Tongrun Construction Co., Ltd.	1	Lu Cheng District, Wenzhou City	100,000,000.00	Wenzhou	Construction projects	60.00	40.00	1
21	Wenzhou Tonghui Construction Co., Ltd.	1	Longwan District, Wenzhou City	30,000,000.00	Wenzhou	Construction projects	90.00	10.00	1
22	Ninth Metallurgical Construction Co., Ltd.	1	Xianyang city, Shaanxi province	320,000,000.00	Xianyang	Engineering construction	62.50	-	3
23	Henan Ninth Metallurgical Construction Co., Ltd.	1	Zhengzhou City, Henan Province	50,000,000.00	Zhengzhou	Engineering construction	-	100.00	3

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## 1. Composition of Group (continued)

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
24	Zhengzhou Ninth Metallurgical Sanwei Chemical Machinery Co., Ltd.	1	Zhengzhou City, Henan Province	100,000,000.00	Zhengzhou	Equipment manufacturing	-	100.00	3
25	Hanzhong Ninth Metallurgical Construction Co., Ltd.	1	Zhengzhou City, Henan Province	120,000,000.00	Hanzhong City, Shaanxi Province	Engineering construction	-	100.00	3
26	Ankang Ninth Metallurgical Changjial Concrete Co., Ltd.	1	Ankang City, Shaanxi Province	1,000,000.00	Ankang City, Shaanxi Province	Concrete production	-	100.00	3
27	Xinjiang Ninth Metallurgical Construction Co., Ltd.	1	Changji Prefecture, Xinjiang	60,000,000.00	Xinjiang	Engineering construction	-	100.00	3
28	Xianyang Ninth Metallurgical Steel Structure Co., Ltd.	1	Xianyang City, Shaanxi province	6,300,000.00	Xianyang City	Equipment manufacturing	-	100.00	3
29	Mian County Ninth Metallurgical Kindergarten	1	Mian County, Shaanxi Province	500,000.00	Mian County, Shaanxi Province	Pre-school education	-	100.00	3
30	Ninth Metallurgical Hanzhong Construction Design Institute Co., Ltd.	1	Mian County, Shaanxi Province	500,000.00	Hanzhong City, Shaanxi Province	Survey and design	-	100.00	3
31	Shaanxi Zhong Mian Investment Company Limited	1	Mian County, Shaanxi Province	100,000,000.00	Shaanxi	Hot spring project development and operations management	-	51.00	1
32	Shenyang Aluminum & Magnesium Design Institute Co., Ltd.	1	Heping District, Shenyang City	490,743,216.49	Shenyang	Engineering survey and design	100.00	-	1
33	Shenyang Boyu Technology Co., Ltd.	1	Heping District, Shenyang City	20,250,000.00	Liaoning	Industrial manufacturing	-	100.00	1
34	Shenyang Aluminum & Magnesium Technology Co., Ltd.	1	Heping District, Shenyang City	10,500,000.00	Liaoning	Technical service	-	100.00	1

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## 1. Composition of Group (continued)

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
35	Shenyang Aluminum & Magnesium Engineering & Research Institute Construction Supervision Co., Ltd.	1	Heping District, Shenyang City	4,118,028.14	Liaoning	Construction supervision	-	100.00	1
36	Beijing Huayu Aerospace Control High-Tech Co., Ltd.	1	Heping District, Shenyang City	17,500,000.00	Beijing	Technology research and development	-	60.00	1
37	China Nonferrous Metals Industry's Twelfth Metallurgical Construction Co., Ltd.	1	Heping District, Shenyang City	533,419,395.00	Shanxi	Construction projects	100.00	-	2
38	China Nonferrous Metals Industry's Twelfth Metallurgical Chongqing Energy Savings Technology Co., Ltd.	1	Heping District, Shenyang City	12,000,000.00	Chongqing	Contract energy management	-	100.00	1
39	Shanxi Nonferrous Metal Twelfth Metallurgical Supplies Co., Ltd.	1	Taiyuan, Shanxi province	15,000,000.00	Taiyuan	Commodity trading	-	100.00	1
40	Shanxi Longye Construction Labor Service Co., Ltd.	1	Taiyuan, Shanxi province	2,000,000.00	Taiyuan, Shanxi province	Construction and installation industry	-	100.00	1
41	China Aluminum International 12MCC Construction Co., Ltd.	3	Incheon, South Korea	3,511,187.50	Incheon, South Korea	Construction and installation industry	-	80.00	1
42	China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	1	Furong District, Changsha City	183,730,014.27	Hunan	Survey and design	100.00	-	2
43	Shenzhen Changkan Survey and Design Co., Ltd.	1	Shenzhen East Road, Shenzhen City	15,020,000.00	Guangdong	Technical service	-	100.00	2
44	Changsha Tongxiang Construction Co., Ltd.	1	Yuelu District, Changsha City	25,000,000.00	Changsha	Construction projects	40.00	60.00	1
45	Hunan Tongdu Investment and Development Co., Ltd.	1	Yuelu District, Changsha City	10,000,000.00	Changsha	Investment	60.00	40.00	1

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## 1. Composition of Group (continued)

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
46	China Aluminum International Engineering & Equipment Co., Ltd.	1	Furong District, Changsha City	200,000,000.00	Beijing	Equipment sales	100.00	-	1
47	China Aluminum International Shandong Chemical Industry Co., Ltd.	1	Zibo High-tech Zone	50,000,000.00	Shandong	Equipment sales	-	100.00	1
48	China Aluminum International Logistic (Tianjin) Co., Ltd.	1	Tianjin Airport Economic Zone	50,000,000.00	Tianjin	Trading	-	100.00	1
49	Shanghai China Aluminum International Supply Chain Management Co., Ltd.	1	Pudong New Area, Shanghai	21,000,000.00	Pudong New Area	Trading	-	100.00	1
50	Chaleco Hong Kong Corporation Limited	3	Hong Kong	65,572,000.00	Hong Kong	Investment	100.00	-	1
51	Chaleco Malaysia Sdn.Bhd.	3	Malaysia	1,579,202.10	Malaysia	Engineering survey and design	-	100.00	1
52	Shanghai Chaleco Fengyuan Equity Investment Fund Partnership (Limited Partner)	1	Shanghai	459,305,803.21	Shanghai	Trading	-	99.95	1
53	China Aluminum International Investment Management (Shanghai) Co., Ltd.	1	Shanghai	494,000,000.00	Shanghai	Trading	5.06	94.94	1
54	Chaleco (Tianjin) Construction Co., Ltd.	1	Tianjin	211,000,000.00	Tianjin	Engineering construction	100.00	-	2
55	Xin Chengong (Tianjin) Construction Engineering Co., Ltd.	1	Ji County, Tianjin	100,000.00	Tianjin	Construction projects	-	100.00	1
56	China Aluminum International Technology Development Co., Ltd.	1	Haidian District, Beijing	60,000,000.00	Beijing	Technology research and development	100.00	-	1

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## 1. Composition of Group (continued)

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
57	China Aluminum International Engineering (India) Private Limited	3	West Bengal, India	5,942,398.83	India	Construction projects	99.99	0.01	1
58	Beijing Zichen Investment Development Corporation Limited	1	Haidian District, Beijing	78,000,000.00	Beijing	Investment consultancy	100.00	-	1
59	Duyun Development Zone Tongda Construction Co., Ltd.	1	Duyun Economic Development Zone	10,000,000.00	Guizhou	Engineering construction	50.00	50.00	1
60	Guiyang Aluminum and Magnesium Design Institute Co., Ltd.	1	Guanshanhu District, Guiyang City	700,000,000.00	Guizhou	Design consultancy	100.00	-	1
61	Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co. Ltd	1	Guanshanhu District, Guiyang City	45,000,000.00	Guizhou	Engineering construction	-	100.00	1
62	Guiyang Zhenxing Aluminum & Magnesium Technological Development Co., Ltd.	1	Guiyang City, Guizhou Province	30,000,000.00	Guizhou	Technology development and software design	-	100.00	1
63	Guizhou Light Metal Innovation Research and Equipment Process Co., Ltd.	1	Gaoxin District, Guiyang City	10,000,000.00	Guizhou	Technology development and software design	-	100.00	1
64	Guiyang Xinyu Construction Supervision Co., Ltd.	1	Guiyang City, Guizhou Province	13,419,476.99	Guizhou	Engineering supervision and consultancy	-	100.00	1
65	Guizhou Yundu Properties Company Limited	1	Duyun City, Guizhou Province	128,000,000.00	Duyun City, Guizhou Province	Real estate development and engineering construction	-	100.00	1
66	Guizhou Shuran Mechanical and Electric Equipment Co., Ltd.	1	Pingba County, Anshui City	61,980,000.00	Guizhou	Equipment manufacturing	-	100.00	3
67	Guangxi Tongrui Investment Construction Co., Ltd.	1	Liangqing District, Nanning City	250,000,000.00	Guangxi	Building construction	100.00	-	1

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## 1. Composition of Group (continued)

No.	Subsidiary	Business type	Place of incorporation	Paid-in capital	Principal place of business	Business scope	Shareholding percentage (%)		Means of acquisition
							Direct	Indirect	
68	China Aluminum International Aluminum Technological Development Co., Ltd.	1	Haidian District, Beijing	144,500,000.00	Beijing	Trading and technical service	100.00	-	1
69	Shanxi Nonferrous Metal Twelfth Metallurgical Advanced Materials Co., Ltd.	1	Taiyuan City, Shanxi Province	23,588,234.94	Shanxi	Scientific research and technical service industry	-	66.00	1
70	Qingdao Xinfu Gongchuang Asset Management Company Limited	1	Shinan District, Qingdao City	10,000,000.00	Shandong	Commercial development and operations	90.00	-	3
71	ChaoCo Shandong Engineering Technology Co., Ltd.	1	Zhangdian District, Zibo City	274,607,057.02	Shandong	Other construction and installation industry	60.00	-	2
72	ChaoCo Wancheng Shandong Construction Co., Ltd.	1	Zhangdian District, Zibo City	63,810,000.00	Shandong	Other construction and installation industry	-	96.57	2
73	Kunming Survey and Design institute Co., Ltd. of China Nonferrous Metals industry	1	Panlong District, Kunming City	108,500,000.00	Kunming	Engineering survey and design	100.00	-	2
74	Kunming Technology Development Co., Ltd.	1	Panlong District, Kunming City	2,000,000.00	Kunming	Other construction and installation industry	-	100.00	2
75	Chiralco Southwest Construction Investment Co., Ltd.	1	Xishan District, Kunming City	200,000,000.00	Kunming	Project investments	100.00	-	1
76	Yunnan Miyu Expressway Investment and Development Co., Ltd.	1	Yuxi City, Yunnan Province	700,000,000.00	Yuxi City, Yunnan Province	Construction projects	43.60	10.20	3
77	Luoyang Kaijing Technology Co., Ltd.	1	Luolong District, Luoyang City	200,000,000.00	Luoyang City, Henan	IT consultancy service	100.00	100.00	2



## SECTION 12 FINANCIAL REPORT

### 7 EQUITY IN OTHER ENTITIES (CONTINUED)

#### 7.1 Equity in subsidiaries (continued)

##### 1. Composition of Group (continued)

Notes:

Business type: 1. Domestic non-financial subsidiaries, 2. Domestic financial subsidiaries, 3. Overseas subsidiaries, 4 public institutions, and 5 infrastructure units.

Means of acquisition: 1. Incorporation; 2. Business combination under common control, 3. Business combination not under common control, 4. Others.

China Aluminum International Engineering (India) Private Limited, a subsidiary incorporated in India, and Chalico Hong Kong Corporation Limited, a subsidiary incorporated in Hong Kong need 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.

