中国铝业股份有限公司

ALUMINUM CORPORATION OF CHINA LIMITED

CHALCO

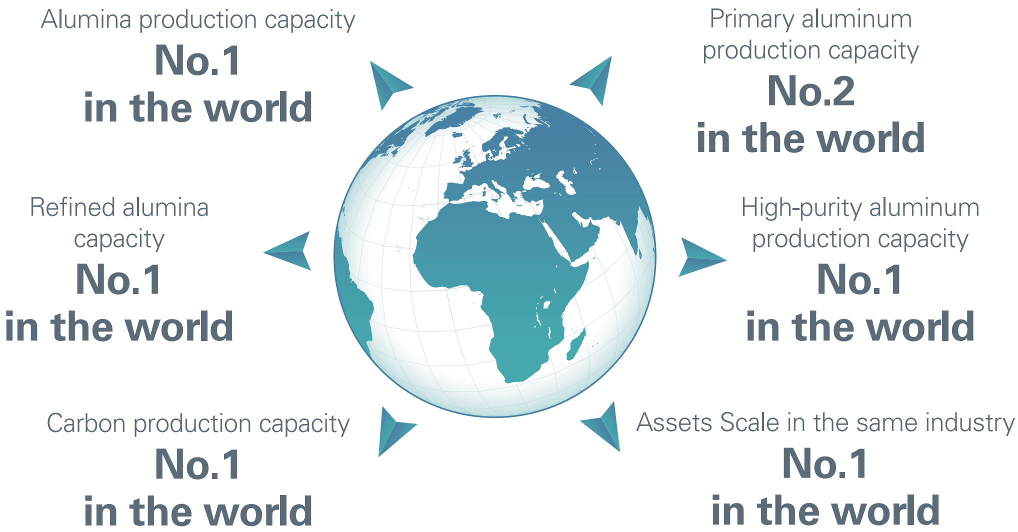
Stock Code: 2600 (HKSE) ACH (US) 601600 (China)

2019 Annual Report


中国铝业
中国铝业公司

Contents

Corporate Profile



Aluminum Corporation of China Limited ("**Chalco**" or the "**Company**") is a joint stock limited company established in the People's Republic of China (the "**PRC**"); its shares are listed on The Stock Exchange of Hong Kong Limited (the "**Hong Kong Stock Exchange**"), the New York Stock Exchange and the Shanghai Stock Exchange, respectively.

The Company and its subsidiaries (collectively referred to as the "**Group**") is the only large manufacturer and operator in aluminum industry in China with integration of mining of bauxite, coal and other resources; production, sales and technology research of alumina, primary aluminum and aluminum alloy products; international trade; logistics business; thermal and new energy power generation.

The Group is a leading enterprise in non-ferrous metal industry in the PRC. In terms of comprehensive strength, we ranked among the top enterprises in global aluminum industry. The core competitiveness of the Group is mainly reflected in:

- its clear and pragmatic development strategy to build itself into a top-notch aluminum company with global competitiveness in the world;
- its ownership of stable and reliable supply of bauxite resources to ensure sustainable development;

- its complete industrial chain and distinct comprehensive competitive edge;

- its advanced management concepts to ensure the realization of the operation objectives of the Company;

- its experienced professional technician team to ensure a leading productivity of labour of the Company;

- its excellent management team to build an efficient operation mode;

- its sustainable scientific innovation capacity to strengthen the transformation of technological achievements into economic benefits;

- its combination of party building and operating management to ensure the health development of the Company.

The Group is principally comprised of the following branches, subsidiaries, joint ventures and associates:

Branches:

- Guangxi branch (mainly engaged in producing alumina products);

- Qinghai branch (mainly engaged in producing primary aluminum and alloy products);

- Guizhou branch (mainly engaged in mining bauxite and producing alloy products);

Subsidiaries:

- Chalco Shanxi New Material Co., Ltd.* (中鋁山西新材料有限公司) ("**Shanxi New Material**") (mainly engaged in producing alumina products, primary aluminum and alloy products);

- Fushun Aluminum Co., Ltd. ("**Fushun Aluminum**") (mainly engaged in producing carbon products);

- Zunyi Aluminum Co., Ltd. ("**Zunyi Aluminum**") (mainly engaged in producing alumina and primary aluminum products);

- Shandong Huayu Alloy Materials Co., Ltd. ("**Shandong Huayu**") (mainly engaged in producing alloy and carbon products);

- Baotou Aluminum Co., Ltd. ("**Baotou Aluminum**") (mainly engaged in producing primary aluminum and alloy products);

- Chalco Mining Co., Ltd. ("**Chalco Mining**") (mainly engaged in mining bauxite and producing alumina products);

- China Aluminum International Trading Co., Ltd. ("**Chalco Trading**") (mainly engaged in the trading of non-ferrous metal products);
- Chalco Hong Kong Ltd. ("**Chalco Hong Kong**") (mainly engaged in developing overseas projects);
- Chalco Shandong Co., Ltd. ("**Chalco Shandong**") (mainly engaged in producing alumina products);
- Chalco Zhongzhou Aluminum Co., Ltd.* (中鋁中州鋁業有限公司) ("**Zhongzhou Aluminum**") (mainly engaged in producing alumina products);
- Chalco Zhengzhou Research Institute of Non-ferrous Metal* (中鋁鄭州有色金屬研究院有限公司) ("**Zhengzhou Institute**") (mainly engaged in research and development services);
- Chalco Energy Co., Ltd. ("**Chalco Energy**") (mainly engaged in energy development);
- Chalco Ningxia Energy Group Co., Ltd. ("**Ningxia Energy**") (mainly engaged in power generation and coal resources development);
- Guizhou Huajin Aluminum Co., Ltd. ("**Guizhou Huajin**") (mainly engaged in producing alumina products);
- China Aluminum Logistics Group Corporation Co., Ltd ("**Chalco Logistics**") (mainly engaged in logistics transportation services);

- Chalco Shanghai Company Limited* (中鋁(上海)有限公司) ("**Chalco Shanghai**") (mainly engaged in trading and engineering project management);
- Guangxi Huasheng New Material Co., Ltd. ("**Guangxi Huasheng**") (mainly engaged in producing alumina products);
- Chalco Materials Co., Ltd. ("**Chalco Materials**") (mainly engaged in procurement of materials including raw materials and fuels);
- Shanxi Huaxing Alumina Co., Ltd. ("**Shanxi Huaxing**") (mainly engaged in producing alumina products);
- Chalco International Trading Group Co., Ltd. ("**International Trading Group**") (mainly engaged in trading, importing and exporting of non-ferrous metal products);
- Shanxi Chalco China Resources Co., Ltd. ("**Shanxi Zhongrun**") (mainly engaged in producing primary aluminum products);
- Guizhou Huaren New Material Co., Ltd. ("**Guizhou Huaren**") (mainly engaged in producing primary aluminum products);
- Lanzhou Aluminum Co., Ltd. ("**Lanzhou Aluminum**") (mainly engaged in producing primary aluminum products);
- Chinalco Shanxi Jiaokou Xinghua Technology Co., Ltd.* (中鋁集團山西交口興華科技股份有限公司) ("**Xinghua Technology**") (mainly engaged in producing alumina products);
- Gansu Hualu Aluminum Co., Ltd. ("**Gansu Hualu**") (mainly engaged in producing carbon products);

Joint Ventures and Associates:

- Guangxi Huayin Aluminum Company Limited ("**Guangxi Huayin**") (mainly engaged in producing alumina products);
- Chalco Steering Intelligent Technology Co., Ltd. ("**Chalco Steering**") (mainly engaged in provision of information technology services);
- Hua Dian Ningxia Ling Wu Power Co., Ltd. ("**Ling Wu Power**") (mainly engaged in coal and energy power generation);
- Guangxi Hualei New Materials Co., Ltd. ("**Guangxi Hualei**") (mainly engaged in producing primary aluminum products);

1. FINANCIAL SUMMARY PREPARED IN ACCORDANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS

The revenue of the Group for the year ended 31 December 2019 amounted to RMB190,074 million, representing an increase of 5.46% as compared with the same period of last year. Profit attributable to the owners of the parent for the year amounted to RMB851 million, and profit per share attributable to the owners of the parent for the year amounted to RMB0.037.

The following is the summary of the consolidated statements of profit or loss and other comprehensive income for the year 2019 and year 2015 to year 2018:

	For the year ended 31 December				
	2019	2018	2017	2016	2015
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
		(Restated)	(Restated)	(Restated)	(Restated)
Revenue	**190,074,161**	180,241,414	181,022,636	144,855,997	123,924,333
Cost of sales	**(177,946,276)**	(167,029,416)	(166,290,269)	(133,700,192)	(121,408,135)
Gross profit	**12,127,885**	13,211,998	14,732,367	11,155,805	2,516,198
Selling expenses	**(1,673,139)**	(2,496,933)	(2,372,966)	(2,111,787)	(1,798,154)
Administrative expenses	**(3,956,604)**	(3,959,177)	(4,551,237)	(3,337,492)	(2,388,276)
Research and development expenses	**(940,828)**	(626,873)	(498,234)	(168,862)	(168,870)
Impairment losses on property, plant and equipment	**(259,354)**	(46,484)	(16,200)	(57,080)	(10,011)
Other income	**79,469**	135,367	89,873	155,576	1,787,774
Impairment losses on financial assets	**(169,751)**	(107,956)	–	–	–
Impairment losses on investments in joint ventures	–	(216,953)	–	–	–
Other gains, net	**1,247,269**	921,904	319,402	169,200	5,027,661
Finance costs, net	**(4,660,028)**	(4,390,262)	(4,496,732)	(4,204,179)	(5,167,030)
Share of profits and losses of Joint ventures	**270,115**	(199,452)	8,151	(95,508)	23,238
Share of profits and losses of Associates	**48,767**	39,335	(165,249)	115,091	284,531

1. FINANCIAL SUMMARY PREPARED IN ACCORDANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS (CONTINUED)

	For the year ended 31 December				
	2019	2018	2017	2016	2015
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
		(Restated)	(Restated)	(Restated)	(Restated)
Profit before income tax	**2,113,801**	2,264,514	3,049,175	1,620,764	107,061
Income tax (expense)/gain	**(625,720)**	(822,519)	(643,706)	(403,871)	226,220
Net profit for the year	**1,488,081**	1,441,995	2,405,469	1,216,893	333,281
Profit for the year attributable to:					
Owners of the Company	**850,999**	707,460	1,413,221	365,800	118,241
Non-controlling interests	**637,082**	734,535	992,248	851,093	215,040
Proposed final dividend for the year	**–**	–	–	–	–

1. FINANCIAL SUMMARY PREPARED IN ACCORDANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS (CONTINUED)

The following is the summary of the consolidated total assets and total liabilities of the Group:

	For the year ended 31 December				
	2019	2018	2017	2016	2015
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
		(Restated)	(Restated)	(Restated)	(Restated)
Total assets	**203,070,664**	200,964,751	199,955,376	191,440,572	193,055,775
Total liabilities	**132,345,604**	133,295,132	134,173,344	135,432,144	140,973,133
Net assets	**70,725,060**	67,669,619	65,782,032	56,008,428	52,082,642

2. FINANCIAL SUMMARY PREPARED IN ACCORDANCE WITH THE PRC ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES

Item	**For the year ended 31 December 2019** ***RMB'000***
Operating profit	**1,957,353**
Profit for the year	**1,488,081**
Profit attributable to owners of the parent	**850,999**
Profit attributable to owners of the parent after excluding gains or losses from non-recurring items	**230,494**
Net cash flows generated from the operating activities	**12,576,862**

2. FINANCIAL SUMMARY PREPARED IN ACCORDANCE WITH THE PRC ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES (CONTINUED)

Gains or losses from non-recurring items	**For the year ended 31 December 2019** *RMB'000*
Gains from disposal of non-current assets	**259,684**
Government subsidies included in the gains and losses for the reporting period (excluding government subsidies closely related to the ordinary business of the Company and enjoyed according to certain standard amount or quantity)	**101,267**
Profit of subsidiaries from the beginning of the year to the consolidation date arising from business combination under common control	**37**
Except for the hedging business that is related to the ordinary business of the Company, the gains or losses arising from fair value changes of held-for-trading financial assets, held-for-trading financial liabilities and investment income on disposal of held-for-trading financial assets, held-for-trading financial liabilities, and equity investments designated at fair value through other comprehensive income	**50,820**
Reversal of the allowance for impairment of receivables and contract assets that are individually tested for impairment	**109,385**
Gains from disposal of controlling interest in subsidiaries	**261,187**
Gains from disposal of equity interest in joint ventures	**159,514**
Gain on share of associates' net assets	**295,288**
Staffing costs for corporate restructuring	**(189,326)**
Gain on disposal of business	**262,677**
Other non-operating income and expenses other than above items, net	**(139,676)**
Income tax effect	**(226,847)**
Non-controlling interests effect	**(323,505)**
Total	**620,505**

2. FINANCIAL SUMMARY PREPARED IN ACCORDANCE WITH THE PRC ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES (CONTINUED)

Principal accounting information and financial indicators for 2019 and 2018 of the Group:

	2019 *RMB'000*	2018 *RMB'000* (Restated)	Increase/ (decrease) for the year 2019 over 2018 *(%)*
Revenue	**190,074,161**	180,241,414	5.46
Profit before income tax	**2,113,801**	2,391,330	-11.61
Profit attributable to owners of the parent	**850,999**	831,214	2.38
Profit attributable to owners of the parent after excluding gains from non-recurring items	**230,494**	119,144	93.46
Basic earnings per share *(RMB)*	**0.037**	0.034	8.82
Diluted earnings per share *(RMB)*	**0.037**	0.034	8.82
Basic earnings per share after excluding gains from non-recurring items *(RMB)*	**0.001**	-0.001	N/A
Weighted average rate of return on net assets *(%)*	**1.59**	1.80	-0.21
Weighted average rate of return on net assets after excluding gains from non-recurring items *(%)*	**0.43**	0.27	0.16
Net cash flows generated from operating activities	**12,576,862**	13,199,390	-4.72
Net cash flows generated from operating activities per share *(RMB)*	**0.74**	0.78	-5.13
Total assets	**203,070,664**	200,964,751	1.05
Equity attributable to owners of the parent	**54,659,633**	52,415,307	4.28
Equity attributable to owners of the parent per share *(RMB)*	**3.21**	3.11	3.22

3. COMPARISON BETWEEN THE FINANCIAL INFORMATION PREPARED IN ACCORDANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS AND THE PRC ACCOUNTING STANDARDS FOR BUSINESS ENTERPRISES

	Profit attributable to owners of the parent for the year ended 31 December		**Equity attributable to owners of the parent as of 31 December**	
	2019	2018	**2019**	2018
	RMB'000	*RMB'000*	***RMB'000***	*RMB'000*
		(Restated)		(Restated)
Prepared in accordance with the PRC Accounting Standards for Business Enterprises	**850,999**	831,213	**54,659,633**	52,415,307
Prepared in accordance with International Financial Reporting Standards	**850,999**	707,460	**54,659,633**	52,415,307

1. PROFILES OF DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT AT PRESENT AND DURING THE REPORTING PERIOD

Name	Position	Gender	Age	Start date of his/her tenure *(Note)*	End date of his/her tenure *(Note)*	Total remuneration before tax received from the Company during the reporting period *(RMB'000)*	Whether receiving emolument from related parties of the Company
Yu Dehui	Chairman and Executive Director (resigned)	M	60	2016.06.28	2019.02.21	0	Yes
Ao Hong	Non-executive Director	M	58	2019.06.25	2022.06.30	0	Yes
Lu Dongliang	Chairman and Executive Director	M	46	2019.06.25	2022.06.30	0	Yes
	President (resigned)			2018.02.13	2019.02.21		
He Zhihui	Executive Director	M	57	2019.06.25	2022.06.30	957.6	No
	President			2019.02.21			
Jiang Yinggang	Executive Director	M	56	2019.06.25	2022.06.30	977.4	No
	Senior Vice President			2018.06.26			
Zhu Runzhou	Executive Director	M	55	2019.06.25	2022.06.30	921.4	No
	Vice President			2018.05.25			
Wang Jun	Non-executive Director	M	54	2019.06.25	2022.06.30	150.0	No
Chen Lijie	Independent Non-executive Director	F	65	2019.06.25	2021.02.28	209.7	No
Hu Shihai	Independent Non-executive Director	M	65	2019.06.25	2021.06.30	209.7	No
Lie-A-Cheong Tai Chong, David	Independent Non-executive Director	M	60	2019.06.25	2021.12.31	209.7	No
Ye Guohua	Chairman of the Supervisory Committee	M	51	2019.06.25	2022.06.30	0	Yes
Ou Xiaowu	Supervisor	M	55	2019.12.10	2022.06.30	0	Yes

Name	Position	Gender	Age	Start date of his/ her tenure *(Note)*	End date of his/ her tenure *(Note)*	Total remuneration before tax received from the Company during the reporting period *(RMB'000)*	Whether receiving emolument from related parties of the Company
Shan Shulan	Supervisor	F	47	2019.06.25	2022.06.30	0	Yes
Guan Xiaoguang	Supervisor	M	49	2019.06.25	2022.06.30	798.3	No
Yue Xuguang	Supervisor	M	56	2019.12.10	2022.06.30	858.3	No
Wu Zuoming	Supervisor (resigned)	M	53	2016.06.28	2019.06.25	666.1	No
Tian Yong	Vice President (resigned)	M	60	2018.06.06	2020.02.27	890.7	No
Zhang Zhankui	Chief Financial Officer (resigned)	M	61	2015.11.13	2019.02.20	138.5	No
	Company Secretary (Secretary to the Board) (resigned)			2016.03.17	2019.02.20		
Wang Jun	Supervisor (resigned)	M	49	2016.06.28	2019.02.20	765.7	No
	Chief Financial Officer, Company Secretary (Secretary to the Board)			2019.02.20			
Wu Maosen	Vice President	M	56	2019.03.21		686.8	No
Total	/	/	/	/	/	8,439.9	/

Explanation: (1) "Total remuneration before tax received from the Company during the reporting period" in the above table includes total remuneration, endowment insurance and housing provident fund (except for non-executive Directors and independent non-executive Directors); (2) the increase in total remuneration of Directors, Supervisors and senior management personnel of the Company as compared with last year was mainly due to the Company's addition of an employee representative Supervisor who received remuneration from the Company in the year and changes in the appointment of some senior management personnel, which caused the Company to adjust the scope and duration of their remuneration accordingly; (3) Mr. Guan Xiaoguang and Mr. Yue Xuguang have served as employee representative Supervisors of the Company in June and December 2019, respectively, and Mr. Wu Zuoming resigned as the employee representative Supervisor of the Company in June 2019. However, as employees of the Company, Mr. Guan Xiaoguang and Mr. Yue Xuguang also received remuneration from the Company before acting as Supervisors of the Company, and Mr. Wu Zuoming also received remuneration from the Company after he resigned. Therefore, the total remuneration of such persons disclosed in the above table is total remuneration received by each of them from the Company for the whole year.

Note: The start date and the end date of tenure of directors ("**Directors**") and supervisors ("**Supervisors**") of the Company are detailed as follows:

(1) Directors of the Company

As the term of the sixth session of the Board of the Company was expired in June 2019, as considered and approved at the 43rd meeting of the sixth session of the Board of the Company convened on 28 May 2019, Directors of the seventh session of the Board of the Company were nominated including Mr. Lu Dongliang, Mr. He Zhihui, Mr. Jiang Yinggang and Mr. Zhu Runzhou, as the executive Director candidates; Mr. Ao Hong and Mr. Wang Jun as the non-executive Director candidates; and Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David as the independent non-executive Director candidates. Such candidates were all elected as the Directors of the seventh session of the Board of the Company at the 2018 annual general meeting of the Company convened on 25 June 2019. On the same day, the first meeting of the seventh Board of the Company was convened at which Mr. Lu Dongliang was elected as the chairman of the seventh session of the Board of the Company.

The term of the seventh session of the Board of the Company shall be expired until the Directors of the eighth session of the Board are elected at the general meeting of the Company by the end of June 2022. However, given that Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David, were elected as the independent non-executive Directors of the Company in February 2015, June 2015 and December 2015, respectively, according to the relevant requirements that the term of independent directors shall not exceed six years, the term of the above three independent non-executive Directors will expire successively in 2021, and then the Company will elect new independent non-executive Directors.

(2) Supervisors of the Company

As the term of the sixth session of the Supervisory Committee of the Company was expired in June 2019, as considered and approved at the 20th meeting of the sixth session of the Supervisory Committee of the Company convened on 28 May 2019. Mr. Ye Guohua and Ms. Shan Shulan were nominated as the candidates for shareholder representative Supervisors of the seventh session of the Supervisory Committee of the Company. As considered and approved at the 2018 annual general meeting of the Company convened on 25 June 2019, such candidates were elected as the shareholder representative Supervisors of the seventh session of the Supervisory Committee of the Company. At the same time, Mr. Guan Xiaoguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company. Mr. Ye Guohua was elected as the chairman of the seventh session of the Supervisory Committee of the Company at the first meeting of the seventh session of the Supervisory Committee of the Company held on 25 June 2019.