##### (b) Particulars of important partially-owned subsidiaries

No.	Subsidiary name	Non-controlling interest (%)	P&L attributable to non-controlling interest	Declared dividends to non-controlling interest	Non-controlling interest at end of the year
1	China Nonferrous Metals Processing Technology Co., Ltd.	26.50	-22,175,909.70	-	27,765,242.73
2	Ninth Metallurgical Construction Co., Ltd.	37.50	56,667,657.46	-	399,862,270.33
3	Chalco Shandong Engineering Technology Co., Ltd.	40.00	7,065,243.71	-	158,030,646.44

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## (c) Summarized financial information of significant partially-owned subsidiaries

No.	Subsidiary name	Current assets	Non-current assets	Closing Balance			
				Total assets	Current liabilities	Non-current liabilities	Total liabilities
1	China Nonferrous Metals Processing Technology Co., Ltd.	1,122,983,707.41	856,740,826.88	1,979,724,534.29	1,759,209,038.33	99,493,897.43	1,858,702,935.76
2	Ninth Metallurgical Construction Co., Ltd.	9,008,613,740.02	853,256,754.94	9,861,870,494.96	8,033,208,147.31	656,390,772.96	8,689,598,920.27
3	Chalco Shandong Engineering Technology Co., Ltd.	1,412,710,353.51	129,180,437.34	1,541,890,790.85	1,126,722,822.25	16,000,000.00	1,142,722,822.25

No.	Subsidiary name	Current assets	Non-current assets	Opening Balance			
				Total assets	Current liabilities	Non-current liabilities	Total liabilities
1	China Nonferrous Metals Processing Technology Co., Ltd.	1,299,396,250.58	781,413,746.07	2,080,809,996.65	1,840,595,522.34	31,048,862.77	1,871,644,385.11
2	Ninth Metallurgical Construction Co., Ltd.	7,308,500,200.20	650,785,727.86	7,959,285,928.06	6,455,154,247.36	567,986,413.00	7,023,140,660.36
3	Chalco Shandong Engineering Technology Co., Ltd.	1,366,583,797.09	132,818,818.65	1,499,402,615.74	1,119,255,129.20	1,367,000.00	1,120,622,129.20

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.1 Equity in subsidiaries (continued)

## (c) Summarized financial information of significant partially-owned subsidiaries (continued)

No.	Subsidiary name	2019				2018			
		Operating revenue	Net profit	Total comprehensive income	Cash flow from operating activities	Operating revenue	Net profit	Total comprehensive income	Cash flow from operating activities
1	China Nonferrous Metals Processing Technology Co., Ltd.	807,233,953.92	-84,510,682.70	-86,673,082.70	124,611,165.28	551,044,870.88	-64,212,073.17	-61,880,523.17	51,848,441.74
2	Ninth Metallurgical Construction Co., Ltd.	5,656,514,477.70	153,704,040.23	154,154,199.81	63,856,049.42	5,187,453,759.24	168,715,077.36	168,188,307.50	368,444,428.63
3	Chalco Shandong Engineering Technology Co., Ltd.	1,133,056,576.27	17,772,840.75	17,772,840.75	-146,629,243.01	1,212,589,634.91	50,338,994.42	50,338,994.42	14,758,381.29

## 7.2 Interests in joint ventures and associates

## (a) Particulars of significant joint ventures

Joint venture name	Business type	Principal place of business	Place of incorporation	Business scope	Shareholding percentage (%)		Accounting treatment method
					Direct	Indirect	
Shanghai Fengtong Equity Investment Fund Partnership (Limited Partnership)	Partnership	Shanghai	Shanghai	Investment company	40.00	-	Equity method
Zhongji Sunward Technology Co., Ltd.	Company with limited liability	Hunan	Hunan	Metallurgical equipment manufacturing	-	49.00	Equity method
China Aluminum South Aluminum (Fujian) Aluminum Structure Technology Co., Ltd.	Company with limited liability	Fujian	Fujian	Metal products	-	50.00	Equity method

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.2 Interests in joint ventures and associates

## (b) Particulars of significant associates

Associate name	Business type	Principal place of business	Place of incorporation	Business scope	Shareholding percentage (%)		Accounting treatment method
					Direct	Indirect	
Xinchengtong Investment Management (Tianjin) Co., Ltd.	Company with limited liability	Tianjin	Tianjin	Investment management	-	40.00	Equity method
Jiangsu Nonferrous Metal Rabily Industrial Co., Ltd.	Company with limited liability	Jiangsu	Yancheng	Industry	-	30.00	Equity method
Guizhou Tongye Construction Development Co., Ltd.	Company with limited liability	Guizhou	Guiyang	Construction and installation industry	-	45.00	Equity method
Luoyang Hua Zhong Aluminum Co., Ltd.	Company with limited liability	Henan	Luoyang	Calendering of common nonferrous metals	-	9.79	Equity method
Chalco-Steering Intelligent Technology Co., Ltd.	Company with limited liability	Hunan	Changsha	Scientific research and technical services	15.00	-	Equity method
Zhuzhou Tianqiao Crane Co., Ltd.	Joint stock limited company	Hunan	Zhuzhou	Material handling equipment	3.80	-	Equity method

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.2 Interests in joint ventures and associates (continued)

## (c) Summarised financial information of significant joint ventures

Item	As at 31 December 2019/2019			As at 31 December 2018/2018		
	Shanghai Fengtong Equity Investment Fund Partnership (Limited Partner)	Zhongji Sunward Technology Co., Ltd.	China Aluminum South Aluminum (Fujian) Aluminum Structure Technology Co., Ltd.	Shanghai Fengtong Equity Investment Fund Partnership (Limited Partner)	Zhongji Sunward Technology Co., Ltd.	China Aluminum South Aluminum (Fujian) Aluminum Structure Technology Co., Ltd.
Current assets	70,402,084.57	166,101,574.85	110,373,032.82	70,564,611.91	130,657,013.28	105,920,580.73
Including: cash and cash equivalents	2,735,947.61	27,715,206.20	3,320,341.43	19,512,548.85	19,465,773.04	6,042,565.92
Non-current assets	465.97	19,875,032.91	7,719,030.71	1,512.29	22,352,592.38	7,789,654.28
Total assets	70,402,550.54	185,976,607.76	118,092,063.53	70,566,124.20	153,009,605.66	113,710,235.01
Current liabilities	10,462,653.16	111,144,828.84	2,480,015.51	10,440,684.59	83,803,862.79	4,001,301.60
Non-current liabilities	-	-	-	-	-	-
Total liabilities	10,462,653.16	111,144,828.84	2,480,015.51	10,440,684.59	83,803,862.79	4,001,301.60
Minority interests	-	-	-	-	-	-
Equity attributable to shareholders of the parent	58,939,897.38	74,831,778.92	115,612,048.02	59,125,439.61	69,205,742.87	109,708,933.41
Share in net assets in proportion to shareholding percentage	8,939,897.38	36,667,571.67	57,806,024.01	9,125,439.61	33,910,814.01	54,854,466.71
Adjustments	-	-	-	-	-	-
Including: Goodwill	-	-	-	-	-	-
Unrealized profit on inter-company transactions	-	-	-	-	-	-
Others	-	-	-	-	-	-
Book value of equity interests in joint ventures	8,939,897.38	36,667,571.67	57,806,024.01	9,125,439.61	33,910,814.01	54,854,466.71
Fair value of equity interests in joint ventures with public quotations	-	-	-	-	-	-
Operating revenue	-	73,331,452.59	55,471,524.26	-	47,740,224.11	78,613,594.21
Finance expense	-11,671.98	-105,781.20	285,081.51	7,652.71	-66,862.56	-64,605.86
Income tax	-	-20,476.24	542,742.97	-	-225,838.03	1,122,899.94
Net profit	-185,542.23	5,462,239.12	5,537,614.85	1,078,304.77	2,256,682.55	5,935,338.46
Net profit on discontinued operations	-	-	-	-	-	-
Other comprehensive income	-	-	-	-	-	-
Total comprehensive income	-185,542.23	5,462,239.12	5,537,614.85	1,078,304.77	2,256,682.55	5,935,338.46
Dividends paid by joint ventures during the year	-	-	-	-	-	-

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.2 Interests in joint ventures and associates (continued)

## (d) Summarised financial information of significant associates

Item	At end of 2019/2019			As beginning of 2019/2018		
	Xinchengtong Investment Management (Tianjin) Co., Ltd.	Jiangsu Nonferrous Metal Rably Industrial Co., Ltd.	Guizhou Tongye Construction Development Co., Ltd.	Xinchengtong Investment Management (Tianjin) Co., Ltd.	Jiangsu Nonferrous Metal Rably Industrial Co., Ltd.	Guizhou Tongye Construction Development Co., Ltd.
Current assets	45,886,945.92	109,432,986.41	1,259,056,142.94	45,678,823.91	114,672,292.25	1,208,104,474.98
Including: cash and cash equivalents	886,945.92	66,463.94	2,074,637.92	15,678,823.91	480,503.97	18,302,779.06
Non-current assets	-	34,880,739.31	532,964.05	-	38,876,530.90	704,077.88
Total assets	45,886,945.92	144,313,725.72	1,259,589,106.99	45,678,823.91	153,548,823.15	1,208,808,552.86
Current liabilities	-	98,656,983.49	97,470,857.96	-	96,915,288.19	69,331,737.66
Non-current liabilities	-	-	1,113,599,458.59	-	-	1,114,099,458.59
Total liabilities	-	98,656,983.49	1,211,070,316.55	-	96,915,288.19	1,183,431,196.25
Minority interests	-	-	-	-	-	-
Equity attributable to shareholders of the parent	45,886,945.92	45,656,742.23	48,518,790.44	45,678,823.91	56,633,534.96	25,377,356.61
Share in net assets at shareholding percentage	18,354,778.37	13,697,022.67	21,833,455.70	18,267,607.02	16,990,060.49	11,419,810.56
Adjustments	-2,467,988.35	-	-	-	-	-
Including: Goodwill	-	-	-	-	-	-
Unrealized profit on inter-company transactions	-	-	-	-	-	-
Others	-	-	-	-	-	-
Book value of equity interests in associates	15,886,790.02	13,697,022.67	21,833,455.70	18,267,607.02	16,990,060.49	11,419,810.56
Fair value of equity interests in associates with public quotations	-	-	-	-	-	-
Operating revenue	-	216,027,006.61	-341,855,513.53	-	199,045,401.03	88,185,536.12
Finance expense	-3,163.11	3,444,331.66	-26,413,750.00	-40,236.23	3,231,877.70	-
Income tax	-	-	-	-	-	-
Net profit	208,122.01	-10,976,792.73	23,141,433.83	-109,845.97	-3,978,318.02	-3,790,398.97
Net profit on discontinued operations	-	-	-	-	-	-
Other comprehensive income	-	-	-	-	-	-
Total comprehensive income	208,122.01	-10,976,792.73	23,141,433.83	-109,845.97	-3,978,318.02	-3,790,398.97
Dividends paid by associates during the year	-	-	-	-	-	-

Note: Zhuzhou Tianqiao Crane Co., Ltd. is listed on the SME board of the Shenzhen Stock Exchange. As it has not disclosed its annual report, the Company calculates the amount of gain on investment for the current period based on its result preview instead of disclosing its financial summary.

## SECTION 12 FINANCIAL REPORT

## 7 EQUITY IN OTHER ENTITIES (CONTINUED)

## 7.2 Interests in joint ventures and associates (continued)

## (e) Summarized financial information of insignificant joint ventures and associates

Item	At end of 2019/2019	At beginning of 2019/2018
1. Joint ventures	–	–
Aggregate of book value of investments	–	–
Aggregate of proportional shares in:	–	–
Net profit	–	–
Other comprehensive income	–	–
Total comprehensive income	–	–
2. Associates	–	–
Aggregate of book value of investments	<b>444,936,123.32</b>	336,348,268.08
Aggregate of proportional shares in:	–	–
Net profit	<b>-16,607,536.74</b>	-2,946,404.25
Other comprehensive income	–	–
Total comprehensive income	<b>-16,607,536.74</b>	-2,946,404.25

## SECTION 12 FINANCIAL REPORT

### 8 FINANCIAL INSTRUMENT RELATED RISKS

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.

Main risks associated with the Company's financial instruments include credit risk, liquidity risk and market risk. Management has reviewed and approved policies intended to manage these risks, which are summarized as follows:

#### 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, re-perform 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 cashflows 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 loss allowance for unrecoverable receivables. See section "3.11" above for our expected credit loss policies.



## SECTION 12 FINANCIAL REPORT

### 8 FINANCIAL INSTRUMENT RELATED RISKS (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.

#### 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.

- (1) 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.
- (2) 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.
- (3) 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 12 FINANCIAL REPORT

## 9 FAIR VALUE

## 9.1 Analysis of assets and liabilities measured at fair value by the level of fair value

Item	Level 1	Level 2	Level 3	As at 31 December 2019
I. Measured at fair value				
continuously	–	–	64,322,963.86	64,322,963.86
(I) Financial assets classified at FVTPL	–	–	18,900,000.00	18,900,000.00
(1) Debt instrument investment	–	–	–	–
(2) Equity instrument investment	–	–	18,900,000.00	18,900,000.00
(II) Financial assets classified at FVTOCI	–	–	45,422,963.86	45,422,963.86
(1) Debt instrument investment	–	–	–	–
(2) Equity instrument investment	–	–	45,422,963.86	45,422,963.86
II. Measured at fair value not continuously	–	–	–	–
(I) Held-for-sale assets	–	–	–	–

**9.2** 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 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS

#### 10.1 Parent of the Company

Parent	Place of incorporation	Business scope	Registered capital (RMB)	Percentage of shareholding in the Company (%)	Percentage of voting right in the Company (%)
China Aluminum Group Limited	PRC	Mineral resources (excluding oil and natural gas) development, nonferrous metal smelting and processing, related trading and engineering and technical services	25,200,000,000.00	76.50	76.50

Note: The ultimate controlling party of the Company is Chinalco (which is owned and controlled by SASAC). On 31 December 2019, Chinalco directly held 73.56% equity interest in the Company and indirectly held 2.94% equity interest in the Company through its subsidiary, Luoyang Institute. Chinalco held in aggregate a 76.50% equity interest in the Company.