The amendments to the Articles of Association of Chalco Aluminum of China Limited (the "**Articles of Association**") and Rules of Procedures for the Supervisory Committee of Chalco Aluminum of China Limited (the "**Rules of Procedures for the Supervisory Committee**") were considered and approved at the 2019 third extraordinary general meeting of the Company held on 10 December 2019, among which the composition of the Supervisory Committee of the Company was increased from three Supervisors to five Supervisors, which includes three shareholder representative Supervisors and two employee representative Supervisors. Mr. Ou Xiaowu, nominated by Aluminum Corporation of China ("**Chinalco**"), the controlling shareholder of the Company, was elected as a shareholder representative Supervisor of the seventh session of the Supervisory Committee of the Company at the above extraordinary general meeting. On the same day, Mr. Yue Xuguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company.

The term of the seventh session of the Supervisory Committee of the Company shall be expired until the Supervisors of the eighth session of the Supervisory Committee are elected at the general meeting and employees' representatives meeting of the Company by the end of June 2022.

The other changes in positions of Directors, Supervisors and senior management of the Company are set out in the section of "CHANGES IN DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT AS OF THE DATE OF THIS ANNUAL REPORT".

2. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT AS AT THE DATE OF THIS ANNUAL REPORT

Major Working Experience of Directors, Supervisors and Senior Management of the Company as at the Date of This Annual Report:

Executive Directors

Mr. Lu Dongliang, aged 46, is currently the chairman and an executive Director of the Company. Mr. Lu graduated from North China University of Technology majoring in accounting. He holds a bachelor's degree in economics and is an accountant. Mr. Lu has more than 20 years of work experience in financial management and in non-ferrous metals industry. He had subsequently served as the cadre in the audit department of China Nonferrous Metals Industry Corporation* (中國有色金屬工業總公司), the officer-in-charge of the capital division of the finance department of China Copper Lead & Zinc Group Corporation* (中國銅鉛鋅集團公司), the head of the accounting division and the capital division of the finance department of Aluminum Corporation of China* (中國鋁業公司), the deputy manager and manager of the treasure management division of the finance department, the manager of the general management office, the deputy general manager and general manager of the finance department of the Company, the chief financial officer of Chalco Gansu Aluminum Electricity Co., Ltd.* (中國鋁業甘肅鋁電有限責任公司), the assistant to the president of the Company and the general manager of Lanzhou Branch of the Company, an executive director and president of Chalco Gansu Aluminum Electricity Co., Ltd., and an executive Director, a senior vice president and a president of the Company. Currently, Mr. Lu also serves as the deputy general manager of Chinalco.

Mr. He Zhihui, aged 57, is currently an executive Director and the president of the Company. Mr. He graduated from Huazhong Institute of Technology* (華中工學院) with a master's degree in engineering and is a senior engineer with outstanding performance. Mr. He served as an engineer and a deputy director of the power control office, the head of the electric automation institution and the dean of the electric automation branch of Guiyang Aluminum Magnesium Design & Research Institute* (貴陽鋁鎂設計研究院), the deputy dean and dean of Guiyang Aluminum Magnesium Design & Research Institute*, the deputy general manager and general manager of China Aluminum International Engineering Co., Ltd.* (中鋁國際工程有限責任公司), the chairman of China Nonferrous Metals Processing Technology Co., Ltd.* (中色科技股份有限公司), the secretary of the Communist Party Committee, chairman, executive director, president and chairman of the labour union of China Aluminum International Engineering Corporation Limited* (中鋁國際工程股份有限公司) and an assistant to the general manager of Chinalco.

Mr. Jiang Yinggang, aged 56, is currently an executive Director and a senior vice president of the Company. Graduated from Central South University of Mining and Metallurgy majoring in the metallurgy of nonferrous metals, Mr. Jiang holds a master degree in metallurgy engineering of non-ferrous metals and is a professor-grade senior engineer. Mr. Jiang has long been engaged in production operation and corporate management of production enterprises and has extensive and professional experience. He formerly served as deputy head and then head of Corporate Management Department of Qinghai Aluminum Plant; head of Qinghai Aluminum Smelter; deputy manager and manager of Qinghai Aluminum Company Limited, general manager of Qinghai branch of the Company and an executive Director and a vice president of the Company.

Mr. Zhu Runzhou, aged 55, is currently an executive Director and a vice president of the Company. Mr. Zhu graduated from Wuhan University, majoring in software engineering, with a master degree in engineering. He is a senior engineer of outstanding performance. Mr. Zhu has extensive experience in energy, technologies on power plants and corporate operation and management. He had successively served as the inspection director, operation director and director of the fuel division of Gansu Jingyuan Power Plant* (甘肅靖遠發電廠), the deputy chief engineer, director of the inspection department and director of the first repairing department of Gansu Jingyuan Power Plant* as well as the manager of Huaming Branch of Gansu Guangming Supervisory Engineering Company* (甘肅光明監理工程公司華明分公司). Mr. Zhu also served as the chairman of the labour union, the standing director of the employee stock holding committee and the deputy general manager of Gansu Jingyuan First Power Co., Ltd.* (甘肅靖遠第一發電有限責任公司), the chairman of Baiyin Huadian Water Supply Co., Ltd.* (白銀華電供水有限公司), head of Guodian Kaili Power Plant* (國電凱里發電廠), director of the preparatory office of the technical transformation program of Guodian in Duyun City, deputy general manager of Guodian Guizhou Branch, deputy general manager of Guodian Yunnan Branch and general manager of Guodian Power Xuanwei Power Generation Co., Ltd.* (國電電力宣威發電有限責任公司), deputy general manager and general manager of Guodian Guangxi Branch, deputy general manager of the energy management department of the Company and deputy general manager of Chalco Energy, a director, the general manager and the chairman of Ningxia Energy, the general manager of Chalco Xinjiang Aluminum Power Co., Ltd.* (中鋁新疆鋁電有限公司).

Non-executive Directors

Mr. Ao Hong, aged 58, is currently a non-executive Director of the Company. Mr. Ao graduated from Central South University with a doctoral degree in management science and engineering. He is a professor-grade senior engineer with over 30 years of work experience in enterprises of non-ferrous metals industry. He successively served as the deputy dean of Beijing General Research Institute for Non-ferrous Metals* (北京有色金屬研究總院) and concurrently the chairman of GRINM Semiconductor Materials Co., Ltd.* (有研半導體硅材料股份有限公司), the chairman of Guorui Electronics Co., Ltd.* (國瑞電子股份有限公司), the chairman of Guo Jing Micro-electronic Holding, Limited* (國晶微電子控股公司) in Hong Kong, a deputy general manager of Aluminum Corporation of China* (中國鋁業公司). During this period, he also successively served as the chairman of the supervisory committee of the Company, chairman of the Labour Union of Aluminum Corporation of China* (中國鋁業公司), the dean of Chinalco Research Institute of Science and Technology* (中鋁科學技術研究院) and the chairman of China Rare Earth Co., Ltd.* (中國稀有稀土有限公司) and an executive Director and the president of the Company. Mr. Ao is currently the full-time deputy secretary of the Communist Party Committee and a director of Chinalco.

Mr. Wang Jun, aged 54, is currently a non-executive Director of the Company. Graduated from Huazhong Institute of Engineering with a degree of industrial and civil construction, and he is an engineer. He has extensive experience in financial and corporate management. Mr. Wang formerly served as the engineer in the engineering department of Babcock & Wilcox Beijing Company Ltd.; deputy manager of the real estate development department of China Yanxing Company; senior deputy manager of equity management department and senior manager of business management department, senior manager, deputy general manager, general manager of custody and settlement department in China Cinda Asset Management Co., Ltd and general manager of the equity management department of China Cinda Asset Management Co., Ltd. Mr. Wang currently serves as the business director of China Cinda Asset Management Co., Ltd.

Independent Non-executive Directors

Ms. Chen Lijie, aged 65, is currently an independent non-executive Director of the Company. Ms. Chen graduated from Renmin University of China Law School and obtained a doctoral degree in Laws. Ms. Chen Lijie has more than 30 years of experience in laws. She acted as director and deputy director of Commercial Affairs of the Office of Legislative Affairs of the State Council, deputy director of Department of Policies and Laws of the National Economic and Trade Commission, patrol officer of Bureau of Policies, Laws and Regulations of SASAC and chief legal consultant of China Mobile Communications Corporation.

Mr. Hu Shihai, aged 65, is currently an independent non-executive Director of the Company. Mr. Hu graduated from Shanghai Jiao Tong University majoring in thermal energy engineering. He is a professor-level senior engineer with more than 40 years of working experience in power industry. Mr. Hu has extensive experience in corporate management and technical management and successively served as the supervisor, director and deputy head of the Huaneng Shanghai Shidongkou No. 2 Power Plant (華能上海石洞口第二發電廠), deputy director of the preparatory office of the Shanghai Waigaoqiao No. 2 Power Plant (上海外高橋第二電廠籌建處), manager of the production department and assistant to the general manager of Huaneng Power International, Inc. (華能電力股份有限公司) and assistant to the general manager and director of the safety production department, and chief engineer of China Huaneng Group (中國華能集團公司).

Mr. Lie-A-Cheong Tai Chong, David, aged 59, honoured with the Silver Bauhinia Star (SBS), Officier de l'Ordre National du Merite and Justice of Peace. Mr. Lie is currently an independent non-executive Director of the Company. Mr. Lie is the executive chairman of Newpower International (Holdings) Co., Ltd. and China Concept Consulting Ltd. He was selected as a member of the National Committee of the 8th, 9th, 10th and 11th Chinese People's Political Consultative Conference since 1993. From 2007 to 2013, he acted as a panel convenor cum member of the Financial Reporting Review Panel of Hong Kong Special Administrative Region ("**HKSAR**"). Mr. Lie is currently the honorary consul of the Hashemite Kingdom of Jordan in the HKSAR, the chairman of the Hong Kong-Taiwan Economic and Cultural Cooperation and Promotion Council, a member of the Commission on Strategic Development of the HKSAR, a standing committee member of the China Overseas Friendship Association, a standing director of China Council for the Promotion of Peaceful National Reunification, and a member of the Hong Kong General Chamber of Commerce (HKGCC). Currently, Mr. Lie is also an independent non-executive director of Herald Holdings Limited and Harbour Centre Development Limited, both of which are listed companies in Hong Kong.

Supervisors

Mr. Ye Guohua, aged 51, is currently the chairman of the Supervisory Committee of the Company. Mr. Ye graduated from Shanghai University of Finance and Economics, majoring in accounting, with a bachelor degree in economics and is a senior accountant. Mr. Ye has extensive experience in financial management and accounting. He had successively served as the director of accounting department of the refinery of Shanghai Gaoqiao Petrochemical Company* (上海高橋石油化工公司), the deputy chief accountant and head of accounting department of Sinopec Shanghai Gaoqiao Branch* (中國石化股份公司上海高橋分公司), the chief financial officer, executive director, a member of the Party Committee, deputy general manager of Sinopec Shanghai Petrochemical Company Limited* (上海石油化工股份有限公司), the director of accounting department of China Petroleum & Chemical Group Corporation* (中國石油化工集團公司), the chairman of Century Bright International Investment Company* (盛駿國際投資有限公司), the chairman of Sinopec Insurance Limited* (中石化保險有限公司), the vice chairman of Taiping & Sinopec Financial Leasing Co., Ltd.*(太平石化金融租賃有限責任公司), a director of Sinopec Finance Co., Ltd.* (中石化財務有限責任公司), and a director of Sinopec Oilfield Service Corporation* (中石化石油工程技術服務股份有限公司). Mr. Ye is also a member of the Communist Party Committee and the chief accountant of Chinalco.

Mr. Ou Xiaowu, aged 55, is currently a Supervisor of the Company. Mr. Ou graduated from Xiamen University with a bachelor's degree in economics majoring in planning and statistics and is a senior auditor. Mr. Ou has extensive experience in auditing and financial management. He successively served as the deputy director and the director of the second division of the audit department and the director of the first division of the audit department in China Nonferrous Metals Industry Corporation* (中國有色金屬工業總公司), the deputy head of the finance department and the deputy head of the audit department of China Copper Lead & Zinc Group Corporation* (中國銅鉛鋅集團公司), the deputy general manager of Guizhou Branch of the Company, the deputy director and the director of the finance department (audit department) and the chief financial officer of the copper department of Aluminum Corporation of China* (中國鋁業公司) and also served as a director and the chief financial officer of China Copper Co., Ltd.* (中國銅業有限公司), the general manager of the finance department and audit department of the Company. Mr. Ou currently also acts as the deputy chief auditor and the director of the audit department of Chinalco, and a supervisor of China Copper Co., Ltd.* (中國銅業有限公司), a supervisor of China Aluminum International Engineering Corporation Limited* (中鋁國際工程股份有限公司), a supervisor of Chinalco High-end Manufacturing Co., Ltd.* (中國鋁業集團高端製造股份有限公司), the chairman of the supervisory committee of Qinghai Yellow River Hydropower Renewable Aluminum Co., Ltd.* (青海黃河水電再生鋁業有限公司) and a supervisor of Chalco Energy.

Ms. Shan Shulan, aged 48, is currently a Supervisor of the Company. Ms. Shan graduated from Beijing Institute of Light Industry* (北京輕工業學院), majoring in industrial corporate management, with a bachelor degree in engineering. She is a certified public accountant and statistician. Ms. Shan has extensive experience in accounting, finance management and other fields. She successively served as an economic analyst at the economic research office of Beijing Glass Instruments Plant* (北京玻璃儀器廠), the financial manager of Beijing CEM-FIL Glass Fiber Co. Ltd.* (北京賽姆菲爾玻璃纖維有限公司) under Saint-Gobain in China, the financial manager for Beijing region of Carrefour (China) Co., Ltd.* (家樂福(中國)有限公司), the financial manager for China region of Baker Hughes Centrilift, the financial manager for China region of Microsoft Research Asia (China)* (微軟(中國)亞洲研究院), and the business director and deputy head of budget division and the head of budget assessment division of the finance department of Aluminum Corporation of China* (中國鋁業公司). Ms. Shan currently serves as the deputy director of the finance department of Aluminum Chinalco, she also concurrently serves as a supervisor of Chinalco Innovative Development Investment Company Limited* (中鋁創新開發投資有限公司) and a director of Aluminum Corporation of China Overseas Holdings Limited and China Aluminum Insurance Broker (Beijing) Co., Ltd.* (中鋁保險經紀(北京)股份有限公司).

Mr. Guan Xiaoguang, aged 49, is currently a Supervisor of the Company and the general manager of the president's office (the office of the Party committee (discipline inspection commission)) of the Company. Mr. Guan is a master of business administration from Peking University. He is a senior economist with rich experience in human resources management and political work. Mr. Guan has successively served as a cadre of the personnel division and deputy secretary of the Youth League Committee of the North China University of Technology, deputy secretary of the Youth League Committee of the attached agencies directly under the China Nonferrous Metals Industry Corporation* (中國有色金屬工業總公司), deputy director and director of the Investment Management Office of the China Nonferrous Metals Industry Association* (中國有色金屬工業協會), head of business and deputy director of the office of the expert advisory committee of the Aluminum Corporation of China* (中國鋁業公司), manager of the talent development and training division of the human resources department of the Company, head and deputy director of the talent development and training division of the human resources department (veteran cadre work department) of the Aluminum Corporation of China* (中國鋁業公司), deputy secretary of the Party committee, chairman of the labour union and supervisor of Shandong Aluminum Co., Ltd* (山東鋁業有限公司), deputy general manager of the president's office (the office of the Party committee (discipline inspection commission)) of the Company.

Mr. Yue Xuguang, aged 56, is currently a Supervisor of the Company and the general manager of the human resources department of the Company. Mr. Yue graduated from Kunming Institute of Technology with a bachelor degree in engineering majoring in mineral census and exploration. He is a senior economist. He has rich experience in human resources management. Mr. Yue has successively served as the deputy head of the coordination division of the labour insurance bureau and the head of the labour management division of the personnel and education department of China Nonferrous Metals Industry Corporation* (中國有色金屬工業總公司), the deputy head of the general division of the personnel office of State Bureau of Nonferrous Metal Industry* (國家有色金屬工業局) (enjoying the head-level treatment), the deputy head of the personnel department of China Aluminum Corporation* (中國鋁業集團公司), the head of the labour division of the personnel department of Aluminum Corporation of China* (中國鋁業公司), the manager of the remuneration management division of the human resources department of the Company, the head of the general division of the general office of Aluminum Corporation of China* (中國鋁業公司), the manager of the general division of the capital operating department of the Company, the deputy general manager of the human resources department of the Company, the deputy head (departmental head level) of the human resources department (veteran cadre work department) of the Aluminum Corporation of China* (中國鋁業公司), the secretary of the party committee and deputy general manager of Chinalco Asset Operation and Management Co., Ltd* (中鋁資產經營管理有限公司).

Other Senior Management

Mr. Tian Yong, aged 60, is a vice president of the Company during the reporting period. Mr. Tian graduated from Kunming University of Science and Technology, majoring in metallurgical engineering, with a master degree in engineering, and with a senior engineer of outstanding performance. Mr. Tian has extensive experience in smelting and production of non-ferrous metals and corporate management. He successively served as a technician and deputy director of the smelting workshop, and the acting director of No. 2 smelting workshop of Yunnan Aluminum Plant (雲南鋁廠), the chief dispatcher and the head of the dispatching office of Yunnan Aluminum Plant (雲南鋁廠), the head of the fabrication factory, the deputy head and head of the production department as well as the head of the production dispatching office, the assistant to the head of the factory and chief dispatcher, and the head of the production division of Yunnan Aluminum Plant (雲南鋁廠), the deputy head and head of Yunnan Aluminum Plant (雲南鋁廠), the vice chairman and general manager of Yunnan Aluminum Co., Ltd. (雲南鋁業股份有限公司), deputy general manager and general manager of Yunnan Metallurgical Group Corporation (雲南冶金集團總公司) and the general manager and chairman of Yunnan Metallurgical Group Co., Ltd. (雲南冶金集團股份有限公司). As approved at the 6th meeting of the seventh session of the Board held by the Company on 27 February 2020, Mr. Tian resigned from the position of vice president of the Company due to reaching statutory retirement age.

Mr. Wang Jun, aged 49, is currently the chief financial officer and the company secretary (secretary to the Board) of the Company. Mr. Wang obtained a master's degree in business administration from Tsinghua University. He is a senior accountant and a member of the Chartered Institute of Management Accountants (CIMA). He has also been recognised as the national top accounting leading talent. Mr. Wang has worked in grassroots units, overseas companies, listed companies and various departments of the group, and has extensive experience in financial accounting, fund management and capital operation. Mr. Wang successively served as the deputy manager and manager of treasury management division of finance department of Aluminum Corporation of China* (中國鋁業公司), the general representative of the Peru office of Aluminum Corporation of China*, a director and senior auditing manager of Minera Chinalco Perú S.A.* (中鋁秘魯礦業公司), the chief financial officer and the manager of finance department of Chinalco Resources Corporation* (中鋁礦產資源有限公司), the chief financial officer of China Aluminum International Engineering Co., Ltd.* (中鋁國際工程有限責任公司), an executive director, the chief financial officer and the secretary to the board of directors of China Aluminum International Engineering Corporation Limited* (中鋁國際工程股份有限公司), the deputy chief accountant, general manager of finance department and capital operating department of Chinalco and a Supervisor of the Company. Mr. Wang is currently the chairman of the supervisory committee of China Rare Metals and Rare Earths Company Ltd.* (中國稀有稀土股份有限公司) and a director of China Aluminum International Engineering Corporation Limited, Chinalco Capital Holdings Co., Ltd.* (中鋁資本控股有限公司) and Chinalco Finance Co., Ltd.* (中鋁財務有限責任公司). He is also a director of Aluminum Corporation of China Overseas Holdings Limited* (中鋁海外控股有限公司).

Mr. Wu Maosen, aged 56, is currently a vice president of the Company. Mr. Wu graduated from Dalian Railway College with a bachelor's degree in engineering, majoring in welding technology and equipment. He is a senior engineer with excellent performance. Mr. Wu has extensive experience in corporate management. He had successively served as the deputy head of the alumina branch, the deputy head of the overhauling branch and the director of the transport department of Shanxi Aluminum Plant, the assistant to the general manager of Shanxi Branch of Aluminum Corporation of China Limited, the deputy commander-in-chief of the engineering and construction command department of Chalco Shanxi, a deputy general manager of Shanxi Huaze Aluminum & Power Co., Ltd* (山西華澤鋁電有限公司), the deputy head and head of Shanxi Aluminum Plant, a director, a general manager and the secretary of the Party committee of Qinghai Huanghe Hydropower Regeneration Aluminum Co., Ltd.* (青海黃河水電再生鋁業有限公司), the secretary of the Party committee, an executive director and general manager of Chalco Asset Operation and Management Company* (中鋁資產經營管理公司) and successively served as an executive director of Chalco Shanghai Company Limited* (中鋁(上海)有限公司), an executive director and the general manager of Chalco Industrial Development Co., Ltd.* (中鋁置業發展有限公司), the chairman of the board of Huaxi Aluminum Company Limited* (華西鋁業有限責任公司), the chairman of the board and the general manager of Chalco Investment and Development Co., Ltd.* (中鋁投資發展有限公司), the deputy team- leader of the team aiming at making up deficits and shaking off dilemma, transforming and upgrading of Shanxi Branch of Aluminum Corporation of China Limited and Shanxi Aluminum Plant and the chairman and an executive director of the board of Chinalco Research Institute of Science and Technology Co., Ltd.* (中鋁科學技術研究院有限公司). Mr. Wu currently also serves as the deputy team-leader of the team aiming at making up deficits and shaking off dilemma, transforming and upgrading of Shanxi Branch of Aluminum Corporation of China Limited and Shanxi Aluminum Plant.

3. POSITIONS HELD IN SHAREHOLDER ENTITIES OF THE COMPANY OR OTHER ENTITIES BY DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT AT PRESENT AND DURING THE YEAR

Positions in the Shareholder Entities of the Company

Name	Name of shareholder	Position(s) in shareholder entity	Date of appointment	Date of Termination	Whether receiving remuneration or allowance
Yu Dehui (resigned his positions in the Company)	Aluminum Corporation of China	General Manager	2016.01.08	–	Yes
Ao Hong	Aluminum Corporation of China	Full-time Deputy Secretary of the Communist Party Committee	2016.12.06	–	Yes
		Director	2019.04.29	–	
Lu Dongliang	Aluminum Corporation of China	Deputy General Manager	2016.04.22	–	Yes
Ye Guohua	Aluminum Corporation of China	Chief Accountant	2018.08.14	–	Yes
Wang Jun (Director)	China Cinda Asset Management Co., Ltd	Business Director	2013.08.19	–	Yes
Wang Jun (Chief Financial Officer, Company Secretary (Secretary to the Board))	Aluminum Corporation of China	Deputy Chief Accountant, Director of the Finance Department	2015.11.13	2019.02.20	Yes
Ou Xiaowu	Aluminum Corporation of China	Deputy Chief Accountant, Director of the Audit Department	2017.01.10	–	Yes
Shan Shulan	Aluminum Corporation of China	Deputy Director of the Finance Department	2016.05.05	–	Yes

Positions in Other Entities

Name	Name of other entities	Position(s)	Date of appointment	Date of termination	Whether receiving remuneration or allowance
Wang Jun (Director)	China Nuclear Engineering & Construction Corporation Limited	Director	2014.03.12		No
Lie-A-Cheong Tai Chong, David	Newpower International (Holdings) Co., Ltd.	Executive Chairman	1992.01.30		Yes
	China Concept Consulting Ltd.	Executive Chairman	1991.07.26		Yes
	Herald Holdings Limited	Independent Non-executive Director	2005.06.16		Yes
	Harbour Centre Development Limited	Independent Non-executive Director	2018.12.01		Yes
Wang Jun (Chief Financial Officer, Company Secretary (Secretary to the Board))	China Rare Metals and Rare Earths Company Ltd.*	Chairman of the Supervisory Committee	2016.07.05		No
	China Aluminum International Engineering Corporation Limited*	Director	2015.05.22		No
	Chinalco Capital Holdings Co., Ltd.*	Director	2015.12.30		No
	Chinalco Finance Co., Ltd.*	Director	2014.02.08		No
	Aluminum Corporation of China Overseas Holdings Limited*	Director	2015.11.13		No
Wu Maosen	Chalco Investment and Development Co., Ltd.*	Chairman	2015.12.31	2019.04.28	No
	Chinalco Research Institute of Science and Technology Co., Ltd.*	Executive Director	2018.11.19	2019.04.28	No

Positions in Other Entities (Continued)

Name	Name of other entities	Position(s)	Date of appointment	Date of termination	Whether receiving remuneration or allowance
Ou Xiaowu	China Copper Co., Ltd.*	Supervisor	2019.02.27		No
	China Aluminum International Engineering Corporation Limited*	Supervisor	2011.06.30		No
	Chinalco High-end Manufacturing Co., Ltd.*	Supervisor	2019.09.20		No
	Qinghai Yellow River Hydropower Renewable Aluminum Co., Ltd.*	Chairman of the Supervisory Committee	2012.10.18		No
	Chalco Energy Co., Ltd.*	Supervisor	2011.07.04		No
Shan Shulan	Chinalco Innovative Development Investment Company Limited*	Supervisor	2018.04.26		No
	Aluminum Corporation of China Overseas Holdings Limited*	Director	2018.08.06		No
	China Aluminum Insurance Broker (Beijing) Co., Ltd.*	Director	2016.10.26		No

4. DECISION MAKING PROCESS AND BASIS OF DETERMINATION OF REMUNERATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT AND REMUNERATION

Based on the prevailing market standards and the remuneration strategy of the Company, the human resources department of the Company would formulate proposals for the remuneration of the Company's Directors, Supervisors and senior management and submit the proposals to the Board for consideration upon approval by the Remuneration Committee of the Board of the Company. Particularly, remuneration of the senior management will be considered and approved by the Board whereas those of the Directors and the Supervisors will be submitted to the shareholders' general meeting for consideration and approval upon being approved by the Board.

The Company determined its remuneration for the Directors, Supervisors and senior management based on its development strategy, corporate culture and remuneration strategy, taking into account the remuneration standards of corresponding positions in comparable enterprises in the market (in terms of scale, industry and nature etc.), as well as the Company's annual operating results, fulfilment of duties by the Directors and Supervisors as well as the appraisal results for performance of senior management.

In 2019, the total pre-tax remunerations of the Directors, Supervisors and senior management received from the Company amounted to RMB8.44 million (including the travelling expenses of the independent non-executive Directors).

5. CHANGES IN DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT AS OF THE DATE OF THIS ANNUAL REPORT

Name	Position(s)	Status	Reason for the change
Yu Dehui	Chairman of the Board and Executive Director	Resigned	On 21 February 2019, Mr. Yu Dehui resigned as the chairman of the Board and the executive Director of the Company due to work allocation.
Lu Dongliang	Chairman of the Board	Elected	On 21 February 2019, Mr. Lu Dongliang was elected as the chairman of the sixth session of the Board of the Company at the 39th meeting of the sixth session of the Board of the Company.
	President	Resigned	On 21 February 2019, Mr. Lu Dongliang proposed to resign from the position of the president of the Company due to work allocation. As approved at the 39th meeting of the sixth session of the Board held by the Company on the same day, Mr. Lu Dongliang resigned from such position.

Name	Position(s)	Status	Reason for the change
He Zhihui	Executive Director	Elected	On 21 February 2019, as approved at the 39th meeting of the sixth session of the Board of the Company, Mr. He Zhihui was nominated as an executive Director candidate of the six session of the Board of the Company. On 29 April 2019, Mr. He Zhihui was elected as an executive Director of the sixth session of the Board of the Company at the 2019 second extraordinary general meeting of the Company.
	President	Appointed	On 21 February 2019, the appointment of Mr. He Zhihui as the president of the Company was approved at the 39th meeting of the sixth session of the Board of the Company.
Tian Yong	Vice President	Resigned	Mr. Tian Yong proposed to resign from the position of the vice president of the Company due to reaching statutory retirement age. As approved at the 6th meeting of the seventh session of the Board held by the Company on 27 February 2020, Mr. Tian Yong resigned from the position of the vice president of the Company.

Name	Position(s)	Status	Reason for the change
Zhang Zhankui	Chief Financial Officer, Company Secretary (Secretary to the Board)	Resigned	Mr. Zhang Zhankui proposed to resign from the position of the chief financial officer and the company secretary (secretary to the Board) of the Company due to reaching statutory retirement age. As approved at the 38th meeting of the sixth session of the Board held by the Company on 20 February 2019, Mr. Zhang Zhankui resigned from such positions.
Wang Jun	Chief Financial Officer, Company Secretary (Secretary to the Board)	Appointed	On 20 February 2019, the appointment of Mr. Wang Jun as the chief financial officer and the company secretary (secretary to the Board) of the Company was approved at the 38th meeting of the sixth session of the Board of the Company.
Wu Maosen	Vice President	Appointed	On 21 March 2019, the appointment of Mr. Wu Maosen as the vice president of the Company was approved at the 40th meeting of the sixth session of the Board of the Company.

Name	Position(s)	Status	Reason for the change
Ou Xiaowu	Supervisor	Elected	On 24 October 2019, Chinalco, the controlling shareholder of the Company, nominated Mr. Ou Xiaowu as a candidate for the shareholder representative Supervisor of the seventh session of the Supervisory Committee of the Company. On 10 December 2019, as approved at the 2019 third extraordinary general meeting of the Company, Mr. Ou Xiaowu was elected as a shareholder representative Supervisor of the seventh session of the Supervisory Committee of the Company.
Shan Shulan	Supervisor	Elected	On 24 December 2018, the nomination of Ms. Shan Shulan as a candidate for the shareholder representative Supervisor of the sixth session of the Supervisory Committee of the Company was approved at the 16th meeting of the sixth session of the Supervisory Committee of the Company. On 20 February 2019, Ms. Shan Shulan was elected as a shareholder representative Supervisor of the sixth session of the Supervisory Committee of the Company at the 2019 first extraordinary general meeting of the Company.

Name	Position(s)	Status	Reason for the change
Guan Xiaoguang	Supervisor	Elected	On 25 June 2019, Mr. Guan Xiaoguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company.
Yue Xuguang	Supervisor	Elected	On 10 December 2019, Mr. Yue Xuguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company.
Wu Zuoming	Supervisor	Resigned	The term of office of the six session of the Supervisory Committee of the Company expired on 25 June, 2019, and Mr. Wu Zuoming would no longer serve as the employee representative Supervisor of the Company.

In addition to the changes in the Directors, Supervisors and senior management as mentioned above, the term of the sixth session of the Board and the sixth session of the Supervisory Committee of the Company were expired in June 2019, and the election of Directors and Supervisors of the new session of the Board and the Supervisory Committee was detailed as follows:

On 28 May 2019, as considered and approved at the 43th meeting of the sixth session of the Board of the Company, Mr. Lu Dongliang, Mr. He Zhihui, Mr. Jiang Yinggang and Mr. Zhu Runzhou were nominated as the executive Director candidates of the seventh session of the Board of the Company, Mr. Ao Hong and Mr. Wang Jun were nominated as the non-executive Director candidates of the seventh session of the Board of the Company, and Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David were nominated as the independent non-executive Director candidates of the seventh session of the Board of the Company. On 25 June 2019, such candidates were all elected as the Directors of the seventh session of the Board of the Company at the 2018 annual general meeting of the Company. On the same day, Mr. Lu Dongliang was elected as the chairman of the seventh session of the Board of the Company at the first meeting of the seventh session of the Board of the Company.

On 28 May 2019, as considered and approved at the 20th meeting of the sixth session of the Supervisory Committee of the Company, Mr. Ye Guohua and Ms. Shan Shulan were nominated as the candidates for the shareholder representative Supervisors of the seventh session of the Supervisory Committee of the Company. On 25 June 2019, such candidates were all elected as the shareholder representative Supervisors of the seventh session of the Supervisory Committee at the 2018 annual general meeting of the Company. On the same day, Mr. Ye Guohua was elected as the chairman of the Supervisory Committee of the Company at the first meeting of the seventh session of the Supervisory Committee of the Company.

6. EMPLOYEES OF THE COMPANY

As of 31 December 2019, the Group had 65,507 employees. The structure of employees is as follows:

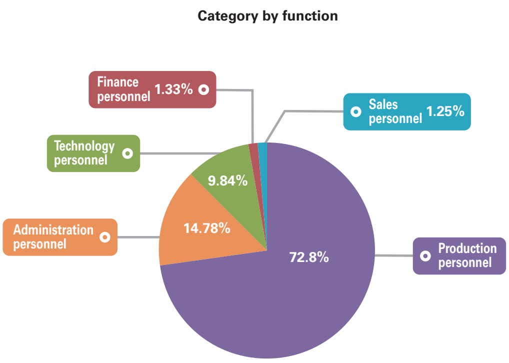
Composition by Function

Category	Headcounts
Production personnel	47,692
Sales personnel	819
Technology personnel	6,445
Finance personnel	869
Administration personnel	9,682
Total	65,507

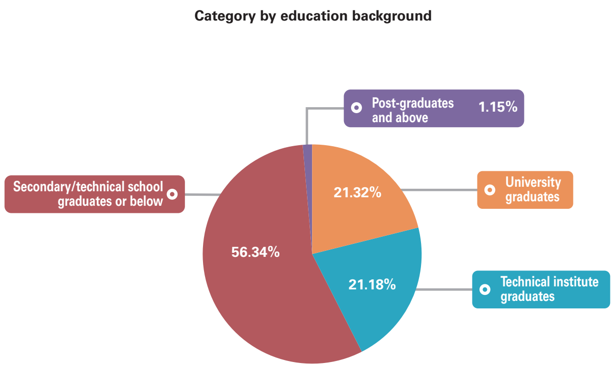
By Education Background

Category	Headcounts
Post-graduates and above	752
University graduates	13,969
Technical institute graduates	13,877
Secondary/technical school graduates or below	36,909
Total	65,507

Composition by Function



By Education Background



Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders

1. SHARE CAPITAL STRUCTURE

Chinalco is the single largest shareholder of the Company, which directly held 29.67% equity interest of the Company and together with its subsidiaries held an aggregate of 32.06% equity interest of the Company as of 31 December 2019. As of 31 December 2019, Chinalco was the controlling shareholder of the Company.

As of 31 December 2019, the share capital structure of the Company was as follows:

	As of 31 December 2019	
	Number of shares *(In million)*	Percentage to total issued share capital *(%)*
Holders of A shares	**13,078.71**	**76.83**
Holders of H shares	**3,943.97**	**23.17**
Total	**17,022.67**	**100**

According to the publicly available information and to the best knowledge of the Company's Directors, as of the date of this annual report, the share capital structure of the Company can maintain a sufficient public float and is in compliance with the requirement of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("**Hong Kong Listing Rules**").

2. CHANGES IN SHAREHOLDING AND SHAREHOLDERS

On 25 February 2019, the Company completed the registration procedure with Shanghai Branch of China Securities Depository and Clearing Corporation Limited in respect of the additional shares arising from the acquisition of assets by issuing shares, under which it issued 2,118,874,715 additional A shares, and the total share capital of the Company increased to 17,022,672,951 shares from 14,903,798,236 shares. Subject to trading moratorium, the additional shares issued shall not be transferred within the lock-up period of 12 months from the completion date of the issuance. On 26 February 2020, the lock-up period of such additional shares issued was released, and all the shares were tradable on the market. For details, please refer to the relevant announcements published by the Company on 26 February 2019 and 20 February 2020, respectively.

As at 31 December 2019, particulars of shares of the Company are set out as follows:

	Shares *(Number)*	Percentage *(%)*
Shares subject to trading moratorium		
1. RMB denominated ordinary shares	**2,118,874,715**	**12.45**
Total shares subject to trading moratorium	**2,118,874,715**	**12.45**
Shares not subject to trading moratorium		
1. RMB denominated ordinary shares	**10,959,832,268**	**64.38**
2. Overseas listed foreign invested shares	**3,943,965,968**	**23.17**
Total tradable shares not subject to trading moratorium	**14,903,798,236**	**87.55**
Total shares	**17,022,672,951**	**100**

As at the date of this annual report, particulars of shares of the Company are set out as follows:

	Shares *(Number)*	**Percentage** *(%)*
Shares subject to trading moratorium	**0**	**0**
Shares not subject to trading moratorium		
1.RMB denominated ordinary shares	**13,078,706,983**	**76.83**
2.Overseas listed foreign invested shares	**3,943,965,968**	**23.17**
Total tradable shares not subject to trading moratorium	**17,022,672,951**	**100**
Total shares	**17,022,672,951**	**100**

Approval of Changes in Shares

The Company received the Reply on Approving the Acquisition of Assets by Aluminum Corporation of China Limited* by issuance of shares to Huarong Ruitong Equity Investment Management Co., Ltd. and Certain Other Companies (關於核准中國鋁業股份有限公司向華融瑞通股權投資管理有限公司等發行股份購買資產的批覆) (Zheng Jian Xu Ke [2018] No. 2064) issued by China Securities Regulatory Commission ("**CSRC**") on 18 December 2018, pursuant to which the Company was approved to issue an aggregate of 2,118,874,715 A shares to 8 investors, including Huarong Ruitong Equity Investment Management Co., Ltd..

Transfer of Changes in Shareholding

On 25 February 2019, the registration procedure for the additional A shares of the Company arising from the acquisition of assets by issuance of shares was completed with Shanghai Branch of China Securities Depository and Clearing Corporation Limited. The total share capital of the Company was increased from 14,903,798,236 shares to 17,022,672,951 shares.

3. SHARE ISSUANCE AND LISTING

(1) Securities Issuance in the Past Three Years

On 18 December 2018, the Company received the Reply on Approving the Acquisition of Assets by Aluminum Corporation of China Limited* by issuance of shares to Huarong Ruitong Equity Investment Management Co., Ltd. and Certain Other Companies (關於核准中國鋁業股份有限公司向華融瑞通股權投資管理有限公司等發行股份購買資產的批覆) (Zhen Jian Xu Ke [2018] No. 2064) issued by the CSRC, pursuant to which the Company was approved to issue an aggregate of 2,118,874,715 A shares to 8 investors, for the purpose of acquiring 25.6748% equity interests in Baotou Aluminum, 30.7954% equity interests in Chalco Shandong, 81.1361% equity interests in Chalco Mining and 36.8990% equity interests in Zhongzhou Aluminum jointly held by these 8 investors. The issue price for the acquisition of assets by way of issuance of shares is fixed at RMB6.00 per share which is not less than 90% of the average trading price of the shares of the Company for the last 60 trading days prior to the pricing benchmark date, i.e. the date of the announcement on resolutions passed at the 19th meeting of the sixth session of the Board of the Company. The registration procedure regarding the additional shares issued under the issuance of shares was completed with Shanghai Branch of China Securities Depository and Clearing Corporation Limited on 25 February 2019.

In addition to the additional issuance of A shares above, the Company had no new share issuance in the past three years.

(2) Changes in Total Number of Shares and the Shareholding Structure of the Company

On 25 February 2019, the registration procedure for the additional A shares of the Company arising from the acquisition of assets by issuance of shares was completed with Shanghai Branch of China Securities Depository and Clearing Corporation Limited, and the total share capital of the Company was increased from 14,903,798,236 shares to 17,022,672,951 shares. The change in the share capital structure of the Company is as follows:

Before the additional issuance

Class of shares	Number of shares (share)	Percentage in total issued share capital (%)
A shares	10,959,832,268	73.54
H shares	3,943,965,968	26.46
Total	14,903,798,236	100

After the additional issuance

Class of shares	Number of shares (share)	Percentage in total issued share capital (%)
A shares	13,078,706,983	76.83
H shares	3,943,965,968	23.71
Total	17,022,672,951	100

4. SUBSTANTIAL SHAREHOLDERS WITH SHAREHOLDING OF 5% OR MORE

So far as the Directors are aware, as of 31 December 2019, the following persons (other than the Directors, Supervisors and chief executive of the Company) had interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed under the provisions of Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance ("**SFO**") of Hong Kong, or which were recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO, or as otherwise notified to the Company and the Hong Kong Stock Exchange.

Name of substantial shareholder	Class of shares	Number of shares held	Capacity	Percentage in the relevant class of issued share capital	Percentage in total issued share capital
Aluminum Corporation of China	A shares	5,295,895,019(L) *Note 1*	Beneficial owner and interests of controlled corporation	40.49%(L)	31.11%(L)
	H shares	162,276,000(L) *Note 1*	Interests of controlled corporation	4.11%(L)	0.95%(L)
The Capital Group Companies, Inc.	H shares	275,175,500(L) *Note 2*	Interests of controlled corporation	6.98%(L)	1.62%(L)
BlackRock, Inc.	H shares	235,885,726(L) *Note 3*	Interests of controlled corporation	5.98%(L)	1.39%(L)
		1,432,000(S) *Note 3*	Interests of controlled corporation	0.04%(S)	0.01%(S)

The letter (L) denotes a long position, the letter (S) denotes a short position, and the letter (P) denotes a lending pool. The information of H shareholders is based on the disclosure of interests system of the Hong Kong Stock Exchange.