#### 10.2 Particulars of subsidiaries of the Company

For details, see Note “7. Interests in Other Entities”.

#### 10.3 Particulars of joint ventures and associates of the Company

For details of important joint ventures or associates of the Company, see Note “7.2 Interests in joint ventures or associates”.

## SECTION 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

#### 10.4 Particulars of other parties related to the Company

Other related party	Relation to the Company
Luoyang Engineering & Research Institute for Nonferrous Metals Processing	Our shareholder, ultimately controlled by the same parent
Guangxi Hualei Advanced Materials Co., Ltd.	A joint venture of our parent
Guangxi Huayin Aluminum Company Limited	A joint venture of our parent
Chinalco Zibo International Trade Co., Ltd.	A joint venture of our parent
Guangxi Huazhong Cement Co., Ltd	A joint venture of our parent
Shanxi Chalco Taiyue New Materials Co., Ltd.	A joint venture of our parent
Zhejiang Chinalco Automobile Lightweight Technology Co., Ltd.	Ultimately controlled by the same parent
Chinalco Material 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 Lveng Qinxin Clean Environment Technology Co., Ltd.	Ultimately controlled by the same parent
Chinalco Environmental Protection and Energy Saving Group Co., Ltd.	Ultimately controlled by the same parent
Chalco Tendering Company Limited	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 Aluminum Co., Ltd.	Ultimately controlled by the same parent
Chibi Great Wall Carbon Products Co., Ltd.	Ultimately controlled by the same parent
Fushun Aluminum Co., Ltd.	Ultimately controlled by the same parent
Gansu Hualu Aluminum 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
Henan Chinalco State Reserve Energy Co., Ltd.	Ultimately controlled by the same parent
Lanzhou Aluminum Co., Ltd.	Ultimately controlled by the same parent
Inner Mongolia Huayun New Materials Co., Ltd.	Ultimately controlled by the same parent
Shandong Huayu Alloy Material Co., Ltd.	Ultimately controlled by the same parent
Shandong Yixing Carbon New Material Co., Ltd.	Ultimately controlled by the same parent
Shanxi Huaxing Aluminum Co., Ltd.	Ultimately controlled by the same parent

## SECTION 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

#### 10.4 Particulars of other parties related to the Company (continued)

Other related party	Relation to the Company
Shanxi Chinalco Resources Co., Ltd.	Ultimately controlled by the same parent
Chalco Hong Kong Limited	Ultimately controlled by the same parent
China Aluminum (Shanghai) Co., Ltd	Ultimately controlled by the same parent
China Aluminum International Trading Corporation Limited	Ultimately controlled by the same parent
Chinalco International Trade Hong Kong Limited	Ultimately controlled by the same parent
Chinalco Group Shanxi Jiaokou Xinghua Science and Technology Co., Ltd.	Ultimately controlled by the same parent
Chinalco Mining Corporation Limited	Ultimately controlled by the same parent
Chinalco Ningxia Energy Group Co., Ltd.	Ultimately controlled by the same parent
Chinalco Qingdao Light Metal Co., Ltd	Ultimately controlled by the same parent
Chinalco Shandong Environmental Protection Technology 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
Chinalco Logistics Group Southeast Asia Land Port Co., Ltd.	Ultimately controlled by the same parent
Chinalco Logistics Group Northwest Land Port Co., Ltd.	Ultimately controlled by the same parent
Chinalco Logistics Group Co., Ltd.	Ultimately controlled by the same parent
Chinalco Logistics Group Central Land Port Co., Ltd.	Ultimately controlled by the same parent
Chinalco Material Supply and Marketing Co., Ltd.	Ultimately controlled by the same parent
Chinalco Materials Co., Ltd.	Ultimately controlled by the same parent
Chinalco 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
Chinalco Finance Company Limited	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

## SECTION 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

#### 10.4 Particulars of other parties related to the Company (continued)

Other related party	Relation to the Company
Northwest Aluminum Co., Ltd	Ultimately controlled by the same parent
Southwest Aluminum (Group) Co., Ltd.	Ultimately controlled by the same parent
Chongqing Southwest Aluminum Mechanical and Electrical Equipment Engineering Co., Ltd.	Ultimately controlled by the same parent
Chongqing Southwest Aluminum Transportation 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
Chinalco Ruimin Co., Ltd.	Ultimately controlled by the same parent
Chinalco Sapa Special Aluminum (Chongqing) Co., Ltd.	Ultimately controlled by the same parent
Chinalco Shenyang Nonferrous Metal Processing Co., Ltd.	Ultimately controlled by the same parent
Chinalco Southwest Aluminum Strip 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
Fumin Xinye Industrial and Trade Co., Ltd.	Ultimately controlled by the same parent
Heqing Yixin Aluminum 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 Co., Ltd.	Ultimately controlled by the same parent
Huili County Wulong Fumin Mining Co., Ltd.	Ultimately controlled by the same parent
Kunming Kehui Electric Co., Ltd.	Ultimately controlled by the same parent
Kunming Nonferrous Metallurgical Design and Research Institute Corporation	Ultimately controlled by the same parent
Lhasa Tianli Mining 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
Qinghai Zerong Mining Development Co., Ltd	Ultimately controlled by the same parent
Qujing Yunal Ganxin Aluminum Co., Ltd	Ultimately controlled by the same parent
Shanghai Huxin Aluminum Foil Co., Ltd.	Ultimately controlled by the same parent
Shangri-la Dingli Mining Co., Ltd.	Ultimately controlled by the same parent
Yimen Copper Co., Ltd.	Ultimately controlled by the same parent

## SECTION 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

#### 10.4 Particulars of other parties related to the Company (continued)

Other related party	Relation to the Company
Yuxi Mining Co., Ltd	Ultimately controlled by the same parent
Yunnan Chihong Zinc Germanium Co., Ltd.	Ultimately controlled by the same parent
Yunnan Chihong Resources 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 Diqing 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 Jinsha Mining Co., Ltd.	Ultimately controlled by the same parent
Yunnan Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Copper (Group) Titanium 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 Technology Development Co., Ltd.	Ultimately controlled by the same parent
Yunnan Copper Mineral Resources Exploration and Development Co., Ltd.	Ultimately controlled by the same parent
Yunnan Copper Die Casting Technology Co., Ltd.	Ultimately controlled by the same parent
Yunnan Wenshan Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Xiping Jinhui Mining Development Co., Ltd.	Ultimately controlled by the same parent
Yunnan Metallurgical Kunming Heavy Industry Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yongshun Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Haixin Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Huixin Trade Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Yongxin Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yunlv Zexin Aluminum Co., Ltd.	Ultimately controlled by the same parent
Yunnan Yuntong Zinc Co., Ltd.	Ultimately controlled by the same parent
Chinalco Huazhong Copper 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

## SECTION 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

#### 10.4 Particulars of other parties related to the Company (continued)

Other related party	Relation to the Company
Minera Chinalco Peru	Ultimately controlled by the same parent
China Copper Southeast Copper Co., Ltd.	Ultimately controlled by the same parent
China Copper Tibet Mining Co., Ltd.	Ultimately controlled by the same parent
Guangxi Guosheng Rare Earth Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
Guangxi Rare Earth Trading Co., Ltd.	Ultimately controlled by the same parent
Chinalco Guangxi Nonferrous Jinyuan Rare Earth Co., Ltd.	Ultimately controlled by the same parent
CRE (Changshu) Rare Earth Advanced Materials Co., Ltd.	Ultimately controlled by the same parent
China Rare Earth International Trade 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
Guangxi Chinalco Industrial Service Co., Ltd.	Ultimately controlled by the same parent
Guizhou Guilv Huayi Real Estate Development Co., Ltd.	Ultimately controlled by the same parent
Guizhou Aluminum Factory Co., Ltd.	Ultimately controlled by the same parent
Guizhou Chinalco Colored Aluminum Technology Co., Ltd.	Ultimately controlled by the same parent
Henan Great Wall Information Technology Co., Ltd.	Ultimately controlled by the same parent
Henan Changalv Industrial Service Co., Ltd.	Ultimately controlled by the same parent
Henan Changxing Industry Co., Ltd.	Ultimately controlled by the same parent
Henan Chinalco Engineering Construction Co., Ltd.	Ultimately controlled by the same parent
Henan Chinalco Equipment Co., Ltd.	Ultimately controlled by the same parent
Henan Zhongzhou Aluminum Factory Co., Ltd.	Ultimately controlled by the same parent
Jinlv Real Estate Development Co., Ltd.	Ultimately controlled by the same parent
Lanzhou Aluminum Factory Co., Ltd.	Ultimately controlled by the same parent
Lanzhou Chinalco Industrial Service Co., Ltd.	Ultimately controlled by the same parent
Pingguo Aluminum Co., Ltd.	Ultimately controlled by the same parent
Qinghai Chinalco Aluminum Strip Co., Ltd.	Ultimately controlled by the same parent
Shandong Aluminum Industry Limited	Ultimately controlled by the same parent
Shandong Shanlv Environmental Advanced Materials Co., Ltd.	Ultimately controlled by the same parent



## SECTION 12 FINANCIAL REPORT

### 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

#### 10.4 Particulars of other parties related to the Company (continued)

Other related party	Relation to the Company
Shandong Shanlv Electromechanical Technology Co., Ltd.	Ultimately controlled by the same parent
Shanxi Chalco Industrial Service Co., Ltd.	Ultimately controlled by the same parent
Suzhou Xinchang Light and Heat Energy Technology Co., Ltd.	Ultimately controlled by the same parent
Suzhou Nonferrous Metal Design and 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 Corporation Limited	Ultimately controlled by the same parent
Chinalco Industrial Service 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 Industry Co., Ltd.	Ultimately controlled by the same parent
Chinalco Commercial Factoring (Tianjin) Co., Ltd.	Ultimately controlled by the same parent

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.5 Connected transactions

## (a) Connected transactions on procurement and acceptance of goods and rendering and acceptance of service

Related party	Connected transaction	Content of transaction	Pricing policies and decision procedures	Transaction amount for 2019
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Engineering construction service	Negotiated between the parties by reference to market price	4,601,518,504.61
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Engineering design service	Negotiated between the parties by reference to market price	349,609,845.95
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Equipment manufacturing and sales	Negotiated between the parties by reference to market price	451,759,963.75
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Back-up service and other business	Negotiated between the parties by reference to market price	3,274,929.45
A subsidiary of China Aluminum Group	Procurement of goods and acceptance of service	Engineering, construction and supervision service	Negotiated between the parties by reference to market price	34,672,719.71
A subsidiary of China Aluminum Group	Procurement of goods and acceptance of service	Procurement of main materials and auxiliary materials	Negotiated between the parties by reference to market price	165,094,261.90
A subsidiary of China Aluminum Group	Procurement of goods and acceptance of service	Back-up service and other business	Negotiated between the parties by reference to market price	27,071,078.26

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.5 Connected transactions (continued)

## (a) Connected transactions on procurement and acceptance of goods and rendering and acceptance of service (continued)

Related party	Connected transaction	Content of transaction	Pricing policies and decision procedures	Transaction amount for 2018
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Engineering construction service	Negotiated between the parties by reference to market price	5,265,083,135.71
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Engineering construction service	Negotiated between the parties by reference to market price	268,515,797.32
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Equipment manufacturing and sales	Negotiated between the parties by reference to market price	629,910,956.64
A subsidiary of China Aluminum Group	Sales of goods and rendering of service	Back-up service and other business	Negotiated between the parties by reference to market price	5,585,437.05
A joint venture of China Aluminum Group	Sales of goods and rendering of service	Engineering construction service	Negotiated between the parties by reference to market price	229,892,486.01
A joint venture of China Aluminum Group	Sales of goods and rendering of service	Equipment manufacturing and sales	Negotiated between the parties by reference to market price	22,673,819.30
A subsidiary of China Aluminum Group	Procurement of goods and acceptance of service	Engineering, construction and supervision service	Negotiated between the parties by reference to market price	44,962,604.97
A subsidiary of China Aluminum Group	Procurement of goods and acceptance of service	Procurement of main materials and auxiliary materials	Negotiated between the parties by reference to market price	274,268,529.92
A subsidiary of China Aluminum Group	Procurement of goods and acceptance of service	Back-up service and other business	Negotiated between the parties by reference to market price	60,142,452.78
A joint venture of China Aluminum Group	Procurement of goods and acceptance of service	Procurement of main materials and auxiliary materials	Negotiated between the parties by reference to market price	218,897,321.42

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.5 Connected transactions (continued)