Note 1: These interests included 5,050,376,970 A shares directly held by Chinalco, and an aggregate interest of 245,518,049 A shares and 162,276,000 H shares held by various controlled subsidiaries of Chinalco, comprising 238,377,795 A shares held by Baotou Aluminum (Group) Co., Ltd. ("**Baotou Aluminum Group**"), 7,140,254 A shares held by Chinalco Shanxi Aluminum Co., Ltd.* (中鋁山西鋁業有限公司) ("**Shanxi Aluminum**") and 162,276,000 H shares held by Aluminum Corporation of China Overseas Holdings Limited* (中鋁海外控股有限公司) ("**Chinalco Overseas Holdings**").

Note 2: These interests were held directly by Capital Research and Management Company which was controlled by The Capital Group Companies, Inc..

Note 3: These interests were held directly by various corporations controlled by BlackRock, Inc.. Among the aggregate interests in the long position in H shares, 518,000 H shares were held as derivatives. Among the aggregate interests in the short position in H shares, 654,000 H shares were held as derivatives.

Save as disclosed above and so far as the Directors are aware, as of 31 December 2019, no other person (other than the Directors, Supervisors and chief executive of the Company) had any interest or short position in the shares or underlying shares of the Company (as the case may be) which would fall to be disclosed to the Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO and as recorded in the register required to be kept under section 336 of the SFO, or was otherwise a substantial shareholder of the Company.

5. NUMBER OF SHAREHOLDERS

Unit: Number of shareholders

Total number of shareholders as of 31 December 2019	449,280

6. PARTICULARS OF SHAREHOLDINGS HELD BY TOP TEN SHAREHOLDERS

As of 31 December 2019, particulars of shareholdings held by top ten shareholders are set out as follows:

Name of shareholder (full name)	Number of shares held as at the end of the reporting period	Class of shares	Percentage of shareholding (%)	Number of shares subject to trading moratorium held
Aluminum Corporation of China Note 1	5,050,376,970	A shares	29.67	–
Hong Kong Securities Clearing Company Limited (H shares) Note 2	3,932,433,595	H shares	23.10	–
Huarong Ruitong Equity Investment Management Co., Ltd. (華融瑞通股權投資管理有限公司) Note 3	841,600,264	A shares	4.94	841,600,264
China Life Insurance Company Limited (中国人寿保险股份有限公司) Note 3	671,882,629	A shares	3.95	671,882,629
China Securities Finance Corporation Limited	448,284,993	A shares	2.63	–
Shenzhen Zhaoping Chalco Investment Center LLP (深圳市招平中鋁投資中心(有限合夥)) Note 3	252,392,929	A shares	1.48	252,392,929
Baotou Aluminum (Group) Co., Ltd.	238,377,795	A shares	1.40	–
China Cinda Asset Management Co., Ltd. (中國信達資產管理股份有限公司) Note 3	217,589,200	A shares	1.28	84,203,869
Hong Kong Securities Clearing Company Limited (A shares)	164,474,173	A shares	0.97	–
Central Huijin Investment Ltd. (中央匯金資產管理有限責任公司)	137,295,400	A shares	0.81	–

As of 31 December 2019, particulars of shareholdings held by top ten shareholders not subject to trading moratorium are set out as follows:

Name of shareholder (full name)	Number of shares held as at the end of the reporting period	Nature of shareholders	Percentage of shareholding (%)
Aluminum Corporation of China Note 1	5,050,376,970	A shares	29.67
Hong Kong Securities Clearing Company Limited (H shares) Note 2	3,932,433,595	H shares	23.10
China Securities Finance Corporation Limited	448,284,993	A shares	2.63
Baotou Aluminum (Group) Co., Ltd.	238,377,795	A shares	1.40
Hong Kong Securities Clearing Company Limited (A shares)	164,474,173	A shares	0.97
Central Huijin Investment Ltd. (中央匯金資產管理有限責任公司)	137,295,400	A shares	0.81
China Cinda Asset Management Co., Ltd. (中國信達資產管理股份有限公司)	133,385,331	A shares	0.78
Wu Xiaofeng (吳曉鋒)	89,400,000	A shares	0.53
Guangdong Finance Trust Co., Ltd. (廣東粵財信託有限公司) – Yuecai Trust • Yuezhong No. 3 Collective Fund Trust Plan (粵財信託•粵中3號集合資金信託計畫)	65,440,000	A shares	0.38
Chen Lanqin (陳蘭琴)	55,401,459	A shares	0.33

Note 1: The number of shares held by Chinalco doesn't include the A shares of the Company indirectly held by it through its subsidiaries Baotou Aluminum Group and Shanxi Aluminum and the H shares of the Company indirectly held by it through its subsidiary Chinalco Overseas Holdings. As of 31 December 2019, Chinalco together with its subsidiaries held an aggregate of 5,458,171,019 shares, among which 5,295,895,019 shares were A shares and 162,276,000 shares were H shares, accounting for approximately 32.06% of the total share capital of the Company.

Note 2: The 3,932,433,595 H shares of the Company held by Hong Kong Securities Clearing Company Limited include 162,276,000 H shares it holds on behalf of Chinalco Overseas Holdings, a subsidiary of Chinalco.

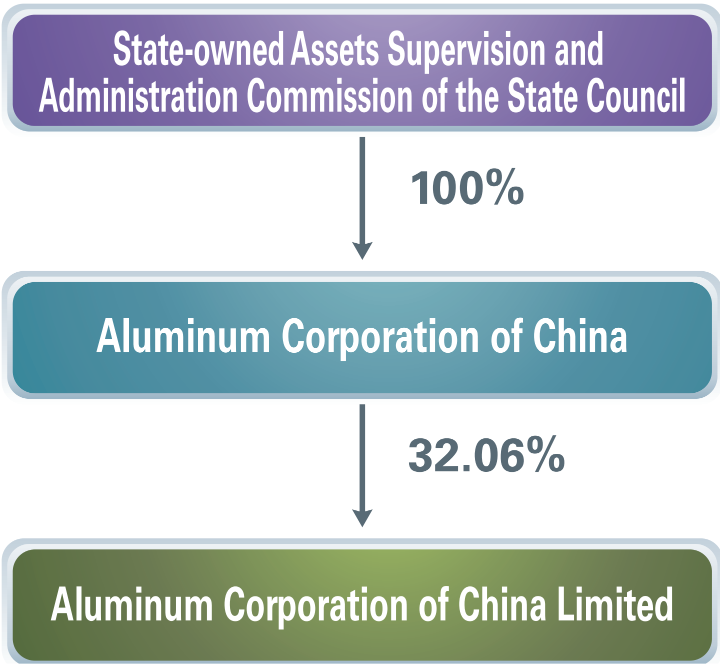
Note 3: Huarong Ruitong Equity Investment Management Co., Ltd. (華融瑞通股權投資管理有限公司), China Life Insurance Company Limited (中國人壽保險股份有限公司), Shenzhen Zhaoping Chalco Investment Center LLP (深圳市招平中鋁投資中心(有限合夥)) and China Cinda Asset Management Co., Ltd. (中國信達資產管理股份有限公司) are counterparties of the Company for acquisition of assets by issuance of shares. The shares subject to trading moratorium held by the aforesaid shareholders had become unlocked on 26 February 2020 and are listed and tradable on the Shanghai Stock Exchange.

7. PARTICULARS OF THE CONTROLLING SHAREHOLDER

(1) Particulars of the Controlling Shareholder

Name of the controlling shareholder：	Aluminum Corporation of China
Legal representative:	Yao Lin
Registered capital:	RMB25.2 billion
Date of incorporation:	21 February 2001
Principal operating or managing activities:	Bauxite mining (limited to the bauxite mining at Guizhou Maochang Mine); deployment of personnel necessary for overseas engineering projects commensurating with its capacity, scale and performance; operation and management of state-owned assets and equities; production and sales of aluminum, copper, rare earth and related non-ferrous metals mineral products, smelted products, processed products and carbon products; exploration design, general project contracting, construction and installation; equipment manufacturing; technological development and technical service; import and export businesses.

(2) Diagram of the Controlling Relationship between the Company and the Controlling Shareholder and Actual Controller



Note: The controlling shareholder of the Company is Chinalco, and the actual controller of the Company is the State-owned Assets Supervision and Administration Commission of the State Council. As at 31 December 2019, Chalco directly holds 29.67% equity interest in the Company and holds an aggregate of 5,458,171,019 shares in the Company together with its subsidiaries, including 238,377,795 A shares held by Baotou Aluminum Group, 7,140,254 A shares held by Shanxi Aluminum and 162,276,000 H shares held by Chinalco Overseas Holdings, accounting for approximately 32.06% of the total issued share capital of the Company.

Chairman's Statement

Dear shareholders,

I hereby present the annual report of the Group for the financial year ended 31 December 2019 for shareholders' review. On behalf of the Board and all employees of the Company, I would like to express our sincere gratitude to all shareholders for your care for and support for the Company.

PRODUCT MARKET REVIEWS

Bauxite Market

In 2019, as affected by some factors such as environmental protection and alumina cost pressure, certain alumina companies in Shanxi and Henan carried out their production line transformation. They converted domestic bauxite production lines to imported bauxite production lines, which resulted in a significant decrease in demand in domestic ore of alumina enterprises in Henan, Shanxi and other regions and continuous drop in price of domestic ore. At the same time, with the increasing number of alumina enterprises using imported bauxite, the amount of imported bauxite has increased substantially.

China mainly imports bauxite from three countries, namely, Guinea, Australia and Indonesia. Due to the seasonality of bauxite output in Guinea, its supply and price had shown a trend of picking up first and then falling. Due to the relatively lower consumption in domestic ore, alumina companies using domestic ore still retained part of their production capacity, making a mutual restriction between domestic ore and imported ore, and thereby the price of bauxite was relatively stable with a decline.

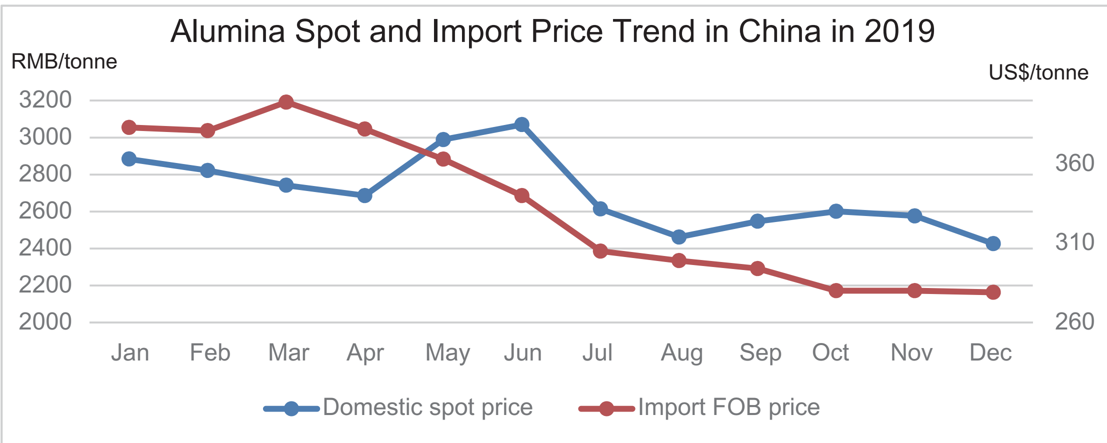
Total imports of bauxite were 100.66 million tonnes in 2019, of which imports from Guinea accounted for 44%. The CIF price of imported bauxite basically fluctuated at the range of USD48–61 per tonne, representing a slight increase as compared with that of last year.

Alumina Market

In 2019, as affected by some factors such as increasing trade barriers and rising geopolitical tensions, the global macro economy was weak, uncertain factors affecting global economic growth were increased and downward pressure was continuously enlarged. China has continued to deepen its supply-side reforms, increased countercyclical adjustments and maintained a stable overall economic development momentum.

In the international market, the growth of major western economies had slowed down simultaneously. Most emerging economies had also shown signs of slowing down in economic growth. The global industrial growth has been slow with sluggish trade condition. In 2019, the highest and lowest price of alumina in the international market were USD418 per tonne and USD275 per tonne, respectively, with the annual average price of USD333 per tonne, representing a decrease of 29.6% as compared to that of 2018.

In the domestic market, under a complex and severe situation, the aluminum industry of China unswervingly advanced supply-side structural reform. However, due to the accumulation of increased production capacity of alumina over the years and the decline in demand resulting from the decrease in electrolytic aluminum production, the gap between supply and demand in China's alumina has gradually narrowed. The change in the supply and demand pattern has made the alumina industry fail to benefit from the supply-side reform of the electrolytic aluminum industry. In 2019, the price of alumina in China fluctuated downward, and the price's center of gravity moved downward from last year. The highest and lowest price of alumina in the domestic market were RMB3,131 per tonne and RMB2,408 per tonne, respectively, with the annual average price of RMB2,696 per tonne, representing a year-on-year decrease of 9.9% year on year.



Source: Domestic spot price is approximately the average prices from aladdiny.com, baiinfo.com and atk.com; Import Fob price is from Platts

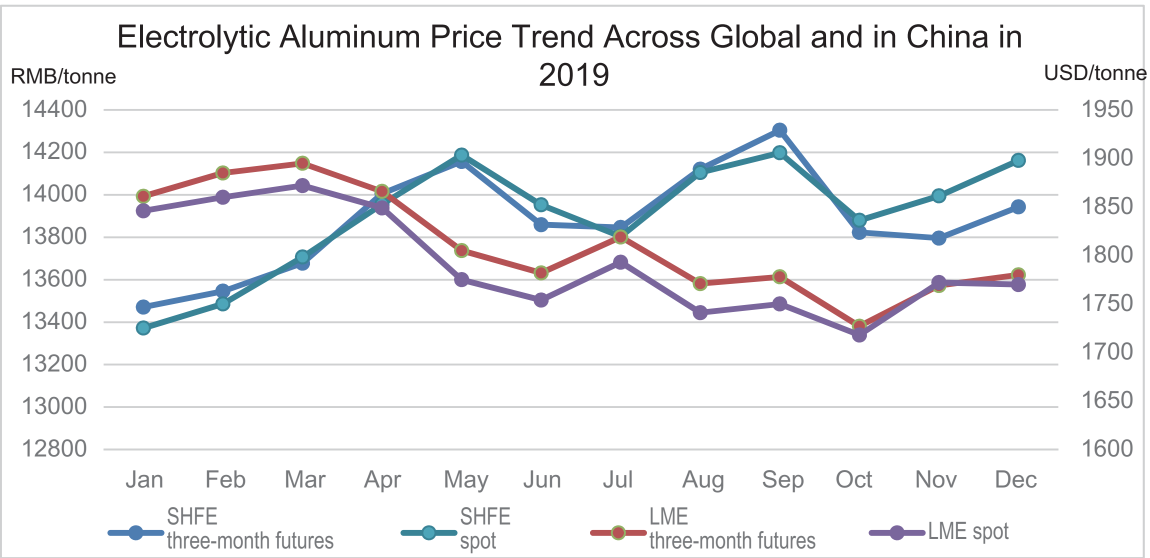
According to the statistics, the respective global output and consumption of alumina for 2019 was approximately 131.41 million tonnes and approximately 129.85 million tonnes, representing a year-on-year increase of 5.4% and 1.1%, respectively. The respective domestic output and consumption of alumina were approximately 71.55 million tonnes and approximately 72.98 million tonnes, representing a year-on-year decrease of 0.4% and a year-on-year increase of 0.4%, respectively, representing 57.43% and 56.62% of global output and consumption, respectively. As of the end of December 2019, the alumina capacity utilization rate in the world (inclusive of the PRC) was approximately 81%, while that of the PRC was approximately 82.2%, representing a decrease of 2.8 percentage points year on year.

Primary Aluminum Market

In 2019, the United States continued to provoke unilateral trade protectionism to trigger the turbulence in the global macroeconomic environment, and the economic growth declined continuously. With intensifying trade frictions, the level and scope of tariff imposed by the United States on China continued to expand. As affected by fluctuation of Sino-US trade frictions, the global economic uncertainty had increased.

In the international market, due to the continued economic downturn, foreign demand for aluminum was stagnant, but the supply increased continuously due to a ramp-up in new and resumed capacity. Such changes of supply and demand relationship accelerated the decline of the aluminum price. At the same time, the United States announced the lifting of sanctions on RUSAL and the Hydro Alunorte alumina plant announced the resumption of production. The center of gravity for trend of international aluminum price continued to move downward. The international aluminum price fluctuated violently in the first half of the year and the price of the three-month aluminum futures at LME rapidly increased to USD1,951 per tonne in April, the peak in the year; in the second half of the year, with Sino-US trade frictions continuously escalated, the aluminum price declined continuously to USD1,705 per tonne at the end of December, the lowest level in the year. In 2019, the average price of spot aluminum and three-month aluminum futures at LME were approximately USD1,791 per tonne and USD1,813 per tonne, respectively, representing a decrease of 15.0% and 14.2% over that of 2018, respectively.

In the domestic market, although the center of gravity for trend of domestic aluminum price has shifted downwards, due to the supply shortage caused by the decline in output, aluminum price was highly stiffened. In the first half of the year, the domestic aluminum price first fell and then picked up, and its price fluctuation range decreased significantly as compared to that of 2018. The domestic aluminum price at the beginning of the year continued the downward trend which started in the second half of 2018. The rapid decline in the price of raw materials such as alumina has weakened the support for aluminum price at the cost end. As the Spring Festival had affected the consumption of domestic downstream processing enterprises, rapid accumulation of aluminum ingot inventory resulted in increasing in supply pressure. Subsequently, with the relatively strong momentum of China's economy, the formal implementation of the tax reduction and exemption policy, and the rebound in the alumina price providing a substantial support for electrolytic aluminum cost, the SMM price of aluminum rapidly moved upward. In the second half of the year, the production of aluminum decreased as affected by weather, production accidents and other reasons, resulting in a significant decrease in the output of electrolytic aluminum, and the price of aluminum continued to rise accordingly. In September, the price of SHFE three-month future aluminum rushed to RMB14,585 per tonne, the peak during the year. Then, such price had a pullback due to the fading away of sentiment, but the consumption was stronger than expected at the end of the year, and the inventory continued to fall, supporting the slow decline of aluminum price. In 2019, the average price of the SHFE spot aluminum and three-month futures aluminum were RMB13,914 per tonne and RMB13,877 per tonne, respectively, representing a decrease of 2.4% and 3.5% as compared to that of 2018, respectively.



Source: SHFE three-month future price and SHFE spot price are extracted from Shanghai Future Exchange (SHFE); LME three-month future price and LME spot price are extracted from London Metal Exchange (LME)

According to the statistics, the global output and consumption of primary aluminum for 2019 were approximately 63.78 million tonnes and approximately 65.15 million tonnes, respectively, representing a year-on-year decrease of 0.6% and 0.8%, respectively. The domestic output and consumption of primary aluminum were approximately 35.93 million tonnes and approximately 36.55 million tonnes, respectively, representing a year-on-year decrease of 1.8% and 1.2%, respectively, representing approximately 56.33% and 56.10% of global output and consumption, respectively. As of the end of December 2019, the capacity utilization rate of primary aluminum in the world (inclusive of the PRC) was approximately 86%, while that of primary aluminum enterprises in the PRC was approximately 88%, representing a decrease of 2 percentage points year on year.

BUSINESS REVIEW

In 2019, in strict compliance with the working principle of "low cost, high quality, optimal mechanism and admirable performance", the Company continued to implement its reform and innovation, promote transformation and upgrading and optimise the layout structure by its strategic structure adjustment and market-oriented resource allocation, and thereby improved its overall cost efficiency and continuously enhanced quality and efficiency of its development.

1. Adhered to the efficiency priority and cost-leading strategy, steadily improved the quality of operations, and continuously enhanced the market influence.

The Company adhered to the cost-leading strategy and further promoted the special actions of "331958", "three reductions and three increases", and cost reduction in three years to increase competitiveness. The cost competitiveness of alumina and electrolytic aluminum had improved continuously. Alumina particle size and primary aluminum liquid quality reached the best in history and the ratio of electrolytic aluminum with primary aluminum contents of 99.85% increased by 29.5 percentage points year on year. The ratio of level-1 or above pre-baked anode was 16.2 percentage points higher than the target. The average life of electrolytic cells represents a year-on-year increase of 52 days. The research and development and industrialization of high value-added products such as fine alumina and aluminum alloys have been further expanded, product varieties and output have continued to grow, and the market share has steadily increased. The operating performance of the Company had been fully affirmed by the capital market. The Company was awarded the highest credit rating of "A-"in the global non-ferrous metal industry and won the "Golden Bauhinia" Award of 2019 Best Listed Company in Corporate Governance.