## (b) Related party leases

Lessor	Lessee	Leasehold	Lease income/ expense recognized for 2019	Lease income/ expense recognized for 2018
China Aluminum (Shanghai) Co., Ltd.	china Aluminum International Engineering & Equipment Co., Ltd.	Housing	3,815,532.71	1,027,002.70
Chalco Shandong Co., Ltd.	Chalco Shandong Engineering Technology Co., Ltd.	Housing	1,111,908.76	2,416,430.52
Luoyang Engineering & Research Institute for Nonferrous Metals Processing	China Nonferrous Metals Processing Technology Co., Ltd.	Housing	937,160.46	187,142.86
China Aluminum (Shanghai) Co., Ltd.	China Nonferrous Metals Processing Technology Co., Ltd.	Housing	837,735.84	988,679.23
Suzhou Nonferrous Metal Design and Research Institute Co., Ltd.	China Nonferrous Metals Processing Technology Co., Ltd.	Housing	877,489.09	-
Zhuhai Changye Asset Management Co., Ltd.	Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	Housing	100,800.00	198,114.28
Hunan Changkan Business Development Co., Ltd.	China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	Housing	718,421.95	-
Zhengzhou Chinalco Construction and Development Co., Ltd.	Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	Housing	730,926.13	285,264.00
Aluminum Corporation of China Limited	China Nonferrous Metals Industry's Twelfth Metallurgical Construction Co., Ltd.	Housing	-	106,961.90
Total			9,129,974.94	5,209,595.49
China Aluminum Great Wall Construction Co., Ltd.	Chinalco Logistics Group Co., Ltd.	Land	1,136,357.03	-
China Aluminum Great Wall Construction Co., Ltd.	Chinalco Mining Corporation Limited	Land	846,418.29	1,273,627.44
Total			1,982,775.32	1,273,627.44

## (c) Related party guarantees

Guarantor	Guaranteed	Guarantee amount	Guarantee starting on	Guarantee ending on	Guarantee performed or not
China Aluminum Group Limited	China Aluminum International Engineering Corporation Limited	500,000,000.00	13 March 2017	Bond redemption date	No.
China Aluminum Group Limited	China Aluminum International Engineering Corporation Limited	1,500,000,000.00	30 October 2019	Bond redemption date	No.

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.5 Connected transactions (continued)

## (d) Borrowing from and lending to related parties

Related party	Borrowing/lending	Amount	Value date	Expiry date	Remarks
China Aluminum Group Limited	Borrowing	2,000,000,000.00	02 Apr 2019	01 Apr 2022	Entrusted loan
China Aluminum Commercial Factoring (Tianjin) Co., Ltd.	Borrowing	100,000,000.00	30 Sep 2019	30 Sep 2020	Direct loan
China Aluminum Commercial Factoring (Tianjin) Co., Ltd.	Borrowing	100,000,000.00	28 Jun 2019	30 Jun 2020	Direct loan
China Aluminum Commercial Factoring (Tianjin) Co., Ltd.	Borrowing	100,000,000.00	29 Apr 2019	30 Apr 2020	Direct loan
China Aluminum Commercial Factoring (Tianjin) Co., Ltd.	Borrowing	100,000,000.00	27 Jun 2019	30 Mar 2020	Direct loan
China Aluminum Commercial Factoring (Tianjin) Co., Ltd.	Borrowing	38,500,000.00	09 Sep 2019	23 Sep 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	100,000,000.00	12 Jul 2019	11 Jul 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	100,000,000.00	06 Mar 2019	06 Mar 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	99,000,000.00	17 Apr 2019	16 Apr 2021	Direct loan
Chinalco Finance Company Limited	Borrowing	90,000,000.00	15 Aug 2019	14 Aug 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	50,000,000.00	17 Sep 2019	16 Sep 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	50,000,000.00	22 Feb 2019	22 Feb 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	50,000,000.00	29 Jan 2019	29 Jan 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	49,000,000.00	07 May 2019	06 May 2021	Direct loan
Chinalco Finance Company Limited	Borrowing	49,000,000.00	23 Apr 2019	22 Apr 2021	Direct loan
Chinalco Finance Company Limited	Borrowing	40,000,000.00	21 Oct 2019	18 Dec 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	30,000,000.00	01 Nov 2019	30 Oct 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	30,000,000.00	21 Oct 2019	20 Oct 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	30,000,000.00	12 Aug 2019	11 Aug 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	20,000,000.00	17 Apr 2019	16 Apr 2020	Direct loan
Chinalco Finance Company Limited	Borrowing	14,000,000.00	17 Dec 2018	16 Dec 2020	Direct loan
Chinalco Finance Company Limited	Providing deposit service	2,636,858,841.15	-	-	Balance of deposits
Total	-	5,876,358,841.15	-	-	-

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.5 Connected transactions (continued)

## (e) Remuneration of key management

Remuneration of key management	2019	2018
Total	4,882,484.08	5,530,641.33

## (f) Other connected transactions

- (1) In October 2018, CNPT, a partially-owned subsidiary of the Company entered into an agreement with Chinalco Henan Aluminum Co., Ltd. to acquire its 100% equity in Luoyang Kaiying Technology Co. Ltd., for a consideration of RMB205.8132 million, of which RMB188.3956 million had been paid as at end of the reporting period. Chinalco Henan Aluminum Co., Ltd. is a subsidiary of our controlling shareholder, China Aluminum Group Limited. CNPT acquired the control over Luoyang Kaiying Technology Co. Ltd. in January 2019. As Luoyang Kaiying Technology Co. Ltd. did not constitute a business operation on the acquisition date, this acquisition is not a business combination though the Company has consolidated the financial statements of Luoyang Kaiying Technology Co. Ltd. as from the acquisition date.
- (2) On 28 March 2019, CNPT, a partially-owned subsidiary of the Company, entered into a capital increase agreement with Luoyang Foyang Decoration Engineering Co., Ltd. to make capital contribution of RMB12.915 million in cash for 51.22% equity in Foyang Company and acquired the control over Foyang Company in May 2019. The original shareholder of Foyang Company was Luoyang Engineering & Research Institute for Nonferrous Metals Processing, which is wholly-owned subsidiary of Chinalco Asset and ultimately controlled by China Aluminum Group. As assets and liabilities of Foyang Company constitutes a business operation, the transactions constitutes a business combination under common control.
- (3) China Nonferrous Metals Processing Technology Co., Ltd. (a partially-owned subsidiary of the Company) ("CNPT") and Suzhou Nonferrous Metal Design and Research Institute ("Suzhou Institute") respectively held 70% and 30% equity in Suzhou Nonferrous Metal Materials Co., Ltd. ("Suzhou Nonferrous Metal Materials"). In order to optimize the strategic layout, focus on the principal business, on 29 April 2019, CNPT and Suzhou Institute entered into an equity transfer agreement with China Aluminum (Shanghai) Co., Ltd, pursuant to which CNPT and Suzhou Institute respectively transfer 70% equity and 30% equity in Suzhou Nonferrous Metal Materials to Chalco Shanghai for a consideration of RMB166,180 and RMB71,220 respectively. The transaction price is determined on the basis of the evaluated net assets of Suzhou Nonferrous Metal Materials as at 31 May 2018, and is the final consideration negotiated between the parties.

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.6 Receivables from and payable to related parties

## (a) Receivables

Item	Related party	Closing balance		Opening balance	
		Carrying amount	Loss allowance	Carrying amount	Loss allowance
Account receivable	A subsidiary of China Aluminum Group	2,667,841,487.47	127,581,169.61	3,508,725,950.96	138,188,032.04
Account receivable	An associate of China Aluminum Group	516,045.40	258,022.70	516,045.40	154,813.62
Account receivable	A joint venture of China Aluminum Group	56,279,233.91	1,712,978.36	112,846,134.82	1,381,852.83
Account receivable	An associate of the Company	816,585,143.26	8,958,908.48	69,535,056.53	4,679,256.11
Subtotal		3,541,221,910.04	138,511,079.15	3,691,623,187.71	144,403,954.60
Other receivable	A subsidiary of China Aluminum Group	106,895,833.03	4,376,616.61	155,493,028.75	6,376,599.07
Other receivable	A joint venture of China Aluminum Group	410,000.00	36,775.00	155,000.00	20,275.00
Other receivable	An associate of the Company	1,980,272.71	52,060,259.53	185,000.00	75,500.00
Other receivable	A joint venture of the Company	3,792,686.29	530,239.34	2,665,164.17	251,057.12
Subtotal		113,078,792.03	57,003,890.48	158,498,192.92	6,723,431.19
Prepayment	A subsidiary of China Aluminum Group	10,719,844.29	-	15,670,611.45	-
Prepayment	A joint venture of the Company	-	-	5,009,226.00	-
Subtotal		10,719,844.29	-	20,679,837.45	-
Long-term receivable	A subsidiary of China Aluminum Group	32,964,881.27	2,541,966.68	29,480,615.00	147,403.08
total		3,697,985,427.63	198,056,936.31	3,900,281,833.08	151,274,788.87

## SECTION 12 FINANCIAL REPORT

## 10 RELATED PARTIES AND THEIR TRANSACTIONS (CONTINUED)

## 10.6 Receivables from and payable to related parties

## (b) Payables

Item	Related party	Closing balance	Opening balance
Account payable	A subsidiary of China Aluminum Group	<b>233,796,421.49</b>	258,599,517.00
Account payable	An associate of the Company	<b>5,017,370.12</b>	2,610,640.12
Account payable	A joint venture of the Company	<b>31,068,827.91</b>	29,913,906.57
Subtotal		<b>269,882,619.52</b>	291,124,063.69
Contract liability	A subsidiary of China Aluminum Group	<b>412,966,115.36</b>	279,936,185.11
Contract liability	A joint venture of China Aluminum Group	<b>10,615,544.28</b>	2,272,490.00
Subtotal	An associate of the Company	<b>110,159,472.98</b>	49,738,737.38
Subtotal		<b>533,741,132.62</b>	331,947,412.49
Other payable	A subsidiary of China Aluminum Group	<b>60,187,603.77</b>	150,918,897.07
Other payable	An associate of the Company	<b>1,062,600.00</b>	1,072,600.00
Other payable	A joint venture of the Company	<b>423,412.00</b>	443,412.00
Subtotal		<b>61,673,615.77</b>	152,434,909.07
Interest payable	A subsidiary of China Aluminum Group	<b>1,500,556.26</b>	437,222.22
Total		<b>866,797,924.17</b>	775,943,607.47



## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES

#### 11.1 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.

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 RMB3 billion by the bank, and the Company has issued a letter of undertaking for deficiency as to RMB1.286 billion or 42.86% of the credit line. The bank has actually granted a loan of RMB1.8 billion, and the Company has provided credit enhancement for RMB771 million of the loan.

Linyun Expressway was granted a credit line of RMB3 billion by the bank, and the Company has issued a letter of undertaking for deficiency as to RMB1.286 billion or 42.86% of the credit line. The bank has actually granted a loan of RMB800 million, and the Company has provided credit enhancement for RMB343 million of the loan.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies

1. Lawsuit on construction contract between the Company's subsidiary Sixth Metallurgical Construction Company of China Nonferrous Metals Industry (hereinafter referred to as "Sixth Metallurgical Company") and Shougang Jingtang Iron and Steel Corporation Limited (hereinafter referred to as "Jingtang Iron and Steel").

In November 2014, Jingtang Iron and Steel filed a lawsuit with Tangshan Intermediate People's Court, claiming that based on the quantity of work completed by Six Metallurgical Company, Sixth Metallurgical Company had been overpaid by Jingtang Iron and Steel for a total of RMB25.78 million after deducting expenses that should be borne by Six Metallurgical Company, and requesting Six Metallurgical Company to return the overpaid project sum. In March 2015, Six Metallurgical Company filed a lawsuit with the Higher People's Court of Hebei Province, pointing out that after the completion of the project, Jingtang Iron & Steel failed to calculate the contract price in the way agreed in the contract and did not review and settle part of the budgetary cost declared by Six Metallurgical Company, and requesting Jingtang Iron and Steel to pay the project sum of RMB292.28 million and interest thereon and to bear all litigation costs.

Six Metallurgical Company submitted applications to Tangshan Intermediate People's Court and Higher People's Court of Hebei Province respectively, requesting Tangshan Intermediate People's Court to suspend the hearing of civil case Jingtang Iron and Steel v. Six Metallurgical Company (2014) Tang Min Chu Zi No.205, and applying to Higher People's Court of Hebei Province to arraign the case for joint hearing with civil case Six Metallurgical Company v. Jingtang Iron and Steel (2015) Ji Min Chu Zi No.3. The Higher People's Court of Hebei Province accepted Six Metallurgical Company's application and held a hearing on the combined case in December 2015. The first instance ruled that Jingtang Iron and Steel shall pay RMB63.49 million and related interest to Six Metallurgical Company. The second trial was held in May 2019 but no judgment has been handed down.