2. Continuously optimised the production layout, gradually formed the industrial base and continuously strengthened the profit base

Guizhou Huaren, Inner Mongolia Huayun New Materials Co., Ltd. (內蒙古華雲新材料有限公司) ("**Inner Mongolia Huayun**") achieved their production goals and standards. The industrial bases in Guangxi, Baotou and Shanxi had gradually formed, Shanxi New Material's pseudo-boehmite project recorded profits immediately after being completed and their profit contribution capacity continued to enhance. The construction of Boffa bauxite project in Guinea was sped up, and the first ship's bauxite had arrived at Rizhao Port, Guangxi Huasheng's alumina project was constructed as scheduled, and the international layout was further accelerated.

3. Appeared the results of structural adjustment and transformation and upgrading and focused on green development

The withdrawal of electrolytic aluminum production capacity of two companies, Shanxi Huasheng Aluminum Co., Ltd.* (山西華聖鋁業有限公司) ("**Shanxi Huasheng**") and Shandong Huayu, has been firmly implemented. Through the transfer of electrolytic aluminum quota, Shanxi Huasheng resolved the costs of employee resettlement and enterprise shutdown, and properly resolved staff diversion and resettlement. The Company invested a hydropower aluminum project by further acquiring shares of Yunnan Aluminum Co., Ltd. ("**Yunnan Aluminum**") issued non-publicly and increasing capital contribution in Heqing Yixin Aluminum Co., Ltd. ("**Yixin Aluminum**") under Yunnan Aluminum to actively participate in the construction of green hydropower-aluminum bases.

4. Strengthened internal collaboration to maximize overall benefits, and continuously improved industry leadership

The Company strengthened the coordination and cooperation between the operating platform and entities and among the entities. The alumina enterprises in Shandong, Shanxi and Henan had implemented the coordinated supply guarantee of domestic ore, and established a "six unifications" operating mechanism for imported ore to improve the guarantee level of ore supply, reduce the cost of ore supply, and thus maximize the overall benefits. The Company also continued to improve the operating mechanisms of the procurement, marketing and logistics platforms, coordinate and balance resource allocation, strengthen synergies in the business of purchasing, selling, and shipping, reduce internal service costs, increase market-oriented operations externally, and its industry leadership was continuously improved.

5. Achieving new breakthroughs in management reform, and continuously enhanced endogenous momentum

The Company implemented the classified authorisation and negative list management for 10 pilot companies in management reform. The approval matters reported by the pilot companies reduced by 58%, which effectively improved the autonomy of operation and management of enterprises. By establishing the performance assessment system of "1+N+4", the Company further deepened the classification assessment and comprehensive evaluation, reduced the performance assessment indicators, and promoted the initiative and enthusiasm of production enterprises in cost reduction and efficiency improvement. With funds and notes "getting into the pool", the concentration rate of funds reached more than 98%, and the turnover rate of funds increased from 7 times to 13 times, and effectively reduced the finance expenses.

6. Optimised and improved the scientific and technological innovation system, and continuously improved the scientific and technological efficiency

The Company integrated scientific research resources to apply technology to help enterprises reduce costs and increase efficiency, and cultivate new momentum for high-quality development of the Company. The Company has accelerated the development of new products of aluminum alloy and fine alumina. The Company has newly developed 11 types of fine alumina products (of which 8 products have been industrialized). 7 new aluminum alloy products have entered industrial production. Electronic surface materials and aluminum profiles for forged wheels and other products have entered the medium- and high-end market. The Company accelerated the application of certain major scientific and technological innovation achievements such as carbon dross-free anodizing production technology and the "FHEST technology", etc., and the technological advantages had been transformed into economic benefits and helped enterprises reduce costs and increase efficiency. The Company strengthened its standard guidance and intellectual property protection, organised 66 technical standard formulation and revision projects, and took the lead in implementing the enterprises standard self-declaration publication in the non-ferrous industry and among central enterprises. As of the end of 2019, the Company had 1,300 valid patents.

7. Strengthened construction of safety and environmental protection systems, and continuously promoted leading environmental protection

The Company continued to promote the construction of the CAHSE system, and carried out the "two grasps, two surveys and stringent supervision" activities at all levels to fully implement the main responsibility, line responsibility and supervision responsibility of safety management. The Company established a comprehensive evaluation system for contractor access and performance, and realised a full coverage of safety hard constraint terms for business outsourcing contracts. In accordance with the principle of classified governance, the Company completed the rectification of 13 major historical environmental responsibilities, implemented 54 water pollutant discharge treatment projects, and an aggregation of 78,500 mu of mine land was reclaimed with a reclamation rate of more than 86%, of which seven mines were selected as the national green mines directory. Qinghai Branch and Zunyi Aluminum were rated as provincial green factories, and Chalco Shandong was recognised as a national green factory.

8. Achieved deep integration of Party building business, and continuously improved governance capabilities

The Company strictly implemented the decision-making system of "Three Important Matters and One Big Concern" and the pre-procedures of the Party committee for research and discussion, strengthened the standardized construction of the board of directors of holding companies, continued to carry out the activities of "two guidance and two makings", "two improvements" of Party members, and "two benchmarking" of Party branches. The Company realised an organic unification between strengthening the Party's leadership and improving corporate governance.

DIVIDENDS

As the Company's profit for the year 2019 will be used to make up for the losses of previous years, the Board did not propose any final dividend for the year ended 31 December 2019 and such proposal is subject to approval of shareholders at the forthcoming 2019 annual general meeting. The Company will publish an announcement after the arrangement of such general meeting is determined.

RESULTS

For the year ended 31 December 2019, the Group recorded revenue of RMB190,100 million, representing a year-on-year increase of RMB9,900 million as compared to RMB180,200 million in 2018. Profit attributable to owners of the parent and earnings per share attributable to owners of the parent were RMB851 million and RMB0.037 respectively.

BUSINESS OUTLOOK AND PROSPECTS

In 2020, under the development goal of building a world-class aluminum company, the Company continues to uphold the high-quality development philosophy. In accordance with the working principle of "low cost, high quality, optimal mechanism and admirable performance", the Company will focus on continuously improving cost competitive advantages, continue to deepen reform and innovation and accelerate the transformation and upgrading, and achieve the high-quality and high-tech of products through industrial layout optimisation, adjustment of products structure and implementation of refined management to comprehensively enhance competitiveness, innovation, control, influence and risk resistance ability. In 2020, the Company will focus on the following tasks:

1. Unswervingly implement the cost-leading strategy, carry out the activities of benchmarking advanced enterprises in all elements, and continuously improve competitiveness

The Company will conduct its management enhancement activities of benchmarking first-class enterprises, learning first-class enterprises and establishing its presence as first-class enterprise in all levels, all industries, all processes, and all elements. Through establishing standards, benchmarking, achieving standards, and creating standards, the Company will apply the concept of refined management and precise improvement into the entire business process, focusing on the three cost reduction points of "human resources, production and management", grasping the three efficiency points of "market, technology and investment", and continuing to carry out "three reductions and three increases" and the special actions of cost reduction in three years to comprehensively improve cost competitiveness. The Company will create conditions to support those enterprise with great development potential, strong sense of reform and better innovation capability to build a demonstration enterprise with first-class mechanism, first-class research and development and first-class management to continuously improve its overall competitiveness.

2. Continue to optimise the layout and accelerate the shift of the industry to advantageous areas

The Company will accelerate the implementation of the "coastal and overseas" development strategy, vigorously promote the construction of bases of hydropower aluminum in Yunnan, coal power aluminum in Inner Mongolia, and aluminum power in Guangxi to realise the transfer of its production capacity to areas with resource advantages, clean energy advantages, environmental capacity advantages, and coastal port advantages. The Company will manage those loss-making enterprises by one strategy for one enterprise and implementing diversification policies with a view to control its losses and increase its profits. The Company will accelerate the regional integration of loss-making enterprises, implement integrated management, and improve survival and development capabilities.

3. Adhere to the strategy of strengthening enterprise by quality to enhance the driving force of innovation

The Company will adhere to the development direction of refinement, alloying, high purification, and materialization, extend the industrial chain, and build certain high-end production capacities such as aluminum alloy, high-purity aluminum, and refined alumina. The Company will promote outstanding performance management, and continuously improve quality of products and services, vigorously develop green, environmental protection, and energy-saving technologies, and introduce intelligent production technology. The Company will build Guangxi Huasheng as a benchmarking enterprise for the intelligent factory in the aluminum industry.

4. Optimise top-level design, improve market-oriented operating mechanism, and stimulate endogenous motivation

The Company will fully implement negative list management, increase the efforts in classification and authorisation operations, guide enterprises to optimise labour management to continuously enhance business management capabilities and cost competitiveness. The Company will continue to deepen differentiation and dynamic assessment, establish a diversified and precise incentive mechanism, and the performance allocation will be more directed to key positions, front-line employees and high-skilled talents. The Company will explore incentive methods such as dividend incentives and excess profit sharing to stimulate innovation and vitality.

5. Strengthen technological research and development to enhance the core competitiveness of industrial development

Through key core technology breakthroughs, the application and promotion of key technological achievements, new product development and application, benchmarking key core technical indicators, and reforms of technological innovation system and mechanism, the Company will invest more resources to break through those key core technologies urgently required for the Company, such as the industrialization demonstration of desulfurization and decarbonization technologies in the alumina production process, comprehensive utilization technology for red mud, carbon slag-free anode production technology demonstration, disposal technology and industrial demonstration for three types of wastes generated from electrolytic aluminum, to continuously provide its supporting for high-quality development of the industry. The Company will further sort out and evaluate the innovation results of technologies developed to introduce and promote within the Company to fully leverage the important supporting role of technological innovation in improving the Company's quality and efficiency.

6. Continue to promote the deep integration of Party building and production and operation, and enhance development effectiveness

The Company will transform the Party Committee's political advantages of direction, overall management and implementation as corporate governance advantages with separating responsibilities as well as coordinating operation, lead its first-class development with first-class Party building, and further optimise the decision-making mechanism with the view to enhancing the initiative and creativity of the crew and providing powerful guarantee for the quality development of the Company.

Lu Dongliang
Chairman

Beijing, the PRC
26 March 2020

DEVELOPMENT STRATEGY AND MODEL

The Company is committed to sustaining its leadership in the domestic market and adheres to the development concepts featuring innovation, green, coordination, opening up and sharing. In accordance with the requirements of high quality and green development, with supply-side structural reform and international strategies as the main line, led by technological innovation, the Company focuses on adjusting structure, reducing costs, and increasing efficiency, strives to adjust and develop its principal businesses such as bauxite, alumina, electrolytic aluminum, deep processing, trade and logistics, and comprehensively coordinates environmental protection, resources, energy, logistics and other factors to continuously optimise the industrial layout and comprehensively improve its comprehensive competitiveness, and thus consolidates its leading position in the industry to build a leading global supplier of high-quality aluminum products, thereby building itself as a top-notch enterprise in the aluminum industry with international competitiveness in the world.

The following discussions should be read together with the financial information of the Group and its notes included in this annual report and other sections.

BUSINESS SEGMENTS

The Group principally engages in the mining of bauxite, coal and other resources; the production, sales and technical development of alumina, primary aluminum and aluminum alloy products; international trading, logistics services, as well as electricity generation from coal and new energy. Business segments comprise:

Alumina segment consists of mining and purchasing bauxite and other raw materials, refining bauxite into alumina, and selling alumina both internally to the Group's electrolytic aluminum enterprises and trading enterprises and externally to customers outside the Group. This segment also includes the production and sales of refined alumina.

Primary aluminum segment consists of procuring alumina, raw supplemental materials and electricity power, smelting alumina to produce primary aluminum, and selling them internally to the Group's trading enterprises and externally to customers outside the Group. This segment also includes the production and sales of carbon products, aluminum alloy products and other electrolytic aluminum products.

Trading segment is mainly engaged in the trading and logistics of alumina, primary aluminum, other non-ferrous metal products, and crude fuels such as coal products, as well as raw and supplemental materials to the internal manufacture enterprises and external customers.

Energy segment consists of coal, electricity generation from coal, wind power, photovoltaic power and new energy equipment production, etc. Among its major products, coals are sold to the internal manufacturers of the Group and external customers outside the Group; and electricity power generated by public power plants, wind power and photovoltaic power stations of the Group is sold to local grid companies.

Corporate and other operating segments include research and development and other activities of other aluminum-related business of the corporation and the Group.

RESULTS OF OPERATIONS

The Group's net profit attributable to owners of the parent for the year 2019 was RMB851 million, representing an increase of RMB144 million as compared to RMB707 million for the same period of last year.

REVENUE

The Group's revenue for the year 2019 was RMB190,074 million, representing an increase of RMB9,833 million as compared with RMB180,241 million for the same period of the previous year. This was mainly attributable to the increase in revenue generated from the increased trading volume of electrolytic aluminum and alumina as a result of the rising market influence of the Company.

COST OF SALES

The Group's cost of sales for the year 2019 was RMB177,946 million, representing an increase of RMB10,917 million as compared with RMB167,029 million for the same period of the previous year. This was mainly affected by the increase in the Company's trading volume of electrolytic aluminum and alumina products.

EXPENSES FOR THE PERIOD

1. Selling expenses: The Group's selling expenses for the year 2019 amounted to RMB1,673 million, representing a decrease of RMB824 million from RMB2,497 million for the same period of the previous year, mainly due to a year-on-year decrease in transportation expenses of products.

2. Administrative expenses: The Group's administrative expenses for the year 2019 amounted to RMB3,957 million, basically flat with RMB3,959 million for the same period of the previous year.

3. Finance costs, net : The Group's finance costs for the year 2019 amounted to RMB4,660 million, representing an increase of RMB270 million from RMB4,390 million for the same period of the previous year. If excluding additional finance costs of RMB332 million recognized in accordance with the new leasing standards, the Company achieved a decrease of RMB62 million in its finance costs on a year-on-year basis by reducing its interest-bearing debts and optimizing its financing costs.

RESEARCH AND DEVELOPMENT EXPENSES

The Group's research and development expenses for the year 2019 amounted to RMB941 million, representing an increase of RMB314 million from RMB627 million for the same period of the previous year. This was mainly due to the increased investments in research and development of bauxite utilization improvement and high-quality alumina.

OTHER GAINS, NET

The Group's other gains for the year 2019 were RMB1,247 million, representing an increase of RMB325 million as compared to RMB922 million for the same period of the previous year, mainly due to the increase in gains from share of net assets from associates.

INCOME TAX EXPENSES/BENEFITS

The Group 's income tax expenses for the year 2019 amounted to RMB626 million, representing a decrease of RMB197 million from RMB823 million for the same period of the previous year, mainly due to the year-on-year decrease in deductible temporary differences for deferred income tax assets unrecognized.

Alumina Segment

Revenue

The Group's revenue from the alumina segment for the year 2019 was RMB43,900 million, representing a decrease of RMB251 million from RMB44,151 million for the same period of the previous year, mainly attributable to the year-on-year decrease in the price of alumina.

Segment Results

The Group's profit before income tax in the alumina segment for the year 2019 was RMB845 million, representing a decrease of RMB2,651 million from RMB3,496 million for the same period of the previous year, mainly due to the decrease in price of alumina.

Primary Aluminum Segment

Revenue

The Group's revenue from the primary aluminum segment for the year 2019 was RMB49,089 million, representing a decrease of RMB4,713 million from RMB53,802 million for the same period of the previous year, mainly due to the decrease in output of primary aluminum resulted from suspension of production of enterprises under transformation and upgrading.

Segment Results

The Group's profit before income tax in the primary aluminum segment for the year 2019 was RMB687 million, representing an improvement of RMB1,616 million as compared to loss before taxation of RMB929 million for the same period of the previous year. This was mainly attributable to the decrease in price of the alumina and electricity.

Trading Segment

Revenue

The Group's revenue from the trading segment for the year 2019 was RMB158,686 million, representing an increase of RMB16,668 million from RMB142,018 million for the same period of the previous year, mainly attributable to the year-on-year increase in trading volume of electrolytic aluminum, alumina, and charred coal.

Segment Results

The Group's profit before income tax in the trading segment for the year 2019 was RMB953 million, representing an increase of RMB213 million as compared with RMB740 million for the same period of the previous year, mainly due to the increase in profit from expanded business volume of charred coal during the year.

Energy Segment

Revenue

The Group's revenue from the energy segment for the year 2019 was RMB7,346 million, representing an increase of RMB111 million from RMB7,235 million for the same period of the previous year.

Segment Results

The Group's profit before income tax in the energy segment for the year 2019 was RMB403 million, representing an increase of RMB377 million in profit before income tax of RMB26 million for the same period of the previous year, mainly attributable to disposal of its interest in associates and an increase in share of profit from its associates.

Corporate and Other Operating Segments

Revenue

The Group's revenue from corporate and other operating segments for the year 2019 was RMB493 million, representing a decrease of RMB174 million as compared with RMB667 million for the same period of the previous year.

Segment Results

The Group's loss before income tax from corporate and other operating segments for the year 2019 was RMB988 million, representing a decrease of RMB279 million in loss from the loss of RMB1,267 million for the same period of the previous year. This was mainly due to the fact that the investment cost of associates in the year was lower than share of net assets' fair value, and the year-on-year decrease in interest expenses.

STRUCTURE OF ASSETS AND LIABILITIES

Current Assets and Liabilities

As of 31 December 2019, the Group's current assets amounted to RMB48,714 million, representing a decrease of RMB10,188 million from RMB58,901 million as at the end of the previous year, primarily due to that the Group enhanced the efficiency and utilization of the working capital, resulted in the decrease of inventories, and cash and cash equivalents.

As of 31 December 2019, the Group's current liabilities amounted to RMB69,170 million, representing a decrease of RMB5,667 million from RMB74,837 million as at the end of the previous year, mainly due to effort of the Group to minimize the portion of short-term loans and borrowings, in order to optimize the maturity profile of the interest bearing liabilities of the Group.

Non-Current Assets and Liabilities

As of 31 December 2019, the Group's non-current assets amounted to RMB154,357 million, representing an increase of RMB12,294 million from RMB142,063 million as at the end of the previous year. This was mainly due to the additional right-of-use assets recognised in accordance with new lease standards and additions of investments to associates during the year.

As of 31 December 2019, the Group's non-current liabilities amounted to RMB63,176 million, representing an increase of RMB4,718 million from RMB58,458 million as at the end of the previous year. This was mainly due to the additional lease liabilities recognised in accordance with new lease standards during the year.

As of 31 December 2019, the debt to asset ratio of the Group was 65.17%, representing a decrease of 1.16 percentage points from 66.33% as of the end of 2018. During the year, the Company achieved a significant decrease in the debt to asset ratio mainly through the increase in profits, the reduction of trade and notes receivables and inventories, and thus offsetting the unfavourable factors, including the increase in the debt to asset ratio resulting from implementation of new lease standards.

MEASUREMENT OF FAIR VALUE

The Group strictly established the procedures for recognition, measurement and disclosure of fair value in accordance with the requirements on fair value under the relevant accounting standards, and took responsibility for the truthfulness of the measurement and disclosure of fair value. At present, except for financial assets for trading purpose and financial liabilities for trading purpose, investments in other equity instruments and notes receivables which are measured at fair value, others are stated at historical cost.

As of 31 December 2019, the Group's financial assets held for trading purpose increased by RMB3,487 million as compared with the end of the previous year, which was mainly due to additional bank wealth management products of RMB3,500 million. The Group's financial liabilities held for trading purpose decreased by RMB0.961 million as compared with the end of the previous year.

PROVISION FOR INVENTORIES IMPAIRMENT

As of 31 December 2019, the Group assessed the net realisable value of its inventories. For the inventories relevant to aluminum products, the assessment was made on the net realisable value of its inventories on the basis of the estimated selling price of the finished goods available for sale with comprehensive consideration of the coordination scheme of the production and sales between alumina enterprises and electrolytic aluminum enterprises within the Group, and the factors including the financial budget, turnover period of inventory, the purpose of the Company to hold the inventories and the influence of events subsequent to the balance sheet date. For the inventories held by the energy segment, the Group unanimously calculated with the most recent market price.

As of 31 December 2019, the balance of provision for impairment of inventories held by the Group was RMB560 million, representing a decrease of RMB251 million as compared with RMB811 million as of the end of 2018.

The Company has always adopted the same approach to determine the net realisable value of its inventories and the provision for inventory impairment on a consistent basis for the relevant accounting policy.

CAPITAL EXPENDITURES, CAPITAL COMMITMENTS AND INVESTMENT UNDERTAKINGS

As of 31 December 2019, the Group's project investment expenditures (excluding equity investments) amounted to RMB10.99 billion, which mainly consisted of investments in construction of transformation and upgrading projects, energy saving and consumption reduction, environmental governance, resources acquisition and technological research and development.