2. Dispute over engineering construction contract between the Company's subsidiary Sixth Metallurgical Company and Zhonghe Anshan Shengshide Real Estate Co., Ltd (hereinafter referred to as "Zhonghe Shengshide")

In September 2016, Sixth Metallurgical Company filed a lawsuit with Anshan Municipal Intermediate People's Court, requiring Zhonghe Shengshide to pay project arrears of RMB55.11 million and interest thereon, and claiming the priority as a construction project contractor against the 5#, 6#, 7#, and 8# floor and the underground parking lots of Zhonghe Shengshi Haoting (Phase II). In June 2019, Liaoning Provincial Higher People's Court revoked the judgment of first instance made by Liaoning Provincial Intermediate People's Court and remanded the case for a retrial. The case is now in hearing.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

3. Dispute over contract between our subsidiary Sixth Metallurgical Construction Company of China Nonferrous Metals Industry (hereinafter referred to as “Sixth Metallurgical Company”) and Xinjiang Qinghua Investment Holdings Limited (hereinafter referred to “Qinghua Investment”)

On 28 December 2018, Sixth Metallurgical Company filed an arbitration application to Urumchi Arbitration Commission in Urumchi City, Xinjiang Uygur Autonomous Region, requesting Qinghua Investment to pay project sum and corresponding interest totaling RMB61.36 million and all litigation costs. Urumchi Arbitration Commission accepted the arbitration application, and issued the Notice on Acceptance of Arbitration Application ((2018) Wu Zhong Zi No.0375) on 18 February 2019.

4. dispute over engineering construction contract between our subsidiary Sixth Metallurgical Construction Company of China Nonferrous Metals Industry (hereinafter referred to as “Sixth Metallurgical Company”) and Xinyang Jieming Earthwork Engineering Co., Ltd (hereinafter referred to as “Xinyang Jieming”)

In September 2017, Xinyang Jieming filed a lawsuit with Zhengzhou Intermediate People’s Court against Sixth Metallurgical Company and parties with several and joint liabilities including Henan Xinchangcheng Construction Engineering Co., Ltd. and Zhengzhou Airport Zone State-owned Asset Operation and Management Co., Ltd, requesting Sixth Metallurgical Company to pay of project arrears and corresponding interest totaling RMB72.12 million and all litigation costs. Zhengzhou Intermediate People’s Court has put the case on file. The judgment of first instance required Henan Xinchangcheng Construction Engineering Co., Ltd to pay RMB51.7567 million to Xinyang Jieming, with Sixth Metallurgical Company severally and jointly liable for the payment.

5. Dispute over engineering construction contract between our subsidiary Sixth Metallurgical Construction Company of China Nonferrous Metals Industry (hereinafter referred to as Sixth Metallurgical Company) and Henan Hongxuan Real Estate Co., Ltd (hereinafter referred to as “Hongxuan Company”)

On 31 May 2018, Sixth Metallurgical Company filed a lawsuit with Anyang Intermediate People’s Court, requesting Hongxuan Company to pay project sums quality retentions totaling RMB77.07 million, and to bear all litigation costs. At the same time, Hongxuan Company brought a separate lawsuit against Sixth Metallurgical Company, claiming for complete documents on construction completion and RMB29.98 million of liquidated damage. Both cases are pending trial of first instance.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

6. Dispute over engineering construction contract between our subsidiary Sixth Metallurgical Company) and Guizhou Gui'an Property Investment Co., Ltd (hereinafter referred to as "Gui'an Property")

In June 2019, Sixth Metallurgical Company filed a lawsuit with Anshun Intermediate People's Court in Guizhou Province, requesting Gui'an Property to pay a total of RMB90.5008 million, including RMB78.1324 million of project arrears and RMB12.3684 million of overdue interest, and to bear all litigation costs. On 12 July 2019, Anshun Intermediate People's Court in Guizhou Province put the case on file. On 3 December 2019, the Court handed down the Civil Judgment [(2019) Qian 04 Min Chu No. 48], ruling that Gui'an Property shall pay Sixth Metallurgical Company RMB78.1324 million of project sum as well as relevant interest within 10 days from the effective date of the judgment.

Objecting to the judgment of first instance, Sixth Metallurgical Company appealed to Guizhou Provincial Higher People's Court, requesting retrial or judgment revision. The case has been put on file by the Court. Trail of second instance has not started as of the reporting date of the financial report.

7. Dispute over engineering construction contract between our subsidiary Sixth Metallurgical Company and Yingkou Zhongwang Aluminum Co., Ltd (hereinafter referred to as "Zhongwang Aluminum")

In July 2019, Sixth Metallurgical Company applied to Yingkou Arbitration Commission for arbitration, requesting Zhongwang Aluminum to pay project arrears of RMB116.1986 million and overdue interest, as well as all arbitration fees. In July 2019, Yingkou Arbitration Commission accepted the application. On 31 July 2019, Zhongwang Aluminum submitted a counterclaim application to Yingkou Arbitration Commission on grounds of project quality issue, claiming for compensation for estimated loss caused by project quality issue in amount of RMB500,000, as well as arbitration application fees, and appraisal fees. The case is in court session now.

8. Dispute over engineering construction contract between our subsidiary Sixth Metallurgical Company and Qiu Haijie, Zhang Jun, Guo Zhiming, and Zeng Minghai

In April 2018, Qiu Haijie, Zhang Jun, Guo Zhiming, and Zeng Minghai brought a lawsuit against Sixth Metallurgical Company with Tumed People's Court in Inner Mongolia Autonomous Region, requiring Sixth Metallurgical Company to pay RMB26 million of project arrears. As the subject value went beyond the authority of the court, the case was handed over to Hohhot Intermediate People's Court. In May 2018, Hohhot Intermediate People's Court handed down the ruling of first instance to freeze RMB36 million of bank deposits of Sixth Metallurgical Company or the RMB36 million payable by Boyuan Real Estate Co., Ltd. in Hohhot Economic and Technological Development Zone to Sixth Metallurgical Company. In June 2019, an application of claim alternation increasing the subject value from RMB36 million to RMB60.95 million was delivered to Hohhot Intermediate People's Court. The case is now in court session.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

9. Dispute over engineering construction contract between our wholly-owned subsidiary China Aluminum Great Wall Construction Co., Ltd (hereinafter referred to as “Great Wall Construction”) and Changge Hongji Weiye Real Estate Development Co., Ltd (hereinafter referred to as “Hongji Weiye”)

On 25 April 2019, Great Wall Construction filed a lawsuit against Hongji Weiye with Xuchang Intermediate People’s Court in Henan Province for dispute over engineering construction contract, requesting that:

- (1) Hongji Weiye pays Great Wall Construction RMB89.4323 million of project arrears and RMB4.4716 million of interest (at 12% per annum for the period from 19 November 2018 to 18 April 2019), totaling RMB93.9039 million in aggregate. The interest on project sum is calculated up to the payment date determined in the judgement.
- (2) Great Wall Construction has priority in respect of payment from discounted price or auction price of high-rise construction project including 27# 1 and 31# floor in Zone A of Hongji Weiye’s Changge Diamond Plaza located north to the middle part of Getian Avenue in Changge City, to the extent of project sum of RMB89.4323 million payable by Hongji Weiye.
- (3) Hongji Weiye bear all litigation fees, attachment fees, and guarantee fees concerning this case.

On 8 January 2020, Great Wall Construction submitted to Xuchang Intermediate People’s Court an application for alternation to claims as follows:

- (1) Hongji Weiye pays Great Wall Construction project sum of RMB56.2155 million and the interest (at 12% per annum for the period from 19 November 2018 to the payment date determined in the judgement).
- (2) Great Wall Construction has priority in respect of payment from discounted price or auction price of high-rise construction project including 27# and 31# floor in Zone A of Hongji Weiye’s Changge Diamond Plaza located north to the middle part of Getian Avenue in Changge City, to the extent of project sum of RMB56.2155 million payable by Hongji Weiye.
- (3) Hongji Weiye bears RMB25,400 of attachment guarantee fee and RMB850,000 of appraisal fee concerning this case.
- (4) Hongji Weiye bears all litigation fees and attachment fees concerning this case.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

10. Dispute over engineering construction contract between Twelfth Metallurgical Company and Huainan Zhongsheng Property Co., Ltd (“Huainan Zhongsheng”), Zhirongcheng Investment (Beijing) Co., Ltd. (“Zhirongcheng”), Beijing Wuzhou Hengyou International Investment Co., Ltd. (Wuzhou Hengyou), Ganzhou Hualong Real Estate Development Co., Ltd (“Ganzhou Hualong”), and Chen Quanhong.

In April 2016, Twelfth Metallurgical Company filed a lawsuit with Shanxi Provincial High People’s Court, requesting Huainan Zhongsheng to repay the RMB450 million of advance for land transfer fees, as well as RMB151.18 million of interest and RMB150.81 million of liquidated damage, Zhirongcheng and Ganzhou Hualong to assume guarantor’s liability to the extent of equity pledged, and Chen Quanhong to bear litigation fees and attachment fees concerning the case.

Shanxi Provincial Higher People’s Court put the case on file in April 2016 and handed down the Civil Judgment [2016 Jin Min Chu No.27] in July 2016, seizing the state-owned construction land use right of Huainan Zhongsheng, which is located in the south of Guoqing West Road, Ancheng Town, Tianjia ’an District, Huainan City, with an area of 90,250.79 square meters, and the north of Shijianhu East Road, Tianjia ’an District, Huainan City, with an area of 16,481.42 square meters. In September 2016, Shanxi Provincial Higher People’s Court issued a ruling [(2016) Jin Min Chu No. 27-1], which imposed an additional freeze RMB509 million bank deposits or equivalent assets of the defendants Huainan Zhongsheng, Zhirongcheng, Beijing Wuzhou Hengyou Company, Ganzhou Hualong Real Estate Company and Chen Quanhong. Subsequently, the land use rights of 42,871.68 square meters and 33,201.40 square meters in the south of Guoqing West Road, Ancheng Town, Tianjiaan District, Huainan City, were seized.

11. Dispute over engineering construction contract between our subsidiary Twelfth Metallurgical Company, and Anhui Wante Investment Development Co., Ltd. (hereinafter referred to as “Anhui Wante”) and its Liu’an Branch (hereinafter referred to as “Liu’an Branch”)

In June 2016, Twelfth Metallurgical Company filed a lawsuit with Anhui Provincial Higher People’s Court against Anhui Wante and its Liu’an Branch, requesting them to pay RMB152.21 million of project arrears and RMB27.40 million of penal interest, make compensation for the loss of RMB27.74 million caused to Twelfth Metallurgical Company, and return the RMB4 million of performance bond together with RMB380,000 of interest. Twelfth Metallurgical Company applied in June 2016 for a freeze on the defendants’ bank deposits of RMB1.28 million, and 61 houses and 212 shops on sale in Bengbu. In June 2016, the first instance ruled that RMB170 million of bank deposits of Anhui Wante and its Liu’an Branch shall be frozen, or their assets in equivalent amount shall be seized or distrained. In January 2019, Anhui Wante appealed against the judgment of the first instance. The court of second instance rejected their appeal, upholding the judgment of the first instance. Twelfth Metallurgical Company is currently applying for enforcement.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

12. Dispute over engineering construction contract between our subsidiary China Nonferrous Metals Industry's 12th Metallurgical Construction Co., Ltd ("Twelfth Metallurgical Company") and Taiyuan Jiaxin Palm Real Estate Development Co., Ltd (hereinafter referred to as "Jiaxin Palm")

In September 2018, Twelfth Metallurgical Company filed a lawsuit with Taiyuan Intermediate People's Court in Shanxi Province, demanding that Jiaxin Palm pay project arrears, liquidated damage and relevant economic loss totaling RMB53.31 million, and requesting the termination of the Engineering Construction Contract between the parties. Taiyuan Intermediate People's Court put the case on file on 12 October 2018. The case is currently in hearing of first instance.

13. Dispute over engineering construction contract between our subsidiary Ninth Metallurgical Construction Co., Ltd. (hereinafter referred to as "Ninth Metallurgical Company") and Shaanxi Huayuan Real Estate Development Co., Ltd. (hereinafter referred to as "Shaanxi Huayuan")

In 2016, Ninth Metallurgical Construction filed a lawsuit with Xi'an Intermediate People's Court to request Shaanxi Huayuan to pay project sum of RMB93.55million and took attachment measures against 88 sets of housing property of Shaanxi Huayuan. The case has been heard in court several times. The result of forensic appraisal of project cost was issued in November 2018, but both Ninth Metallurgical Company and Shaanxi Huayuan objected to the result. The case is now pending further hearing.

14. Dispute over engineering construction contract between the Company's subsidiary Ninth Metallurgical Company and Gree Electric Appliances (Zhengzhou) Co., Ltd. (hereinafter referred to as "Gree Zhengzhou")

In April 2019, Ninth Metallurgical Company filed a lawsuit with Zhengzhou Intermediate People's Court, requesting Gree Zhengzhou to pay project sum of RMB56.4488 million and assume all litigation costs. Zhengzhou Municipal Intermediate People's Court has accepted the case.

On 9 March 2020, Ninth Metallurgical Company received the Civil Judgement [(2019) Yu 01 Min Chu No. 30] from Zhengzhou Intermediate People's Court. The Judgement ruled that Gree Zhengzhou shall pay Ninth Metallurgical Company RMB6.8087 million of project sum and interest thereon.

15. Dispute over engineering construction contracts between our subsidiary Ninth Metallurgical Construction Co., Ltd. (hereinafter referred to as "Ninth Metallurgical Company") and Shaanxi Huangling Coking Coal Chemical Industry Group Co., Ltd. (hereinafter referred to as "Huangling Coking Coal")

In April 2018, Ninth Metallurgical Company filed a lawsuit with Yan'an Intermediate People's Court to request Huangling Coking Coal to pay project sum of RMB68.69 million. In October 2018, Yan'an Intermediate People's Court handed down a judgment of first instance that Huangling Coking Coal shall pay Ninth Metallurgical Company RMB63.88 million and interest. So far, both parties have concluded a settlement that Huangling Coking Coal pays Ninth Metallurgical Construction Co., Ltd. RMB64 million in installments.



## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

16. Debt dispute between our subsidiary CHALIECO (Tianjin) Construction Co., Ltd. (hereinafter referred to as “Tianjin Construction”) and GAO Weihua and 7 companies including Tianzi Environmental Protection Investment Holdings Co., Ltd. (hereinafter referred to as “Tianzi Environmental Protection”)

In May 2016, Tianjin Construction filed a lawsuit with Tianjin Second Intermediate People’s Court, demanding that Tianzi Environmental Protection pay RMB35.75 million of funding fee and costs for equipment purchase, storage, and management, with the rest 7 defendants jointly and severally liable for the aforesaid payment. Tianjin Second Intermediate People’s Court accepted the case in May 2016.

In June 2016, Tianjin Construction submitted the Application for Additional Defendants and Claims, adding Tianjin Free Trade Zone Branch of Industrial and Commercial Bank of China (hereinafter referred to as “ICBC Free Trade Zone Branch”) as a defendant, and demanding that Tianzi Environmental Protection repay the principal and interest of the project advance and equipment investment totaling RMB176.7 million, Huazhiyuan (Tianjin) International Trade Co., Ltd. (hereinafter referred to as “Huazhiyuan”) be severally and jointly liable for the payment to the extent guaranteed and ICBC Free Trade Zone Branch assume guarantor’s liability under the guarantee. In March 2017, Tianjin Construction won the lawsuit in the first instance, and Tianzi Environmental Protection appealed to Tianjin Higher People’s Court, which ruled on the revocation of the civil judgment made by Tianjin Second Intermediate People’s Court and remanded the case for retrial. The case is currently in trial.



## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

17. Dispute over engineering construction contract between Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd. (hereinafter referred to as “Guiyang Institute Contracting Company”), a wholly-owned subsidiary of our subsidiary Guiyang Institute, and Guizhou Huada Real Estate Development Co., Ltd. (hereinafter referred to as “Guizhou Huada”).

In December 2018, Guiyang Institute Contracting Company submitted an application to Guiyang Arbitration Committee for arbitration against Guizhou Huada for the dispute over general contracting agreement. On 20 January 2020, Guiyang Arbitration Committee issued the Award (2019) Gui Zhong Cai Zi No. 0727 as follows:

- (1) It is confirmed that the RMB150 million advanced by Guiyang Institute Contracting Company for Guizhou Huada and the RMB70 million project payment, totaling RMB220 million, have become due, and Guizhou Huada shall repay the RMB220 million to Guiyang Institute Contracting Company within 30 days after the judgement is served.
- (2) Within 30 days after the judgment is served, Guizhou Huada shall repay Guiyang Institute Contracting Company the RMB150 million advanced payment, and RMB70 million project sum and relevant interest up to when the repayment is made.
- (3) Within 30 days after the judgment is served, Guizhou Huada shall repay Guiyang Contracting Company liquidated damage on the basis of the RMB220 million advance at 6% per annum for the period from 19 September 2019 up to when the repayment is made.
- (4) Within 30 days after the judgment is served, Guizhou Huada shall pay Guiyang Institute Contracting Company RMB200,000 as liquidated damage for the delay in mortgage, RMB1.2 million of attorney’s fee, RMB400,000 of attachment guarantee fee and RMB3,000 of attachment fee. The arbitration fee amounted to RMB2.2087 million, with RMB662,600 payable by Guiyang Institute Contracting Company and RMB1.5461 million payable by Guizhou Huada.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### 11.2 Contingencies (continued)

18. Dispute over construction contract between Guiyang Aluminum and Magnesium Design Institute Construction Contracting Co., Ltd. (hereinafter referred to as “Guiyang Institute Contracting Company”), a wholly-owned subsidiary of our subsidiary Guiyang Institute, and the Seventh Engineering Construction Company.

In 2018, the Seventh Engineering Construction Company applied to Guiyang Arbitration Committee in Guizhou Province for arbitration, requesting that Guiyang Institute Contracting Company pay project arrears and interest totaling RMB50.12 million, and bear all litigation costs. Guiyang Arbitration Committee accepted the application. On 30 April 2019, the Seventh Engineering Construction Company requested alteration of arbitration, increasing the amount of project sum and interest payable by Guiyang Contracting Company to RMB30.48 million. In June 2019, Guiyang Arbitration Committee issued a mediation, pursuant to which Guiyang Institute Contracting Company shall pay project sum and interest in amount of RMB30.48 million.

19. Dispute over contract between the Company and China Aluminum International Engineering & Equipment Co., Ltd. (hereinafter referred to as “Equipment Company”), a wholly-owned subsidiary of the Company, and Qinghai Xibu Hydropower Co., Ltd (hereinafter referred to as “Xibu Hydropower”).

On 21 December 2018, the Company filed a lawsuit with Qinghai Provincial Higher People’s Court, requesting Xibu Hydropower to pay the arrears and relevant interest totaling RMB142.67 million and bear all litigation costs. Qinghai Provincial Higher People’s Court put the case on file, and issued the Circular of Qinghai Provincial Higher People’s Court on Case Acceptance [(2018) Qing Min Chu No. 207]. On 13 May 2019, Qinghai Provincial Higher People’s Court handed down the first-instance judgement, ruling that Qinghai Xibu Hydropower Co., Ltd shall pay the Company compensation and cost of about RMB130 million, as well as interest and liquidated damage of about RMB93 million for the period from 22 December 2018 up to the actual payment date. The effect has come into force. The Company is applying for enforcement of the judgment.

On 21 December 2018, Equipment Company filed a lawsuit with Qinghai Provincial Higher People’s Court, requesting Xibu Hydropower to pay the arrears and relevant interest totaling RMB196.24 million and bear all litigation costs. Qinghai Provincial Higher People’s Court put the case on file, and issued the Circular of Qinghai Provincial Higher People’s Court on Case Acceptance [(2018) Qing Min Chu No. 208]. In August 2019, Qinghai Provincial Higher People’s Court handed down the first-instance judgement, ruling that Qinghai Xibu Hydropower Co., Ltd shall pay China Aluminum International Engineering & Equipment Co., Ltd. about RMB161 million, as well as interest and liquidated damage for the period from 1 January 2017 up to the actual payment date. The effect has come into force. Equipment Company is applying for enforcement of the judgment.

## SECTION 12 FINANCIAL REPORT

### 11 COMMITMENTS OR CONTINGENCIES (CONTINUED)

#### (III) Guarantees

1. Our branch Ninth Metallurgical Construction Co., Ltd. Hanzhong Branch provides several and joint liability guarantee for Mian County Urban Development Investment Co., Ltd. in respect of a RMB95 million loan granted by China Development Bank which matures on 6 January 2023. As of December 31, 2019, the balance of guarantee was RMB41 million.
2. Our subsidiary Hanzhong Ninth Metallurgical Construction Co., Ltd. provides several and joint liability guarantee for Mian County Urban and Rural Infrastructure Construction Co., Ltd. in respect of a RMB100 million loan granted by Agricultural Development Bank of China which matures on 19 October 2027. As of December 31, 2019, the balance of guarantee was RMB72.7 million.

### 12 EVENTS AFTER THE BALANCE SHEET DATE

#### (I) Profit distribution plan

As resolved at the Board meeting on 30 March 2020, the Company plans to dividends for the year ended 31 December 2019 at RMB0.0036 (pre-tax) per ordinary share, totaling RMB10.65 million. The distribution proposal is subject to the approval of the general meeting of the Company.

#### (II) Redemption of 2017 Zhong Gong Y1 Renewable Corporate Bonds

In March 2010, the Company redeemed 2017 Zhong Gong Y1 Renewable Corporate Bonds in face value of RMB500 million which were recorded in other equity instruments prior to redemption.

#### (III) Issuance of ultra short-term financing bills

The China Association of Interbank Market Dealers agreed to accept the registration of the Company for issuing ultra-short-term financing bills in the PRC. The registered amount of the Company's ultra-short-term financing bills is RMB4 billion, with a registered quota being valid for 2 years from 25 July 2018. In March 2020, the Company issued the first tranche of ultra short-term financing bills of RMB1 billion in 2020.

## SECTION 12 FINANCIAL REPORT

## 13 OTHER KEY MATTERS

## 13.1 Lease

## (a) Lessor – operating lease

Item	Amount
① Income	
Lease income	82,730,421.79
Variable lease payment related income not included in lease receipts	–
② Undiscounted lease receipts to be received in each of the five financial years post the balance sheet date	106,174,096.33
Year 1	30,892,366.23
Year 2	19,900,400.19
Year 3	19,505,315.29
Year 4	19,510,476.15
Year 5	16,365,538.48
③ Total of undiscounted lease receipts to be received in remaining years	–

## (b) Lessee

## (1) Lessee information disclosure

Item	Amount
Short-term lease expense and low-value asset lease expense charged to profit or loss	32,859,963.49
Total cash outflows related to lease	11,753,766.49

Note: See Note 5.18 for details on right-of-use assets and see Note 5.35 for details on interest expense on lease obligations.

## SECTION 12 FINANCIAL REPORT

## 13 OTHER KEY MATTERS (CONTINUED)

## 13.2 Asset exchange

## Non-monetary asset exchange

Incoming assets			
Category	Cost determination method	Book value	Fair value
Total		42,363,907.02	42,363,907.02
Long-term equity investment	Asset appraisal	24,000,000.00	24,000,000.00
Long-term equity investment	Asset appraisal	11,013,159.00	11,013,159.00
Long-term equity investment	Asset appraisal	7,350,748.02	7,350,748.02

Outgoing assets			
Category	Book value	Fair value	Gain on non-monetary asset exchange
Total	411,891.49	42,363,907.02	41,952,015.53
Intangible assets	–	24,000,000.00	24,000,000.00
Fixed assets, intangible assets	358,233.72	11,013,159.00	10,654,925.28
Fixed assets, intangible assets	53,657.77	7,350,748.02	7,297,090.25

Notes:

- (1) In 2019, the Company appointed Beijing Zhongtonghua Asset Evaluation Co., Ltd. to assess the market value of 19 patented technologies of its subsidiary Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy. The appraised value was RMB24 million (Appraisal Report No.: Zhong Tong Hua Ping Bao Zi (2019) No.020874). The Company made capital contribution with the above patented technologies to establish Chinalco Environmental Protection and Energy Saving Technology (Hunan) Co., Ltd. jointly with Chinalco Environmental Protection and Energy Saving Group. The Company holds 49% equity and voting rights and has significant influence.
- (2) In 2019, the Company appointed Woxen (Beijing) International Asset Evaluation Co., Ltd. to assess market value of the intelligent information asset group of its subsidiary, China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.. The appraised value was RMB11.0132 million (Appraisal Report No.: Woxen Ping Bao Zi [2019] No.1052). The Company made capital contribution with the above asset group to establish Chinalco Intelligent (Hangzhou) Safety Science Research Institute Co., Ltd. jointly with Chinalco Intelligent Technology Development Co., Ltd. The Company holds 49% equity and voting rights and has significant influence.
- (3) In 2019, the Company appointed Beijing Zhongtonghua Asset Evaluation Co., Ltd. to assess the market value of some electronic equipment and intangible assets of its subsidiary Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy. The appraised value was RMB7.3507 million (Appraisal Report No.: Zhong Tong Hua Ping Bao Zi (2019) No.020967). The Company made capital contribution with the ownership over the above assets to establish Chinalco Environmental Protection and Ecological Technology (Hunan) Co., Ltd. jointly with Chinalco Environmental Protection and Energy Saving Group. The Company holds 49% equity and voting rights and has significant influence.