As of 31 December 2019, the Group's contracted but not provided capital commitment to fixed asset investment amounted to RMB4,042 million.

As of 31 December 2019, the Group's investment undertakings to joint ventures and associates amounted to RMB444 million, comprised of the capital contributions of RMB400 million to Chinalco Overseas Development Co., Ltd.* (中鋁海外發展有限公司), RMB10.0 million to Loudi Zhongyu New Materials Co., Ltd.* (婁底中禹新材料有限公司), RMB28.0 million to Shanxi Qinlv Taiyue New Materials Co., Ltd.* (山西沁鋁太嶽新材料有限公司) and RMB6.0 million to Chalco Tendering Company Limited* (中鋁招標有限公司), respectively.

CASH AND CASH EQUIVALENTS

As of 31 December 2019, the Group's cash and cash equivalents amounted to RMB7,759 million.

CASH FLOWS FROM OPERATING ACTIVITIES

For the year 2019, the Group's cash flows generated from operating activities were net cash inflows amounting to RMB12,473 million, representing a decrease of RMB559 million as compared to net cash inflows of RMB13,032 for the same period last year, mainly due to the increase in cash outflows resulted from the increased purchase of imported bauxite.

CASH FLOWS FROM INVESTING ACTIVITIES

For the year 2019, the Group's cash flows generated from investing activities were net cash outflows amounting to RMB13,392 million, representing an increase of RMB7,863 million as compared to net cash outflows of RMB5,529 million for the same period of last year, mainly due to the structured deposits purchased by the Group for increasing the return on its existing cash, and the increase in investment in project construction.

CASH FLOWS FROM FINANCING ACTIVITIES

For the year 2019, the Group's cash outflows generated from financing activities were RMB10,474 million, representing a decrease of RMB5,807 million net cash outflows of RMB16,281 million for the same period of last year, mainly attributable to the year-on-year decrease in net repayment of debts by the Company during the year.

The Board hereby submits the Report of the Board together with the audited financial statements for the year ended 31 December 2019.

PRINCIPAL ACTIVITIES

The Group is a leading enterprise in non-ferrous metal industry in China. In terms of comprehensive strength, the Group ranked among the top enterprises in global aluminum industry. The Group is currently the only large manufacturer and operator in aluminum industry in China with integration of mining of bauxite, coal and other resources; production, sales and technical research of alumina, primary aluminum and aluminum alloy products; international trading and logistics services, as well as electricity generation from coal and new energy.

OPERATION MODEL

The Company has developed a complete industrial chain with the integration of the mining of bauxite, the production of alumina and the production of electrolytic aluminum and alloy products as its principal businesses. Its businesses cover mining of resources, production of alumina, electrolytic aluminum and alloy products, high and new technology development and promotion, international trade, circulation services, energy and power as well as other industries. In recent years, due to the market price fluctuation in the aluminum industry, the Company consistently explored and innovated operation models and adjusted industrial structures. It has extended businesses to the energy and power industry and vigorously expanded trade and logistic businesses to bolster its leadership in the industry and advance the stable results growth of the Company.

INDUSTRY CONDITIONS

Aluminum industry is an important fundamental industry in China. As key fundamental raw materials, alumina and primary aluminum are closely associated with electromechanical, power, aerospace, shipbuilding, automobile manufacturing, packaging, construction, transportation, daily necessities, property and other industries. The products prices experienced periodic fluctuations with the domestic and overseas macro-economic fluctuations.

China is a great power aluminum industry and has been No. 1 in aluminum output and consumption for 18 consecutive years. In recent years, the Chinese government has been eliminating outdated capacities and encouraging and leading less competitive capacities to exit the market through advancing the supply-side structural reform. Meanwhile, China strictly controlled new electrolytic aluminum capacities by setting an upper limit on the capacity. New projects can only be conducted with an equivalent or less capacity replaced. It initiated environmental renovation campaigns and controlled total emission and enabled enterprises with illegal emission or failing to satisfy environmental standards voluntarily shut down capacities. All these efforts effectively improved the market supply and demand and facilitated the orderly and healthy development of the aluminum industry.

In addition to the expansion of product categories and the improvement of product quality in transportation, construction projects and other traditional industries with wide aluminum application, China promoted gradually the replacement of steel with aluminum for main structural products in automobile, high-speed rails, airplanes, bridges and other industries leveraging on the durability and metal stability of aluminum to effectively boost the stable and rapid growth in aluminum consumption. It expanded the application of aluminum products in furniture, packages and other consumables sectors by means of the recyclability of aluminum. It also facilitated the use of aluminum cables to save copper based on the conductivity and economic value of aluminum. On the other hand, it actively expanded aluminum application in emerging industries and vigorously developed customized products. The rapid development of medium and thick plates for aviation and aluminum automotive body sheet as well as the industrialization of aluminum-air batteries and nano-ceramic aluminum will gradually become new consumption drivers.

INDUSTRY LANDSCAPE AND TRENDS

China is the biggest producer and consumer of alumina and electrolytic aluminum in the world. In 2019, the domestic output of alumina and electrolytic aluminum were 71.55 million tonnes and 35.93 million tonnes, accounting for 54.45% and 56.33% of the global output of alumina and electrolytic aluminum. The domestic consumption of alumina and electrolytic aluminum were 72.98 million tonnes and 36.55 million tonnes, representing 56.20% and 56.10% of the global consumption of alumina and electrolytic aluminum, respectively. The domestic output and consumption of alumina and electrolytic aluminum were over half of the global output and consumption.

Due to the slower macro-economic growth, the global trade protectionism, the Sino-U.S. trade frictions, the sluggish downstream aluminum consumption industries such as automobile manufacturing and property development as well as other factors, the growth in the domestic aluminum industrial consumption will remain weak in a certain period. However, thanks to the strict State control on new capacity of electrolytic aluminum and gradual normalization of the competition order in the industry, the supply and demand is basically balanced. Meanwhile, under the background of deepening of the supply-side structural reform by the State, the aluminum industry has entered into a new period with expanded high-quality supply. Leveraging on innovation to optimize the industrial layout, adjusting the capacity structure and developing deep-processing products with high added value will be the key orientation of the industrial transformation and upgrading. The industry has shown the development trends of transferring towards domestic and overseas regions with abundant resources and clean energy and extending into downstream high-end industries. In terms of the competition landscape in the aluminum industry, enterprises with complete industrial chain with the integration of bauxite, energy, alumina, primary aluminum and aluminum alloy products production, technology research and development and logistic industries are more competitive.

For the alumina industry, as affected by China's strict control on the additional capacity of electrolytic aluminum, the growth in output of electrolytic aluminum is restricted, and in turn the alumina output growth slowed down. In 2019, China witnessed both alumina output reduction and new capacity putting into operation with output increase in the south and decrease in the north. Additional alumina capacity mainly came from Shanxi, Guizhou and Guangxi regions. Shandong and Shanxi remained main regions with alumina output growth. Shandong and southwest regions saw more resumption of production and new capacity putting into operation. However, under the unfavorable operation environment, certain alumina enterprises in the north regions such as Henan and Shanxi recorded output reduction as a result of environmental issues, ores supply and cost reasons. Bauxite is a raw material for alumina production and enterprises with high-quality and low-cost bauxite resources will enjoy competition advantages in alumina cost in the future. As of the end of December 2019, the alumina capacity reached 87.15 million tonnes per year, representing an increase of 3.80 million tonnes per year as compared with the end of 2018.

For the electrolytic aluminum industry, since 2017, China has been advancing the supply-side structural reform on the electrolytic aluminum industry to eliminate and rectify illegal and illicit electrolytic aluminum capacity. Then, it also strictly controlled new capacities by setting an upper limit on the capacity. Therefore, the electrolytic aluminum projects can merely be conducted with an equivalent or less capacity replaced. It is expected to see little new capacity in the following years. In terms of consumption, with the expanding application of electrolytic aluminum, the demand is increasing continuously. It is expected to gradually improved, the supply and demand and it may show tight balance in supply and demand or short supply in the following 2–3 years. As of the end of 2019, the total electrolytic aluminum capacity reached 41 million tonnes in China, representing a slight increase of 0.7% as compared with that of the previous year. New capacities mainly came from Inner Mongolia, Yunnan, Guangxi and other regions with cost advantages and abundant power resources. In terms of the capacity layout, Shandong and Xinjiang remained the two major domestic producers of electrolytic aluminum. As power cost is a key factor in determining the competitiveness of electrolytic aluminum enterprises, those located in coal bases and regions with abundant water and power resources and equipped with self-owned supporting network of plants enjoy the highest competitiveness. Electrolytic aluminum enterprises with bargaining power and direct power supply from plants also enjoy comparative competition advantages. Enterprises with reasonable layout, operation and environment compliance, technical progress, active performance of social responsibilities and high integration will have more development advantages and development potential.

For the development trends of the aluminum industry, despite the slower consumption growth in construction and other traditional industries and with China continuously promoting development philosophy of green, environmental protection and energy conservation, automobile lightweight, packaging aluminum, building templates and other new applications consistently expand the consumption of aluminum. In addition, aluminum is increasingly applied in high and new-tech industries and high-end manufacturing and aluminum consumption will continue to grow. On the other hand, there is still a wide gap in the per capita aluminum consumption in China as compared with developed countries and aluminum products have tremendous application and market potential.

BUSINESS REVIEW

Statements about the business review and future business development of the Group are set out in the section headed "Chairman's Statement". The section headed "Management's Discussion and Analysis of Financial Position and Results of Operations" gives an analysis of the financial and operational conditions of the Group using financial key indicators. Details of compliance with relevant laws and regulations that have a significant impact on the Group are set out in sections headed "Report of the Board" and "Report on Corporate Governance and Internal Control".

POTENTIAL RISKS

In the production and operation of the Company, the constantly changing macroeconomy, market environment, social environment and other risk factors, as well as the epidemic of corona virus disease ("**Epidemic**") that broke out may cause an adverse impact on the operational and financial conditions of the Company. The main risks that the Company may face include: safety and environmental risks, market change risks, cash flow risks, interest rate risks and international operation risks. The details are as follows:

1. Safety and Environmental Risks: with more and more stringent national environmental protection standards, the Company has faced the increasing pressure on environmental protection, and it still has weak points in safety production, where safety and environmental protection risks exist. During the Epidemic, there is a risk that the normal operation of the Company may be affected as a result of infection of our employees.

To cope with such risks, the Company will regularly conduct screening on potential environmental hazards, follow and urge the handling of significant potential environmental hazards and carry out operation management and maintenance of environmental facilities. It enhances management and control during the production process and prohibits uncontrolled emission to ensure emission according to relevant standards. The Company continues to advance "two strict controls and two inspections with strict supervision" and emphasizes grass-roots and on-site safety management to ensure the implementation of safety management systems. For the outstanding problems in the operation of CAHSE, the Company will correct the defects, strengthen weak points to promote the healthy and efficient operation of the CAHSE system. During the prevention and control of the Epidemic, the Company fulfills responsibilities at all levels, strictly screens suspicious groups and practically carries out prevention and control to try its best to minimize the impact of the Epidemic on the production and operation of the Company.

2. Market change risk: With the global outbreak of the COVID-19 epidemic, the risk of triggering a global economic recession and financial crisis has increased, exacerbating a turbulence in prices of commodity market, including electrolytic aluminum. In particular, the spread of the COVID-19 epidemic has an increasingly impact on global supply chains, industrial production, terminal consumption, and investment, resulting in logistics disturbance, reduction or suspension of production by industrial enterprises, and increased electrolytic aluminum inventory, which has a potential impact on the Company's financial condition and operating performance.

   To cope with such risks, the Company fully leverages on its voice in the aluminum market and market influence, closely follows the market changes and trends as affected by the Epidemic, controls procurement and sales paces in market fluctuations and flexibly adjusts the products structure and marketing strategies to enhance the market risks management and control ability. The Company adopts flexible procurement strategies and adjusts the inventory appropriately to effectively reduce the procurement cost. It also actively conducts futures hedging businesses and enhances profitability from the interaction between futures and spot commodities to effectively respond to market price risks with futures hedging and other instruments.

3. Cash Flow Risks: Due to higher demands for capital expenditures of the Company, it has higher requirements on capital turnover, which may have an impact on the liquidity to a certain extent.

To cope with such risks, the Company makes its approval and decision of investment projects based on the principle of acting within capacity; conducts centralized and unified management and control of funds and leverages well on the advantages of "capital pool + notes pool". It will also strengthen budget management and manage funds from the source to avoid large-amount or accidental expenditure out of the budget. We continuously carried out cash flow forecasting and analysis, and reasonably control the level of liquidity; further strengthened credit management to prevent credit risks; strictly enforced customer credit ratings and strengthened dynamic management of credit ratings.

4. Interest Rate Risks: Changes in interest rates will reduce asset value or interest income or increase interest expenses arising from liabilities, which may in turn affect the Company's finance costs.

   To cope with this risk, the Company will closely follow the international situation and national policies, pay close attention to market dynamics, strengthen the research and assessment of the interest rate market; optimize the financing structure, and enhance its ability to resist financial risks.

5. Risks on International Operation: They are mainly risks in social security, public health and safety, labors and construction safety as well as exchange rate risks. Due to the social instability and limited medical and health conditions in the regions where the Company's overseas projects are located, it may increase risks on the life and property of its staff. Besides, uncertainties as to overseas project investment and operation springing from volatile exchange rate may have negative implications on the Company's business activities.

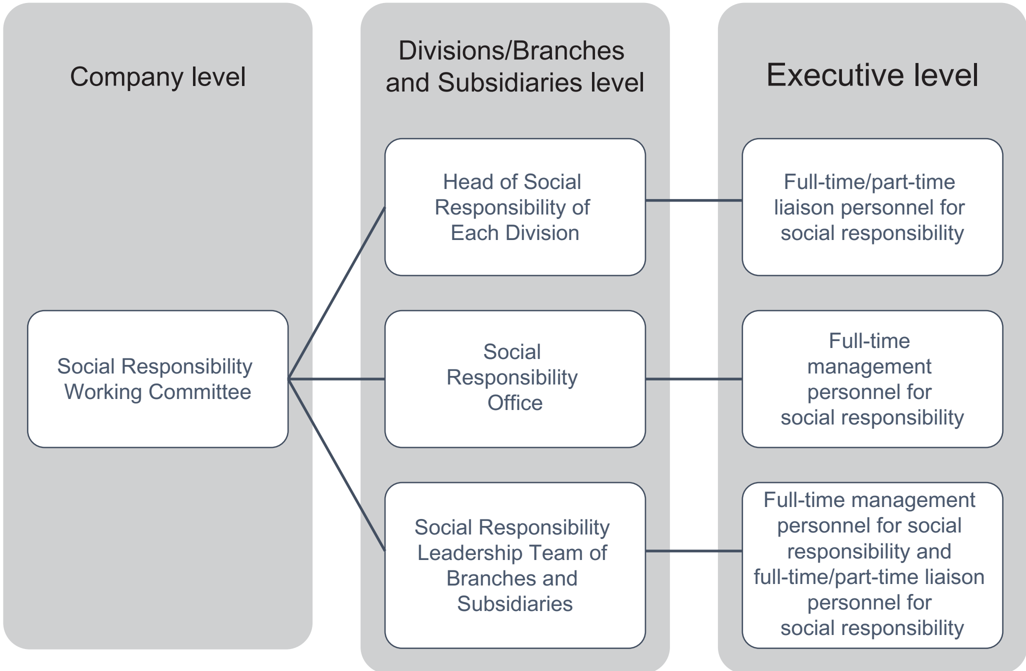
   To cope with this risk, the Company will fully implement the Guidelines on Strengthening the Prevention and Control of Overseas Security Risks of Central Enterprises (關於加強中央企業境外安全風險防控的指導意見) promulgated by the State-owned Assets Supervision and Administration Committee of the State Council, explore and improve the risk management system of overseas operating enterprises; and strengthen the assessment of various risks such as overseas politics and security to enhance the ability and level to effectively respond to emergencies; establish and improve emergency response mechanisms for risks, formulate countermeasures against major risks, monitor major risks on a monthly basis, and regularly check and deal with hidden risks.

SOCIAL RESPONSIBILITY AND ENVIRONMENT PROTECTION

The Company adheres to the social responsibility view of "turning stone into gold and benefiting mankind", and voluntarily integrates social responsibilities into management, integrates sustainable development into its own long-term development goals, maintains competitiveness for successful development of enterprise, and shoulders its responsibilities to employees, customers, society, environment and other stakeholders.

In 2019, in order to further improve the level of social responsibility management and promote building as a world-class aluminum company with global competitiveness, on the basis of its existing leadership group for social responsibilities, the Company established a Social Responsibility Working Committee (hereinafter referred to as the "**Committee**") as the Company's top management organization for social responsibility. Mr. Lu Dongliang, the chairman of the Company, is the chairman of the Committee, and Mr. He Zhihui, the president, and Mr. Jiang Yinggang, the senior vice president, are vice chairmen of the Committee. The Committee formulated and issued the Implementation Rules for Management of Social Responsibility of Aluminum Corporation of China Limited in accordance with the Guides to Social Responsibility (GB/T36000), the Guiding Opinions on State-owned Enterprises to Better Perform Social Responsibility promulgated by the State-owned Assets Supervision and Administration Commission of the State Council and the Administrative Measures for Social Responsibility (2019 Revision) of Chinalco for the purpose of further promoting the Company's fulfillment of social responsibility. The implementation rules clarified the specific scope of the Company's social responsibility, and specified the Company's major stakeholders including the government, shareholders, employees, suppliers and customers, the environment, communities, corporations (non-governmental organizations), etc.

The main duties of the Committee include: considering the Company's social responsibility work development plan and major projects, considering the Company's social responsibility management related policies and systems, considering and determining the Company's annual social responsibility work plan and project adjustment proposal, and considering and determining the Company's annual social responsibility report and other special reports and other matters related to the Company's social responsibility work.



The Company always fulfilled its social responsibilities in a proactive and voluntary manner, and made huge efforts in guarantee of employees' interests, environmental protection, poverty alleviation and public welfare. The Company always regards employees as its most valuable resources and assets. It is the Company's belief that protecting employees' interests and enhancing employees' well-being will pave the way for fulfilling its social responsibilities and achieving sustainable development. Furthermore, the Company insists on people oriented concepts, respecting the employees and providing them with opportunities to make achievements, and creating a "sunny, honest, simple and inclusive" work atmosphere.

The Company always prioritizes employees' safety and health, and strictly comply with and implements the Production Safety Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and other relevant national laws and regulations, and as early as 2004, the Company passed the accreditation ISO14004 environmental management system and the occupational health and safety system of OHSAS18001. The Company attaches great importance to safety production and considers it the highest priority in production and operation. It continuously strengthens the establishment of safety production systems and basic management. Based on the Company's operation situation, it formulated the Safety Production Management Measures of Aluminum Corporation of China Limited and the Safety and Environmental Protection Responsibility Rules of Headquarters of Aluminum Corporation of China Limited to strictly ensure the implementation of safety measures in all production processes and focus on grass-roots safety management. In 2019, the Company also formulated six methods and measures, covering radioactive source management, hazardous waste management, standard guidelines on "two strict controls and two inspections with strict supervision", measures on enhancing safety monitoring and management as well as safety liability period margin management for coal enterprises. All enterprises have improved the setting of safety and environmental protection agencies and staff allocation. While intensifying safety production management, the Company further raised the safety awareness of all staff. It organized trainings at different levels to enhance safety concepts, consolidate safety awareness and prevention knowledge and regulate standard operation. In 2019, the Company arranged the staff to participate in the "Knowledge Contest on Safety and Emergency Law Popularization" organized by the Ministry of National Emergency Management and the National Office for Law Popularization (普法辦) and attended the national finals. The Company was awarded the Outstanding Organization Award and the safety and emergency knowledge of the staff were generally enhanced. At the same time, the Company has established the system of occupational health management and gradually carried out occupational health and safety measures to guarantee employees' physical health. Meanwhile, the Company provides regular physical examinations for employees and sets up employee health files to ensure good occupational health management. The Company also provides employees with safe and comfortable working conditions and protective equipment.

The Company consistently insists on "people oriented" concepts and considers human resources as the most important resources of the Company. It established a harmonious and stable employment relationship with the staff to achieve the common growth of staff and the enterprise. The Company strictly abides by the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, the Labour Dispute Mediation and Arbitration Law of the People's Republic of China and other laws and regulations and established complete employment systems and regulations within the Company to safeguard the legitimate interests of the staff. The Company always upholds the principle of respecting employees and equal employment. It follows a non-discriminatory labour policy by treating all employees fairly and equally regardless of their nationality, race, gender, religious beliefs and cultural background, and insists on equal pay for equal work. The Company insists on ensuring equal employment opportunities to the disabled, women and other disadvantaged groups. Moreover, the Company strives to create jobs for the community, and aligns its development with the stability of employment and the protection of employees' interests. Through continuous improvement in labour employment and income distribution systems, the Company aims to strengthen employment management, regulate employment activities and determine reasonable distribution of income.