## SECTION 12 FINANCIAL REPORT

## 13 OTHER KEY MATTERS (CONTINUED)

## 13.3 Segment report

## 1. 2019

Item	Engineering design and consultancy	Engineering and construction contracting	Equipment manufacturing	Trading	Inter-segment elimination	Total
1. Operating revenue	2,351,285,421.01	20,990,448,791.59	2,005,054,457.55	5,948,940,966.23	235,938,024.75	31,059,791,611.63
2. Segment income	69,353,396.54	361,620,327.82	-37,671,452.44	-48,662,032.19	-133,013.01	344,773,252.74
Income tax	-	-	-	-	-	122,248,501.14
Net profit	-	-	-	-	-	222,524,751.60
3. Total assets	22,186,173,757.57	26,718,258,484.03	3,112,178,426.46	7,422,898,215.43	3,440,045,762.87	55,999,463,120.62
4. Total liabilities	14,475,578,533.83	24,796,341,969.19	2,063,347,465.31	4,465,005,061.17	5,196,189,859.71	40,604,083,169.79

## 2. 2018

Item	Engineering design and consultancy	Engineering and construction contracting	Equipment manufacturing	Trading	Inter-segment elimination	Total
1. Operating revenue	2,391,015,871.80	21,782,437,369.69	1,509,978,654.31	8,299,196,423.27	347,777,123.75	33,634,851,195.32
2. Segment income	31,480,065.20	570,894,133.97	-30,332,787.66	95,485,001.45	9,544,965.06	657,981,447.90
Income tax	-	-	-	-	-	146,672,754.71
Net profit	-	-	-	-	-	511,308,693.19
3. Total assets	20,367,645,085.37	27,240,838,980.38	3,461,026,554.95	4,807,738,392.26	6,780,023,935.97	49,097,225,076.99
4. Total liabilities	14,190,969,111.95	21,440,232,100.62	2,332,829,248.14	4,545,084,245.00	6,613,412,256.67	35,895,702,449.04

## 13.4 Auditor's remuneration

Auditor's remuneration	2019	2018
Total	5,759,000.00	5,200,000.00

## SECTION 12 FINANCIAL REPORT

### 13 OTHER KEY MATTERS (CONTINUED)

#### 13.5 Directors', Supervisors' and Employees' Emoluments

##### 1. Directors' and supervisors' emoluments

Director/ supervisor	Fee	Salary, subsidy, allowance and bonus			Contribution to social security and housing provident funds	Contribution to pension fund	Others	Total
		Basic salary	Subsidy and allowance	Bonus				
Directors								
WU Jianqiang	-	233,333.33	-	222,900.00	104,250.64	67,136.80	-	627,620.77
ZONG Xiaoping	-	280,000.00	-	225,913.00	120,309.84	64,086.08	-	690,308.92
WU Zhigang	-	280,000.00	15,600.00	171,615.00	121,059.33	46,685.28	-	634,959.61
ZHANG Jian	-	210,000.00	15,500.00	171,615.00	126,044.46	44,193.60	-	567,353.06
Sub-total	-	1,003,333.33	31,100.00	792,043.00	471,664.27	222,101.76	-	2,520,242.36
Supervisors								
FAN Guangsheng	-	233,333.33	63,000.00	143,078.00	104,250.64	44,200.00	-	587,861.97
Sub-total	-	233,333.33	63,000.00	143,078.00	104,250.64	44,200.00	-	587,861.97
Total	-	1,236,666.66	94,100.00	935,121.00	575,914.91	266,301.76	-	3,108,104.33

Note: The Company does not have a director fee system.

##### 2. Five highest paid individuals

Among the five highest paid individuals of the Company for the year were 3 directors and 0 supervisor. Their emoluments have been reported in Directors' and Supervisors' Emoluments. The emoluments of the remaining 2 highest paid individuals are as follows:

Item	2019
Salaries, subsidies, allowances and bonuses	<b>885,024.00</b>
Contribution to social security fund and housing provident fund	<b>252,088.92</b>
Retirement benefits	<b>100,471.20</b>
Total	<b>1,237,584.12</b>

The emoluments paid to each of the above 5 highest paid individuals for the year do not exceed RMB1 million.

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT

## 14.1 Accounts receivable

## (a) Accounts receivable disclosed by category

Category	Closing balance			
	Carrying Amount		Loss allowance	
	Amount	Percentage (%)	Amount	Percentage (%)
Accounts receivable tested for impairment on an individual basis	33,550,020.00	1.87	14,650,020.00	43.67
Accounts receivable tested for impairment on a collective basis	1,757,595,920.21	98.13	259,760,769.40	14.78
Including, Group 1: aging analysis group	1,756,895,920.21	98.09	259,760,769.40	14.79
Group 2: receivables from subsidiaries	700,000.00	0.04		
<b>Total</b>	<b>1,791,145,940.21</b>	<b>100.00</b>	<b>274,410,789.40</b>	<b>15.32</b>

Category	Opening balance			
	Carrying Amount		Loss allowance	
	Amount	Percentage (%)	Amount	Percentage (%)
Accounts receivable tested for impairment on an individual basis	14,412,720.00	0.63	14,412,720.00	100.00
Accounts receivable tested for impairment on a collective basis	2,286,034,740.30	99.37	188,449,411.70	8.24
Including: Group 1: aging analysis group	2,275,334,740.30	98.90	188,449,411.70	8.28
Group 2: receivables from subsidiaries	10,700,000.00	0.47	–	–
<b>Total</b>	<b>2,300,447,460.30</b>	<b>100.00</b>	<b>202,862,131.70</b>	<b>8.82</b>



## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.1 Accounts receivable (Continued)

## (a) Accounts receivable disclosed by category (Continued)

(1) Accounts receivable tested for impairment on an individual basis as at 31 Dec 2019

Debtor	Carrying Amount	Loss Allowance	Aging	Percentage of loss allowance (%)	Reason for Loss allowance
Debtor 1	18,900,000.00		-		Balance of assets on continuing involvement in ABS
Debtor 2	14,650,020.00	14,650,020.00	Over 5 years	100.00	In dispute. Expected not to be recoverable
Total	33,550,020.00	14,650,020.00	-	-	-

(2) Accounts receivable tested for impairment on a collective basis

Group 1: Aging analysis group

Aging	Closing balance			Opening balance		
	Carrying Amount	Percentage of Provision (%)	Loss allowance	Carrying Amount	Percentage of loss allowance (%)	Loss allowance
Within 1 year	736,349,844.55	0.50	3,681,749.21	1,601,320,641.35	0.50	8,006,603.21
Between 1-2 years	478,448,435.23	10.00	47,844,843.53	102,373,138.62	10.00	10,237,313.86
Between 2-3 years	41,987,158.49	20.00	8,397,431.70	417,530,283.06	20.00	83,506,056.61
Between 3-4 years	400,766,341.89	30.00	120,229,902.56	77,194,490.20	30.00	23,158,347.06
Between 4-5 years	39,474,595.30	50.00	19,737,297.65	26,750,192.24	50.00	13,375,096.13
Over 5 years	59,869,544.75	100.00	59,869,544.75	50,165,994.83	100.00	50,165,994.83
Total	1,756,895,920.21	-	259,760,769.40	2,275,334,740.30	-	188,449,411.70

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.1 Accounts receivable (Continued)

**(b) Addition to or recovery or reversal of loss allowance**

For the reporting period, addition to loss allowance was RMB259,760,769.40, and no loss allowance was recovered or reversed.

**(c) Significant accounts receivable written-off for the reporting period.**

For the reporting period, bad debts of RMB11,772,000.00 were written off.

Significant accounts receivable written off for the reporting period:

Debtor	Nature	Written-off Amount	Reason for Write-off	Write-off Procedures	Arising from Connected Transaction or Not
Debtor 1	Project payment	11,770,000.00	Write-down upon acceptance	GM regular meeting	Yes
Total	–	11,770,000.00	–	–	–

**(d) Top five debtors of accounts receivable as at 31 Dec 2019**

Debtor	Closing balance	Percentage in total accounts receivable (%)	Loss allowance balance
No. 1	454,669,952.74	19.76	2,273,349.76
No. 2	407,659,075.72	17.72	69,256,084.13
No. 3	252,418,515.78	10.97	20,052,331.57
No. 4	229,631,114.61	9.98	68,889,334.38
No. 5	32,186,554.36	1.40	9,655,966.31
Total	1,376,565,213.21	–	170,127,066.15

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.2 Other receivables

Category	Closing balance	Opening balance
Interest receivable	–	–
Dividends receivable	<b>130,825,077.12</b>	363,266,717.96
Other receivables	<b>5,193,032,939.17</b>	5,912,564,400.10
Less: loss allowance	<b>3,536,476.82</b>	4,843,193.91
<b>Total</b>	<b>5,320,321,539.47</b>	6,270,987,924.15

## (a) Dividends receivable

Item	Closing balance	Opening balance
China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	<b>21,440,000.00</b>	
China Aluminum International Investment Management (Shanghai) Co., Ltd.	<b>949,900.00</b>	1,328,900.00
China Aluminum Great Wall Construction Co., Ltd.	<b>21,252,414.21</b>	28,674,400.00
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	<b>39,955,954.99</b>	129,377,500.00
China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	<b>45,610,799.93</b>	45,610,799.93
Zhuzhou Tianqiao Crane Co., Ltd.	<b>1,616,007.99</b>	
Shenyang Aluminum & Magnesium Design Institute Co., Ltd.	–	12,559,300.00
Chinalco Southwest Construction Investment Co., Ltd.	–	7,734,231.75
China Aluminum International Aluminum Technological Development Co., Ltd.	–	8,353,557.63
China Nonferrous Metals Industry's Twelfth Metallurgical Construction Co., Ltd.	–	4,628,028.65
Guangxi Tongrui Investment Construction Co., Ltd.	–	125,000,000.00
<b>Total</b>	<b>130,825,077.12</b>	363,266,717.96

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.2 Other receivables (Continued)

## (b) Other receivables:

(1) Other receivables disclosed by category

Category	Closing balance		Loss allowance	
	Carrying Amount Amount	Percentage (%)	Amount	Percentage (%)
Other receivable tested for impairment on an individual basis	339,865.53	0.01	339,865.53	100.00
Other receivable tested for impairment on a collective basis	5,192,693,073.64	99.99	3,196,611.29	0.06
Including: Group 1: aging analysis group	24,987,505.00	0.48	3,196,611.29	12.79
Group 2: receivables from subsidiaries	5,167,705,568.64	99.51	-	-
<b>Total</b>	<b>5,193,032,939.17</b>	<b>100.00</b>	<b>3,536,476.82</b>	<b>0.07</b>

Category	Opening balance		Loss allowance	
	Carrying Amount Amount	Percentage (%)	Amount	Percentage (%)
Other receivable tested for impairment on an individual basis	919,169.19	0.02	919,169.19	100.00
Other receivable tested for impairment on a collective basis	5,911,645,230.91	99.98	3,924,024.72	0.07
Including, Group 1:aging analysis group	82,287,743.40	1.39	3,924,024.72	4.77
Group 2: receivables from subsidiaries	5,829,357,487.51	98.59	-	-
<b>Total</b>	<b>5,912,564,400.10</b>	<b>100.00</b>	<b>4,843,193.91</b>	<b>0.08</b>

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.2 Other receivables (Continued)

## (b) Other receivables: (Continued)

- (2) Other receivable tested for impairment on a collective basis

Group 1: Aging analysis group

Aging	Closing balance			Opening balance		
	Carrying Amount	Percentage of Provision (%)	Loss allowance	Carrying Amount	Percentage of Provision (%)	Loss allowance
Within 1 year	13,235,621.41	0.50	66,178.11	63,861,531.71	0.50	319,307.69
Between 1-2 years	4,721,352.05	10.00	472,135.20	2,748,797.76	10.00	274,879.78
Between 2-3 years	1,113,915.02	20.00	222,783.01	13,733,869.15	20.00	2,746,773.82
Between 3-4 years	3,613,966.52	30.00	1,084,189.97	1,943,544.78	30.00	583,063.43
Between 4-5 years	1,902,650.00	50.00	951,325.00	-	50.00	-
Over 5 years	400,000.00	100.00	400,000.00	-	100.00	-
Total	24,987,505.00	-	3,196,611.29	82,287,743.40	-	3,924,024.72

- (3) Addition to or recovery or reversal of loss allowance

For the reporting period, addition to loss allowance was RMB3,196,611.29, and no loss allowance was recovered or reversed.

- (4) Significant other receivable written-off during the reporting period.

Other receivable of RMB579,303.66 was written off during the reporting period.