The Company emphasizes talents training and succession and is committed to the philosophy of "talents are the most valuable assets", with a focus on education, training and individual development of employees. A training system that covers employees according to their ranks and professional background has been set up by the Company. It is determined to be a lifelong learner, with efforts to build a learning team. In 2019, the Company arranged 71 leaders to participate in trainings on enhancing their ability to perform duties in two sessions, continuously improving their management level. Meanwhile, it made great efforts in fostering young reserve cadres and implemented the "Blade Program" and the "Leap Program", which specifically enhanced the quality and ability of young reserve cadres and achieved outstanding results. The Company not only develops clear paths for the career development of talents but also encourages them to constantly realize growth and progress through performance appraisal and promotions and thus cultivate and create a well-structured, professional, and innovative talent pool, contributing to the Company's continuous and healthy growth.

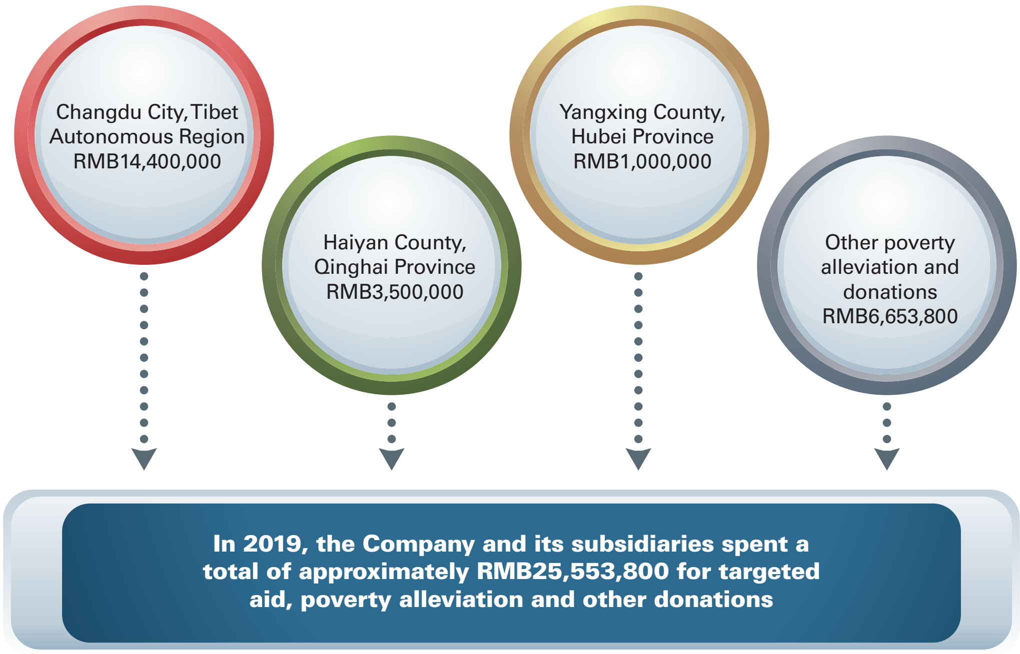
Chalco's training for enhancement of financial basic ability

Chalco's training for full-time and part-time internal auditing personnel

Dedicated to business development, the Company has also been making contributions to social progress and fulfilling its social responsibilities by keeping close eyes on and providing supports to public welfare programs. The Company has shown unwavering support for the national policy of targeted poverty alleviation and made efforts to lift people out of poverty and to tackle hard issues. Leveraging advantages particular to the Company, it formulates appropriate aid programs that fully involve all departments and staff, to ensure the effective advance of poverty alleviation.

The partner assistance and poverty alleviation targets of the Company include Changdu City, Tibet Autonomous Region, Haiyan County, Qinghai Province and Yangxin County, Hubei Province. The Company provided selfless assistance and full support with talents, capitals and substances and gradually established assistance guarantee, special supports, industrial development, partner assistance, talent cultivation, clear guarantee on project responsibilities and quality, communication and promotion of products and culture and various mechanisms, thereby improving local livelihoods and promoting local development. Various branches and subsidiaries of the Company also actively participated in local welfare activities, making contributions to our society through targeted poverty alleviation and donations to cultural and sports undertakings.

In 2019, the Company and its subsidiaries spent a total of approximately RMB25,553,800 for targeted aid, poverty alleviation and other donations, increased by RMB1,869,800 as compared with RMB23,684,000 in 2018.



In 2020, the Company and its subsidiaries budgets approximately RMB26.5659 million in target assistance, poverty alleviation and other donations, including continuing to arrange assistance and poverty alleviation funds for three partner assistance regions, namely Changdu City, Tibet Autonomous Region, Haiyan County, Qinghai Province and Yangxin County, Hubei Province. In addition, the Company will participate in the implementation of the "Chalco-Potentilla Fruticosa Education Fund" to fund local poverty-stricken teachers and students. Meanwhile, the Company will put more efforts in assisting Tibet and provide employment opportunities to university graduates in regions with assistance.

Home of Old Cadres in Chaya County, Changdu, Tibet supported by Chalco

Chalco New Village Project of the Company in Chaya County, Changdu, Tibet

With regard to environmental protection, as the Company operates in the non-ferrous metal industry with high pollution and its business involves mining, production of alumina and electrolytic aluminum, power generation, etc., its pollution discharge has been drawing close attention of the environmental protection authorities. According to the list of key discharge units released by the national environmental protection departments, a number of subordinate enterprises under the Company are listed as the key monitoring entities for discharge in air, water and soil, among which 23 enterprises were included in the key monitoring entities for discharge in atmosphere, 3 enterprises were included in the key monitoring entities for discharge in water environment, 9 enterprises were included in the key monitoring entities for soil environment pollution.

As a leading enterprise in the PRC non-ferrous metal industry and a state-controlled company listed on the stock exchanges in China, Hong Kong and the USA, the Company always attaches great importance to the protection of the environment, makes effort into energy management and emission reduction, strictly complies with related national laws and regulations, local policies as well as the internal rules and regulations of the Company, improves environmental management systems, increases investment in environmental protection, carries out new-tech transformation, strengthens elimination of hidden hazards in environmental protection, recyclable use of water resources, construction of green mines as well as disposal of hazardous wastes, and fully implements measures such as energy saving and emission reduction, recyclable use, and ecology protection, so as to improve energy efficiency, facilitate clean production, and minimize the environmental impact of the production process.

In 2019, based on the regional conditions and environmental protection facilities of its subsidiaries, the Company specified the management concepts on environmental protection with A, B and C categories. It formulated the leading implementation plan on "one enterprise with one policy" and conducted the weekly reporting system to urge enterprises conducting transformation of environmental protection.

With regard to waste gas treatment: the Company's four companies including Chinalco Shandong, Zhengzhou Institute, Chinalco Mining and Zhongzhou Aluminum, which are located in the "2 + 26" cities, and three companies including Shanxi New Materials, Shanxi Huaxing and Xinghua Technology in Fenwei Plain have achieved ultra-low emission transformation of thermal power boiler, the ultra-low emission transformation of dust removal for the clinker firing kiln, and completed substantially the ultra-low emission transformation of dust removal for the aluminum hydroxide roaster.

With regard to waste water reduction: the Company has continuously promoted circulating utilization of water resources project and improved both gradient utilization (step-wise utilization) of water and the reuse rate, and has achieved both economic benefits and environmental benefits. The water that can't be reused will be discharged strictly according to national requirements for wastewater treatment. In 2019, the Group's total water consumption was 3,001 million tonnes, of which the fresh water consumption was only 103 million tonnes, the circulating water consumption reached 2,898 million tonnes, and the recycling utilization rate was 96.57%.

With regard to disposal of solid waste : solid waste of the Company is mainly from red mud produced in alumina production and packaging materials used in transportation of raw materials. As a result, the Company has been devoted to enhancing the development and use of red mud and the recycling and reusing of packaging materials in recent years. For the problem on use of red mud, the Company focused on two sets of technical breakthroughs on the comprehensive use of red mud in 2019 and completed the formulation of the plan on test expansion and the design of the test line and established the pilot test line. It will conduct the pilot test based on the test plan in the first half of 2020. With regard to recycling of packaging materials, the Company recycled and reused 1,897.2 tonnes of recyclable bags and 14,597.0 tonnes of container bags in 2019, which effectively saved resources and reduced the generation of waste.

The hazardous waste of the Company mainly includes aluminum ash, carbon slag and slag from delining (waste spent potlining and waste cathodes) produced during the electrolytic aluminum production process. The Company has classified hazardous wastes for disposal and stored hazardous wastes and general industrial solid wastes in different places. In the places where the hazardous wastes are stored, the Company has taken measures, such as rain prevention and seepage prevention, and posted waste storage signs. The disposal of hazardous wastes in the available landfills for hazardous wastes have been carried out in compliance with relevant laws and regulations; harmless treatment has been carried out in available process lines for harmless treatment; if neither of hazardous wastes landfills and harmless treatment process lines are available, the Company will regularly transfer the hazardous wastes to a qualified third party, and hand in the duplicate forms for the transfer of hazardous wastes to make sure the transfer record is properly registered and hazardous wastes are appropriately transferred and disposed of in accordance with the required procedures. In order to reduce the amount of hazardous waste generation, Baotou Aluminum, a subsidiary of the Company, developed the first test line on the reclamation of electrolytic waste cathodes both at home and abroad with a designed test capacity of 4,000 tonnes per year. It completed the trial run and commenced the preheating at the end of October 2019 and started harmless resource use with waste cathodes in December. In 2019, the Company generated and safely disposed of 1,667 tonnes of oily hazardous waste oil, generated and safely disposed of 19,007 tonnes of aluminum ash, of which 11,562 tonnes were reused; 45,400 tonnes of carbon slag, of which 26,756 tonnes were reused; and 20,837 tonnes of waste spent potlining, of which 10,108 tonnes were reused.

Besides the above measures on the treatment of pollutants, the Company also vigorously promoted the construction of green mine sites and green factories. In 2019, the Company formulated the Incentive Measures on Strengthening Mine Sites Management in 2019 and the Construction Plan on Green Mine Sites for Bauxite. It completed reclamation of 12,000 mu of land throughout the year and reclaimed a total of 78,500 mu of land, representing a reclamation rate of over 86%. As at the end of 2019, seven mine sites of the Group included listed in the list of national green mine sites. Qinghai Branch of the Company and Zunyi Aluminum were rated as provincial green factories, and Chalco Shangdong and Guangxi Branch were rated as national green factories.

Land after implementing mine reclamation

Building a garden-style factory

Chalco's Emissions Table for 2017–2019

Performance Indicators	Unit	2017	2018	2019
Basic Information				
Total value of industrial production	RMB10,000	9,206,729.2	10,162,954.9	9,302,483.23
Emissions				
Air Emissions				
The amount of SO_2 emission (Note1)	10,000 tonnes	4.27	4.44	4.73
The amount of NO_X emission	10,000 tonnes	1.46	1.62	1.33
The amount of PM emission (Note2)	10,000 tonnes	0.24	0.22	0.57
GHG Emissions				
The amount of carbon dioxide emission (in CO_2 equivalent) (Note3)	10,000 tonnes	6,862.3	6,478.04	6,138.16
The amount of carbon dioxide emission (in CO_2 equivalent) per RMB10,000 of production value	tonne/ RMB10,000	7.47	6.37	6.60
Wastewater Discharge				
The amount of industrial wastewater discharged in compliance with relevant standards (Note 4)	10,000 tonnes	173.74	241.38	192.02
The amount of ammonia nitrogen discharged	tonnes	44.00	22.00	7.00
The amount of wastewater circulated	100 million tonnes	25.69	25.22	28.98
General Industrial Solid Wastes				
The amount of general industrial solid wastes generated (Note5)	10,000 tonnes	3,316.08	3,811.47	3,945.30
The amount of general industrial solid wastes generated per RMB10,000 of production value	tonne/ RMB10,000	3.6	3.7	4.24

Performance Indicators	Unit	2017	2018	2019
The amount of red mud generated	10,000 tonnes	2,105.30	2,344.97	2,181.04
The amount of red mud utilised	10,000 tonnes	209.80	193.09	449.18
The amount of fly ash generated	10,000 tonnes	356.30	494.56	505.92
The amount of fly ash utilised	10,000 tonnes	245.20	328.00	358.63
The amount of slag generated	10,000 tonnes	87.20	141.16	170.99
The amount of slag utilised	10,000 tonnes	61.30	101.18	143.94
Hazardous Wastes				
The amount of disposal of waste oil (including machine oil and mineral oil)	tonnes	1,113.00	938.00	1,667.00
The amount of disposal of waste oil per RMB10,000 of production value	tonne/RMB10,000	0.00012	0.00009	0.00018
Use of Resources				
Comprehensive energy consumption	10 ktce	1,876.60	2,039.21	1,956.27
Comprehensive energy consumption per RMB10,000 of production value	tce/RMB10,000	2.03	2.01	2.10
The amount of purchased electricity	100 million kWh	349.30	398.84	389.26
Total coal consumption	10,000 tonnes	1,292.20	1,495.95	1,368.33
Total water consumption	100 million tonnes	26.68	26.15	30.01
In which: circulating water consumption	100 million tonnes	25.69	25.22	28.98
total fresh water consumption	100 million tonnes	0.99	0.93	1.03
Water consumption per RMB10,000 of production value	tonne/RMB10,000	290.38	257.38	322.60
The amount of packaging material used	10,000 tonnes	1.08	1.23	1.37

Note 1: The increase in SO_2 emissions in 2019 was due to the full-process monitoring of emissions data from the online automatic detection system of flue gas purification of four electrolytic aluminum companies and the increase in sulfur content of coal by some power generation companies.

Note 2: PM emission: those for 2017 and 2018 represented the PM data, and that for 2019 represented the PM and dust data. The statistical data of PM and dust for 2018 was 8,588 tonnes.

Note 3: In 2019, the Group's CO_2 emissions equivalent was calculated based on the total energy consumption of oil, natural gas, coal, and purchased electricity, and the data for 2018 were restated according to the same standard and calculation method.

Note 4: The amount of industrial wastewater discharged in compliance with relevant standards does not include the amount of Ningxia Energy.

Note 5: The scope of general industrial solid waste statistics has expanded from 2018 (added coal gangue, smelting waste, other types of solid waste, etc.), and the implementation of ultra-low emissions and increased use of desulfurizers, etc. resulted in the increase in the general industrial solid waste generated in 2019.

For further information on social responsibilities and environmental protection of the Company, please refer to the 2019 Social Responsibility and Environmental, Social and Governance Report of Aluminum Corporation of China Limited separately disclosed by the Company.

FINANCIAL SUMMARY

The results of the Group for the year ended 31 December 2019 are set out in the consolidated statement of comprehensive income on pages 188 to 190. A five-year financial summary of the Group is set out on pages 8 to 13.

DIVIDEND AND DIVIDEND POLICY

Dividend Policy

1. The basic principles of profit distribution policy of the Company are as follows:

   (1) taking full account of return to investors and distributing dividend to shareholders in proportion to the distributable dividend realized for the year concerned on an annual basis;

   (2) maintaining the continuity and stability of the Company's dividend distribution policy, while at the same time take care of the interest of the Company in the long term, the interest of the shareholders as a whole, as well as the sustainable development of the Company;

   (3) giving priority to dividend distribution in cash.

2. Dividend distribution policies of the Company are to be specified as follows:

   (1) dividend shall be distributed in the following manner: the Company may distribute dividends in cash, in shares or in a combination of both cash and shares. The Company shall give priority to dividend distribution in cash. Subject to conditions, interim profit distribution may be made by the Company;

   (2) specific conditions and proportions of cash dividend of the Company: save in exceptional circumstances, if the Company's profit for the year and its cumulative undistributed profit are positive, the Company may distribute dividend in cash and the profit to be distributed in cash per annum will not be less than 10% of the distributable profit realized for that year, or that the total profit to be distributed in cash in the past three years will not be less than 30% of the average annual distributable profit realized in the past three years;

As at the reporting period, if the Company's distributable profit is positive, the Company has distributed no less than 30% of the net profit of the parent company in the corresponding year and all adopted dividend distribution in cash. In recent years, as the Company's cumulative undistributed profit was negative, the Company's profit was used in making up losses and conducted no dividend distribution in cash.

DIVIDEND

The Board did not recommend any distribution or payment of final dividend for the year ended 31 December 2019.

Total dividends paid during 2019 and 2018 are as follows:

	2019	2018
Total dividends paid: *(RMB million)*	**Nil**	Nil
Percentage to profits attributable to holders of the interests of the Company: *(%)*	**Nil**	Nil

SHARE CAPITAL

The total share capital of the Company was 17,022,672,951 shares as at 31 December 2019.

CORPORATE BONDS

In order to replace the Company's debts due and provide additional liquidity, the corporate bonds issued by the Company as of 31 December 2019 are as follows:

Name	Abbreviation	Code	Issue date	Maturity date	Balance *(RMB'100 million)*	Rate *(%)*	Exchange
2016 Corporate Bonds (Tranche 1) privately issued by Aluminum Corporation of China Limited	16 Chalco 01	135890	2016.09.23	2019.09.23	0	–	Shanghai Stock Exchange
2018 Corporate Bonds (Tranche 1) (Type 1) publicly issued by Aluminum Corporation of China Limited	18 Chalco 01	143804	2018.09.14	2021.09.18	11	4.55	Shanghai Stock Exchange
2018 Corporate Bonds (Tranche 1) (Type 2) publicly issued by Aluminum Corporation of China Limited	18 Chalco 02	143805	2018.09.14	2023.09.18	9	4.99	Shanghai Stock Exchange
2018 Corporate Bonds (Tranche 2) (Type 1) publicly issued by Aluminum Corporation of China Limited	18 Chalco 03	155032	2018.11.14	2021.11.16	14	4.19	Shanghai Stock Exchange
2018 Corporate Bonds (Tranche 2) (Type 2) publicly issued by Aluminum Corporation of China Limited	18 Chalco 04	155033	2018.11.14	2023.11.16	16	4.50	Shanghai Stock Exchange

Name	Abbreviation	Code	Issue date	Maturity date	Balance *(RMB'100 million)*	Rate *(%)*	Exchange
2019 Corporate Bonds (Tranche 1) publicly issued by Aluminum Corporation of China Limited	19 Chalco 01	155166	2019.01.22	2022.01.23	20	3.80	Shanghai Stock Exchange
2019 Corporate Bonds (Tranche 2) (Type 2) publicly issued by Aluminum Corporation of China Limited	19 Chalco G3	155594	2019.08.08	2029.08.09	20	4.55	Shanghai Stock Exchange
2019 Corporate Bonds (Tranche 3) (Type 1) publicly issued by Aluminum Corporation of China Limited	19 Chalco G4	155677	2019.09.04	2022.09.05	10	3.50	Shanghai Stock Exchange

RESERVES

Movements in the reserves of the Group and of the Company during the year are set out in the consolidated statement of changes in equity on page 191 to 192 and note 17 to the financial statements, respectively.

PROPERTY, PLANT AND EQUIPMENT

Details of the movements in property, plant and equipment of the Group are set out in note 6 to the financial statements.

DISTRIBUTABLE RESERVES

Pursuant to Article 189 of the Articles of Association of the Company, where there are differences between the PRC accounting standards and the International Financial Report Standards, the distributable reserves for the relevant period shall be the lesser of the amounts shown in the two different financial statements. As such, as of 31 December 2019, the Company had no distributable reserves.

USE OF PROCEEDS

The Company has no use of proceeds in 2019.

USE OF FUND OTHER THAN PROCEEDS

The Boffa bauxite project in Guinea with an annual capacity of 12 million tonnes: total investment in project construction amounted to approximately RMB3.088 billion, and by the end of 2019, an aggregate of approximately RMB1.872 billion of capital expenditure had been incurred. The quarry of mine had been put into operation successfully at the end of 2019 and the first batch of bauxite had been shipped to the PRC in February 2020.

Guangxi Huasheng's alumina project with an annual capacity of 2 million tonnes: total investment in project construction amounted to RMB5,805 million, and by the end of 2019, an aggregate of RMB3,912 million of capital expenditure had been incurred. The project is expected to be completed and put into operation in June 2020.

Ningxia Energy's 200 MW Wind Power Project in Alxa Left Banner: total investment in the project amounted to RMB1,446 million. By the end of 2019, an aggregate of RMB1,253 million of capital expenditure had been incurred. The project had been connected to the grid for power generation at the end of 2019.

PRE-EMPTIVE RIGHTS

Pursuant to the Articles of Association of the Company and the PRC laws, there are no pre-emptive rights that require the Company to offer new shares to its existing shareholders on a pro-rata basis.