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.2 Other receivables (Continued)

## (b) Other receivables: (Continued)

(5) Top five debtors of other receivables as at 31 Dec 2019

Debtor	Nature	Closing balance	Percentage in total other receivable (%)	Loss allowance balance
No. 1	Principal of and interest on entrusted loan	947,725,202.90	16.03	-
No. 2	Principal of and interest on entrusted loan	721,929,305.57	12.21	-
No. 3	Principal of and interest on entrusted loan	713,615,537.10	12.07	-
No. 4	Principal of and interest on entrusted loan	583,428,378.64	9.87	-
No. 5	Principal of and interest on entrusted loan	485,122,073.74	8.20	-
Total	-	3,451,820,497.95	58.38	-

(6) Other payables by

Nature	Closing balance	Opening balance
Advance	<b>22,390,430.68</b>	55,307,177.24
Retentions funds and deposits	<b>1,634,293.36</b>	23,142,721.89
Imprest	<b>1,302,646.49</b>	2,247,844.27
Others	<b>5,167,705,568.64</b>	5,831,866,656.70
Total	<b>5,193,032,939.17</b>	5,912,564,400.10

## 14.3 Long-term equity investment

Items	Closing balance			Opening balance		
	Carrying amount	Impairment provision	Book value	Carrying amount	Impairment provision	Book value
Investments in subsidiaries	<b>5,915,995,036.38</b>	-	<b>5,915,995,036.38</b>	4,180,413,136.38	-	4,180,413,136.38
Investments in associates and joint ventures	<b>244,673,836.00</b>	-	<b>244,673,836.00</b>	59,833,428.62	-	59,833,428.62
Total	<b>6,160,668,872.38</b>	-	<b>6,160,668,872.38</b>	4,240,246,565.00	-	4,240,246,565.00

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.3 Long-term equity investment (Continued)

## (a) Investments in subsidiaries

Investee	Opening balance	Increase	Decrease	Closing balance	Impairment provisions for the current period	Impairment provisions as at 31 Dec 2019
Guiyang Aluminum and Magnesium Design Institute Co., Ltd.	598,559,465.50	-	-	598,559,465.50	-	-
Shenyang Aluminum & Magnesium Design Institute Co., Ltd.	312,257,365.81	20,000,000.00	-	332,257,365.81	-	-
Changsha Engineering & Research Institute Limited for Nonferrous Metallurgy	359,761,736.37	40,000,000.00	-	399,761,736.37	-	-
China Nonferrous Metals Industry's Twelfth Metallurgical Construction Co., Ltd.	255,780,969.93	1,000,000,000.00	-	1,255,780,969.93	-	-
China Aluminum International Engineering & Equipment Co., Ltd.	200,000,000.00	-	-	200,000,000.00	-	-
China Aluminum International Logistic (Tianjin) Co., Ltd.	166,737,383.73	-	-	166,737,383.73	-	-
Sixth Metallurgical Construction Company of China Nonferrous Metals Industry	499,165,278.44	250,000,000.00	-	749,165,278.44	-	-
China Nonferrous Metals Processing Technology Co., Ltd.	121,479,260.67	-	-	121,479,260.67	-	-
Duyun Development Zone Tongda Construction Co., Ltd.	5,000,000.00	-	-	5,000,000.00	-	-
China Aluminum International Technology Development Co., Ltd.	60,000,000.00	-	-	60,000,000.00	-	-
Wenzhou Tongrun Construction Co., Ltd.	60,000,000.00	-	-	60,000,000.00	-	-
Beijing Zichen Investment Development Corporation Limited	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.	25,000,000.00	-	-	25,000,000.00	-	-

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.3 Long-term equity investment (Continued)

## (a) Investments in subsidiaries (Continued)

Investee	Opening balance	Increase	Decrease	Closing balance	Impairment provisions for the current period	Impairment provisions as at 31 Dec 2019
China Nonferrous Metals Changsha Investigation and Design Research Institute Co., Ltd.	69,273,189.34	-	-	69,273,189.34	-	-
Changsha Tongxiang Construction Co., Ltd.	10,000,000.00	-	-	10,000,000.00	-	-
Hunan Tongdu Investment and Development Co., Ltd.	6,000,000.00	-	-	6,000,000.00	-	-
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.	400,000,000.00	-	150,000,000.00	250,000,000.00	-	-
Ninth Metallurgical Construction Co., Ltd.	49,980,000.00	-	-	49,980,000.00	-	-
China Aluminum International Aluminum Technological Development Co., Ltd.	144,500,000.00	-	-	144,500,000.00	-	-
Qingdao Xinfu Gongchuang Asset Management Company Limited	9,000,000.00	-	-	9,000,000.00	-	-
Chalco Shandong Engineering Technology Co., Ltd.	187,946,928.49	-	-	187,946,928.49	-	-
Kunming Survey and Design institute Co., Ltd. of China Nonferrous Metals industry	263,457,753.51	-	-	263,457,753.51	-	-
Chinalco Southwest Construction Investment Co., Ltd.	200,000,000.00	-	-	200,000,000.00	-	-
Yunnan Miyu Expressway Investment and Development Co., Ltd.	-	575,581,900.00	-	575,581,900.00	-	-
<b>Total</b>	<b>4,180,413,136.38</b>	<b>1,885,581,900.00</b>	<b>150,000,000.00</b>	<b>5,915,995,036.38</b>	<b>-</b>	<b>-</b>



## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.3 Long-term equity investment (Continued)

## (b) Investments in associates and joint ventures (Continued)

Investee	Opening balance	Increase in investments	Decrease in investments	Investment gain recognized under equity method	Increase/Decrease			Cash dividends or profits declared	Impairment provisions	Others	Closing balance	Impairment provisions Closing balance
					Adjustment to other comprehensive income	Other changes in equity	Impairment provisions					
1. Joint ventures												
Shanghai Fengtong Equity Investment Fund Partnership (Limited Partner)	9,125,439.61	-	-	-185,542.23	-	-	-	-	-	-	8,939,897.38	-
Sub-total	9,125,439.61	-	-	-185,542.23	-	-	-	-	-	-	8,939,897.38	-
2. Associates												
Chalco-Steering Intelligent Technology Co., Ltd.	10,864,976.66	-	-	-5,263,202.62	-	-	-	-	-	-	5,601,774.14	-
Chalco Tendering Company Limited	9,643,012.35	-	-	6,112,670.82	-	-	4,354,179.19	-	-	-	11,601,503.98	-
Yunnan Ning Yong Expressway Co., Ltd.	15,000,000.00	-	-	-	-	-	-	-	-	-	15,000,000.00	-
Yunnan Lin Yun Expressway Co., Ltd.	15,000,000.00	-	-	-	-	-	-	-	-	-	15,000,000.00	-
Yunnan Lin Shuang Expressway Co., Ltd.	-	15,000,000.00	-	-	-	-	-	-	-	-	15,000,000.00	-
Zhuzhou Tangqiao Crane Co., Ltd.	-	171,835,516.27	-	1,695,144.23	-	-	-	-	-	-	173,530,660.50	-
Sub-total	50,707,989.01	166,835,516.27	-	2,544,612.63	-	-	4,354,179.19	-	-	-	235,733,938.62	-
Total	59,833,428.62	166,835,516.27	-	2,359,070.30	-	-	4,354,179.19	-	-	-	244,673,836.00	-

## SECTION 12 FINANCIAL REPORT

## 14 NOTES TO FINANCIAL STATEMENTS OF THE PARENT (CONTINUED)

## 14.4 Operating income and operating cost

## Operating income and operating cost by category

Items	2019		2018	
	Income	Cost	Income	Cost
1. Sub-total of principal business	<b>1,339,063,669.63</b>	<b>1,110,067,534.29</b>	3,149,774,190.38	2,823,267,981.36
Engineering contracting	<b>1,104,865,958.34</b>	<b>958,688,830.34</b>	2,672,977,489.43	2,383,411,518.78
Engineering design and consultancy	<b>225,596,538.10</b>	<b>163,140,227.15</b>	168,793,744.85	135,369,823.61
Equipment manufacturing	–	–	22,478,841.28	20,953,197.15
Trading	<b>8,601,173.19</b>	<b>-11,761,523.20</b>	285,524,114.82	283,533,441.82
Less:inter-segment elimination	–	–	–	–
2. Sub-total of other business	<b>10,340,896.43</b>	<b>6,152,247.30</b>	3,888,662.71	1,158,074.06
Material sales	<b>413,334.51</b>	–	–	–
Lease	<b>228,580.58</b>	–	2,429,763.46	–
Miscellaneous	<b>9,698,981.34</b>	<b>6,152,247.30</b>	1,458,899.25	1,158,074.06
Less:inter-segment elimination	–	–	–	–
Total	<b>1,349,404,566.06</b>	<b>1,116,219,781.59</b>	3,153,662,853.09	2,824,426,055.42

## 14.5 Gain on investment

Items	2019	2018
Gain on long-term equity investment accounted for using cost method	<b>468,871,800.00</b>	148,828,900.00
Gain on long-term equity investment accounted for using equity method	<b>2,359,070.30</b>	-523,582.10
Gain on disposal of long-term equity investment	–	193,067,314.43
Gain on disposal of financial assets at FVTPL	<b>22,500.00</b>	–
Gain from holding other equity instrument investment	<b>2,780,255.19</b>	3,272,557.60
Gain on investment in discretionary wealth management products	<b>13,486,974.89</b>	4,419,786.91
Gain on derecognition of financial asset at amortised cost	<b>-4,704,167.26</b>	–
Total	<b>482,816,433.12</b>	349,064,976.84

## SECTION 12 FINANCIAL REPORT

### 15 SUPPLEMENTARY INFORMATION

#### (1) Details of non-recurring profit and loss

Items	Amounts	Notes
1 Gain or loss on disposal of non-current assets, including written-off asset impairment provisions	-5,477,862.75	-
2 Tax return, reduction or exemption arising from ultra vires approval, without official approval document, or on an occasional basis	-	-
3 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)	10,236,127.37	-
4 Financing fee from non-financial enterprises recorded in profit or loss	16,293,877.06	-
5 Gain on bargain purchase of equity in subsidiaries, associates and joint ventures	-	-
6 Gain or loss on non-monetary asset exchange	41,952,015.53	-
7 Gain or loss on assets under discretionary investment or management	-	-
8 Asset impairment provisions arising from force majeure factors such as natural disasters	-	-
9 Gain or loss on debt restructuring	-3,012,041.80	-
10 Restructuring costs, such as employee settlement cost and integration cost	-	-
11 Gain or loss in excess of fair value arising from obviously unfair transactions	-	-
12 Net profit or loss of subsidiaries arising from business combination under common control for the period from the beginning of the reporting period to the combination date	1,057,684.02	-
13 Gain or loss on contingencies not related to usual operations of the Company	-	-
14 Gain or loss on changes in fair value arising from holding held-for-trading financial assets, other non-current financial assets and trading financial liabilities, and gain on investment from disposal of held-for-trading financial assets, other non-current financial assets, and trading financial liabilities, except for the effective portion of hedging related to usual operations of the Company.	-	-
15 Reversal of loss allowance for receivables tested for impairment on an individual basis	15,941,582.21	-
16 Gain or loss on entrusted loans	-	-

## SECTION 12 FINANCIAL REPORT

## 15 SUPPLEMENTARY INFORMATION (CONTINUED)

## (1) Details of non-recurring profit and loss (Continued)

Items	Amounts	Notes
17 Gain or loss on changes in the fair value of investment property subsequently measured at fair value	–	–
18 Impact of non-off adjustments to current P&L as required by taxation and accounting laws and regulations	–	–
19 Trustee fee income from entrusted operations	–	–
20 Other non-operating income and expenses other than above items	10,372,058.59	–
21 Other items falling within the definition of non-recurring gain or loss	–	–
22 Impact of income tax	17,227,022.52	–
23 Impact of non-controlling interests	–3,544,429.16	–
Total	73,680,846.87	–

## (2) Net asset yield and earnings per share

Profit for the Reporting Period	Weighted average net assets yield (%)		EPS			
			Basic		Diluted EPS	
	2019	2018	2019	2018	2019	2018
Net profit attributable to ordinary shareholders	–0.66	2.84	–0.02	0.08	–	–
Net profit attributable to ordinary shareholders net of non-recurring gain or loss	–1.53	1.67	–0.04	0.04	–	–

Note: There are no dilutive potential ordinary shares.

## SECTION 13 FIVE-YEAR RESULT SUMMARY

Unit: '0000 Yuan Currency: RMB

Item	2019年	2018年	2017年	2016年	2015年
Total assets	<b>5,599,946.31</b>	4,906,900.14	4,542,145.34	4,380,839.64	3,152,012.20
Total equity	<b>1,539,538.00</b>	1,320,152.26	1,214,413.20	1,399,734.16	927,187.52
Revenue	<b>3,105,979.16</b>	3,363,485.12	3,611,217.91	2,696,628.74	2,096,217.92
Profit before tax	<b>34,477.33</b>	65,798.14	104,496.96	135,821.64	80,151.94
Earnings per share (Yuan)	<b>-0.02</b>	0.08	0.21	0.36	0.19
Net assets income rate (%)	<b>1.56</b>	4.57	6.26	9.64	6.90

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**中鋁國際工程股份有限公司**  
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