DONATIONS

The Group had contributed approximately RMB25,553,800 for poverty alleviations and donations in 2019 (2018: approximately RMB23,684,000).

LITIGATION AND CONTINGENT LIABILITIES

(a) Litigation

There was no significant litigation pending during the year which was required to be disclosed.

(b) Contingent Liabilities

As at 31 December 2019, the Group was sued by its counterparties with an amount of approximately RMB590,967,000 involved in the case. Both parties had disputes over the work quantity and settlement amount of the projects in the PRC Mainland.

During the lawsuit, local courts rules that bank deposits of two subsidiaries with an amount of RMB214,536,000 or assets with an equivalent amount will be frozen, As at the date of this report, local courts have frozen the balance in bank accounts of approximately RMB60,800,000 and properties of approximately RMB45,680,000. Based on the opinions of the legal advisor of the Group, the Group is of opinion that it can conduct effective defense against the accusation. Therefore, the Group did not make expected liabilities on claims or interest penalty.

DIRECTORS AND SUPERVISORS

As of the date of this report, the Board and Supervisory Committee of the Company comprise:

Executive Directors

Mr. Lu Dongliang	Re-appointed on 25 June 2019
Mr. He Zhihui	Re-appointed on 25 June 2019
Mr. Jiang Yinggang	Re-appointed on 25 June 2019
Mr. Zhu Runzhou	Re-appointed on 25 June 2019

Non-executive Directors

Mr. Ao Hong	Re-appointed on 25 June 2019
Mr. Wang Jun	Re-appointed on 25 June 2019

Independent Non-executive Directors

Ms. Chen Lijie	Re-appointed on 25 June 2019
Mr. Hu Shihai	Re-appointed on 25 June 2019
Mr. Lie-A-Cheong Tai Chong, David	Re-appointed on 25 June 2019

Supervisors

Mr. Ye Guohua	Re-appointed on 25 June 2019
Mr. Ou Xiaowu	Appointed on 10 December 2019
Ms. Shan Shulan	Re-appointed on 25 June 2019
Mr. Guan Xiaoguang	Appointed on 25 June 2019
Mr. Yue Xuguang	Appointed on 10 December 2019

Profiles of the current Directors and Supervisors are set out on pages 17 to 24.

DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS AND REMUNERATION

Pursuant to Articles 108 and 150 of the Articles of Association of the Company, the term of office for a Director or a Supervisor is three years, subject to re-election. Each Director and Supervisor has therefore entered into a service contract with the Company, but such service contracts are not terminable by the Company within one year without payment of compensation (other than statutory compensation). Details of the Directors' and Supervisors' remunerations and remunerations of the five highest paid individuals are set out in note 30 to the financial statements. For the year ended 31 December 2019, there were no arrangements under which any Director or Supervisor of the Company had waived or agreed to waive any remuneration.

PERMITTED INDEMNITY PROVISIONS

As at 31 December 2019, all Directors, Supervisors and other senior management of the Company were covered under the liability insurance purchased by the Company for them.

INTERESTS OF DIRECTORS, CHIEF EXECUTIVE AND SUPERVISORS IN SHARES OF THE COMPANY AND ITS ASSOCIATED CORPORATIONS

As of 31 December 2019, the following Director of the Company was interested in the shares of the Company:

Name	Position in the Company	Number of A shares of the Company held as personal interests	Capacity	Percentage in relevant class of issued share capital	Percentage in total issued share capital
Jiang Yinggang	Executive Director and Senior Vice President	10,000	Beneficial owner	0.000091%	0.000067%

Save as disclosed above, as of 31 December 2019, none of the Directors, chief executive, Supervisors or their respective associates had any interests or short positions in the shares, underlying shares or debentures of the Company or its associated corporations (within the meaning of the SFO), which were (a) required to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO; or (b) required to be recorded in the register kept by the Company pursuant to Section 352 of the SFO; (c) required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**").

During the year ended 31 December 2019, none of the Directors, chief executive, Supervisors, senior management or their respective spouses or children under the age of eighteen was granted any right to acquire shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of the SFO).

INTERESTS OF DIRECTORS AND SUPERVISORS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

For the year ended 31 December 2019, none of the Directors or Supervisors or entities connected to such Directors or Supervisors was materially interested, either directly or indirectly, in any transaction, arrangement or contract of significance to which the Company or any of its subsidiaries was a party.

EMPLOYEES AND PENSION SCHEMES

As of 31 December 2019, the Group had 65,507 employees. The remuneration of the employees includes the salaries, bonuses, subsidies, allowances and medical care, housing subsidies, maternity, unemployment, occupational injury, retirement pension and other benefits.

In accordance with applicable PRC regulations, the Company has currently enrolled in a series of pension schemes regulated by various provincial and municipal governments, under which each of the Company and its subsidiaries is required to contribute a percentage of its employees' salaries, bonuses and various allowances to the pension fund. As the State adjusted the social insurance rate, the percentage of the contribution in the employees' remuneration is adjusted to around 16% from around 20% from 1 May 2019.

The Company keeps in close touch with employees and provides them with fair working environment. In addition, the Company emphasizes the professional development of employees and provides them with various training opportunities including internal trainings and courses offered by professional organizations, so as to keep them abreast of the latest development in the market, industry and various businesses. For details on the trainings attended by the employees of the Company in 2019, please refer to the 2019 Social Responsibility and Environmental, Social and Governance Report of Aluminum Corporation of China Limited separately disclosed by the Company.

REPURCHASE, SALE AND REDEMPTION OF THE COMPANY'S SHARES

The Company did not redeem any of its shares during 2019. Neither the Company nor any of its subsidiaries purchased or sold any of its listed securities during 2019.

MANAGEMENT CONTRACTS

No contract concerning the management or administration of the whole or any substantial part of the business of the Company was entered into or subsisted during the year.

MAJOR CUSTOMERS AND SUPPLIERS

1. Major Customers

The Company attaches great importance to the relationship with customers, provides customers with products and services of high quality. While improving the quality of our products, we also deepen our communication with customers to learn more about market demands and provide customized comprehensive solution for customers, so as to create more value for them. The Company always puts the product quality first, for which the "Administrative Measures for Product Quality" (《產品質量管理辦法》) is formulated to guarantee the high quality of our reliable products through the quality management system that covers the whole industrial line. The Company has established various communication channels with customers to understand customers' needs by diversified online and offline communication channels to promote our products and consolidate our cooperation. The Company has soundly established a pre-sale, sale and after-sales service management system, and provided consumers well-established channels for complaints and feedback. The Company also investigates customer satisfaction in the form of questionnaires in line with the ISO9001 management system, fully understands and respects customers' feedback and opinions, and at the same time formulate effective solutions so to constantly improve service levels and customers' satisfaction.

The Company's major customers are, in respect of alumina, domestic electrolytic aluminum enterprises and in respect of primary aluminum, domestic aluminum fabrication enterprises and distributors.

The Company sells alumina products to customers mainly through long-term sales agreements and spot market sales. The Company sells self-produced alumina and certain alumina products sourced from external suppliers under spot contracts signed with third parties and long-term sales agreements with a term ranging from one to three years. Such long-term sales agreements usually specify annual or monthly sales quantities, pricing mechanisms, payment terms, place of delivery and the delivery method for the alumina sold. The selling prices for alumina sold on the spot market are determined by the Company by taking into account (i) domestic and international situation of supply and demand; (ii) CIF price of imported alumina arrived at Chinese ports and import related expenses; (iii) international and domestic transportation costs; (iv) the impacts of national policy on raw materials required for alumina enterprises; and (v) the Company's short- and medium-term forecast for alumina prices.

The Company sells primary aluminum products to customers mainly through the following three ways: (i) sales agreements, which are entered into between the Company and its customers that have longstanding business relationship with it, generally with a term of one year and selling prices determined based on the prices quoted on the Shanghai Futures Exchange and prevailing market prices; (ii) futures contracts ranging from one to twelve months on the Shanghai Futures Exchange; and (iii) spot market sales, with selling prices determined by reference to such factors as market spot prices and transportation costs.

In 2019, sales to the five largest customers of the Company amounted to RMB20,750.21 million and accounted for 10.92% of the Company's total annual sales, among which sales to related parties were RMB4,278.77 million, accounting for 2.25% of the Company's total annual sales.

2. Suppliers

The Company always insists on cooperating with its suppliers in the spirit of mutual benefit and win-win, and strictly selects and manages its suppliers. It avoids and minimizes the risks and negative impacts caused from non-performing suppliers by assessing the environmental and social impact of suppliers, formulating strict supplier access rules, and improving the supplier evaluation system, and thus establishes and maintains a sustainable supply chain system. The Company has formulated internal management systems such as the "Administrative Measures for Procurement of Aluminum Corporation of China Limited" (《中國鋁業股份有限公司採購管理辦法》), the "Administrative Measures for Suppliers of Aluminum Corporation of China Limited" (《中國鋁業股份有限公司供應商管理辦法》), and the "Regulations on Management of the Operational Mode of Major Procurements of Aluminum Corporation of China Limited" (《中國鋁業股份有限公司重點採購運行模式管理規定》), which provide comprehensive management in quality, procurement, logistics, services of product, and selection, supervision and evaluation of suppliers. At the same time, the Company also puts great importance on a long-term and stable cooperation relationship with suppliers, and strengthened the relationship and communication with suppliers by various ways such as holding annual meetings with suppliers, summary of procurement work and participation of commodity trade meeting with a view to consolidate the cooperation with excellent suppliers.

In 2019, the procurement amounts from the top five suppliers of the Company amounted to RMB16,181.21 million, accounting for 11.52% of the total procurement amounts, among which procurement from related parties were RMB3,507.61 million, accounting for 2.50% of the Company's total annual procurement amounts.

CODE ON CORPORATE GOVERNANCE

The Articles of Association of the Company, the Rules of Procedures for the Shareholders' Meeting of Aluminum Corporation of China Limited (the "**Rules of Procedures for the Shareholders' Meeting**"), the Rules of Procedures for the Board Meeting of Aluminum Corporation of China Limited (the "**Rules of Procedures for the Board Meeting**"), the Rules of Procedures for the Supervisory Committee Meeting, the detailed implementation rules for the special committees under the Board, the Code of Conduct for Securities Dealings by Directors, Supervisors and Specific Employees and other relevant systems of the Company constitute the framework for the codes on corporate governance of the Company. The Board has reviewed its corporate governance documents and is of the view that such documents have incorporated the principles and code provisions in the Code on Corporate Governance (the "**CG Code**") as set out in Appendix 14 of the Hong Kong Listing Rules and the Guidelines of the Shanghai Stock Exchange for Internal Control of Listed Companies (the "**Internal Control Guidelines**").

AUDIT COMMITTEE

The written terms of reference in relation to the authorities and duties of the Audit Committee were prepared and adopted in accordance with and with reference to "A Guide for the Formation of an Audit Committee "published by the Hong Kong Institute of Certified Public Accountants and Rule 10A-3 of U.S. Securities and Exchange Commission.

The financial statements of the Company for the year ended 31 December 2019 have been reviewed by the Audit Committee of the Company.

AUDITORS

The financial statements in this report have been audited by Ernst & Young. Ernst & Young was the auditors of the Company for its 2019 Hong Kong annual report, and it was also the auditors of the Company for its 2012 to 2018 Hong Kong annual reports. For further details of the auditors of the Company, please refer to the section headed "Auditors' Remuneration" of the "Report on Corporate Governance and Internal Control" in this annual report.

Lu Dongliang
Chairman

Beijing, the PRC
26 March 2020

Report of the Supervisory Committee

Dear shareholders,

Since 2019, the Supervisory Committee of the Company actively performed its powers and duties as prescribed in the Article of Association and the Rules of Procedures for the Supervisory Committee Meeting. Focusing on supervision of significant decisions, regular financial statements, behavior of Directors, Supervisors and senior management as well as operation condition of the Company, it continually standardized supervision behaviour, improved supervision efficiency through convening regular or irregular meetings and other means. Such measures facilitated the transparency and standard operation of the Company, maintained a positive image of the Company in the capital market and safeguarded the interests of investors. The specific works are reported as follows:

I. CHANGE OF THE SUPERVISORS

During the reporting period, the sixth session of the Supervisory Committee of the Company consisted of three supervisors, among which, Mr. Ye Guohua and Ms. Shan Shulan were shareholder representative Supervisors, and Mr. Wu Zuoming was the employee representative Supervisor. The term of the sixth session of the Supervisory Committee of the Company was expired in June 2019, as elected and approved at the 2018 annual general meeting of the Company held on 25 June 2019, Mr. Ye Guohua and Ms. Shan Shulan were re-appointed as as the shareholder representative Supervisors of the seventh session of the Supervisory Committee of the Company; at the same time, Mr. Guan Xiaoguang was elected as the employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company. Mr. Ye Guohua was elected as the chairman of the seventh session of the Supervisory Committee at the first meeting of the seventh session of the Supervisory Committee of the Company held on the same day.

The amendments to the Articles of Association and Rules of Procedures for the Supervisory Committee of the Company were considered and approved at the 2019 third extraordinary general meeting of the Company held on 10 December 2019, and the composition of the Supervisory Committee of the Company was increased to five supervisors from three supervisors, which shall comprise three shareholder representative Supervisors and two employee representative Supervisors. At the same time, Mr. Ou Xiaowu was elected as a shareholder representative Supervisor of the seventh session of the Supervisory Committee of the Company at the above extraordinary general meeting. On the same day, Mr. Yue Xuguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company.

As of the date of this report, the seventh session of the Supervisory Committee of the Company consisted of five Supervisors, including three shareholder representative Supervisors, namely Mr. Ye Guohua, Mr. Ou Xiaowu and Ms. Shan Shulan, and two employee representative Supervisors, namely Mr. Guan Xiaoguang and Mr. Yue Xuguang.

II. CONVENING OF MEETINGS

In 2019, 7 meetings were held by the Supervisory Committee of the Company, of which 5 were onsite meeting, and 2 were telecommunication meetings. The particulars of which are as follows:

1. The seventeenth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 22 January 2019, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to the Proposed Change of Accounting Policies of the Company.

2. The eighteenth meeting of the sixth session of the Supervisory Committee of the Company was held on 28 March 2019, with all three Supervisors attending the meeting. The meeting considered and approved four resolutions, including the 2018 Financial Report, the 2018 Report of the Supervisory Committee, the 2018 Assessment Report on Internal Control and the draft of the Board's evaluation on internal control of the Company, the 2018 Social Responsibilities and Environmental, Social and Governance Report, and considered the report of changes in list of related parties in the second half of 2018.

3. The nineteenth meeting of the sixth session of the Supervisory Committee of the Company was held on 29 April 2019, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to the 2019 First Quarterly Report of the Company and the Resolution in Relation to Proposed Implementation of New Lease Standard of the Company.

4. The twentieth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 28 May 2019, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to Nomination of Candidates for the Shareholder Representative Supervisor of the Seventh Session of the Supervisory Committee of the Company and the Resolution in Relation to Amendments to the Rules of Procedures for the Supervisory Committee Meeting of Aluminum Corporation of China Limited.

5. The first meeting of the seventh session of the Supervisory Committee of the Company was held on 25 June 2019, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to Election of the Chairman of the Seventh Session of the Supervisory Committee of the Company.

6. The second meeting of the seventh session of the Supervisory Committee of the Company was held on 27 August 2019, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to the 2019 Interim Report of the Company.

7. The third meeting of the seventh session of the Supervisory Committee of the Company was held on 28 October 2019, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to the 2019 Third Quarterly Report of the Company.

All of the above-mentioned meetings of the Supervisory Committee were in accordance with the relevant provisions of the Company Law of the People's Republic of China (the "**Company Law**"), the Articles of Association and the Rules of Procedures for the Supervisory Committee Meeting of the Company.

III. PERFORMANCE OF THE SUPERVISORY COMMITTEE

In 2019, each member of the Supervisory Committee of the Company effectively supervised the Company's legal and compliance operation, financial management and internal control etc. by attending the general meeting and the Board meeting, convening the Supervisory Committee meeting and proposing operation-related suggestion. The particulars are set out as below:

(I) Supervision of Implementation of Meetings and Resolutions

Members of the Supervisory Committee exercised supervision on the proposals and reports submitted to the Board and general meetings for consideration by way of participating in or attending the general meetings and Board meetings and no objection has been made. It also supervised the related-party transactions between the Company and the controlling shareholder Chinalco. The Supervisory Committee is of the opinion that these related-party transactions were in line with the Company's strategic development plan and overall interests, and the terms of the transactions were fair and reasonable, and the transaction review procedures had complied with relevant laws, regulations and the Articles of Association. The Company disclosed timely and fully the related-party transactions and there is no behavior that was detrimental to the interests of the Company and its shareholders. Moreover, the Supervisory Committee exercised supervision on implementation of the general meetings' resolutions by the Board, all Directors and the management. When the Directors and senior management of the Company exercised their functions and powers, no violations of laws, regulations, and good faith and diligence obligation are found, and they strictly implemented the resolutions passed at the general meetings.

(II) Inspection of Legal Compliance of the Company's Operations

The Supervisory Committee exercised supervision in routine work over the legal compliance and legality of the Company's operation and management. It has also exercised supervision over the work performance of the Company's Directors and senior management. The Company's operation and decision-making procedures have complied with the Company Law, the Articles of Association of the Company and corporate regulations and systems. The Directors and senior management of the Company performed their duties diligently, and it has found no violation of the laws and regulation and the Articles of Association, and no authorization beyond prescribed scope or damages to the interests of the Company and the shareholders.

(III) Inspection of the Company's Financial Activities

Each Supervisor of the Supervisory Committee cautiously reviewed the financial statements of the Company for each period, and supervised and inspected the Company's implementation of relevant financial policies and legislation as well as details on the Company's assets, financial income and expenditure. At the meetings of the Supervisory Committee held in March, April, August and October 2019, each of the Supervisors carefully reviewed the Company's 2018 annual financial report, 2019 interim report and quarterly report, and fully discussed segment of costs and expenses and revenue, profit, gross profit margin and impact of changes in accounting standards. The Supervisory Committee is of the opinion that the operating results achieved by the Company were true, the financial reports of the Company truly reflected the financial position and operating results of the Company and the preparation and review procedures for the reports were in compliance with the requirements of relevant laws and regulations, the Articles of Association of the Company and the Company's internal control system. Information on all significant events of the Company in 2019 has been disclosed under the principles of truthfulness, timeliness, accuracy, completeness and fairness pursuant to relevant regulations, and there are no false records, misleading statements or major omissions..

(IV) Review of Self-assessment Report on Internal Control

During the reporting period, the Supervisory Committee listened to reporting in respect of the implementation and examination of the Company's internal control and fully performed its role of guidance and supervision. After reviewed the Annual Assessment Report on Internal Control of the Company and the draft Report in respect of assessment of internal control of the Company by the Directors, the Supervisory Committee is of the opinion that the Company has established, improved and implemented effectively sound internal control systems covering all procedures in accordance with the requirements of the Internal Control Guidelines and the Basic Principles of Corporate Internal Control, and such systems played a better role in risk prevention and control for the company's operation and management. The Supervisory Committee advises that the internal control system shall be enhanced to be updated timely and synchronously with the management systems in accordance with changes in management environment of the Company.

In 2020, the Supervisory Committee of the Company will continue to diligently perform its duties in accordance with the powers and responsibilities conferred by the Company Law and other relevant laws and regulations as well as the Articles of Association of the Company. The Supervisory Committee will perform diligently duties as the permanent supervision body and further strengthen its supervision to exercise its supervision functions in operation, financial report, internal control, information disclosure and related-party transactions and so forth. The Supervisory Committee will also be responsible for the supervision on the Board and its members and the senior management members of the Company, so as to safeguard the legitimate interests of the shareholders, in particular, the minority shareholders, and the Company and all of its staff.

By order of the Supervisory Committee
Ye Guohua
Chairman of the Supervisory Committee

Beijing, the PRC
26 March 2020

CODE ON CORPORATE GOVERNANCE

The Articles of Association, the Rules of Procedures for the Shareholders' Meeting, the Rules of Procedures for the Board Meeting, the Rules of Procedures for the Supervisory Committee Meeting, the detailed implementation rules for the special committees under the Board, the detailed implementation rules for independent Directors, the Code of Conduct for Securities Dealings by Directors, Supervisors and Specific Employees and other relevant systems of the Company constitute the corporate governance documents of the Company. After reviewed such corporate governance documents, the Board believed that the Company had fully complied with the CG Code and the Internal Control Guidelines in 2019, and the implementation of the Company are more stringent than them in some areas:

1. The Company had appointed a sufficient number of non-executive Directors (independent non-executive Directors), the Board of the Company has five non-executive Directors, representing more than half of the Board; the Board of the Company has three independent non-executive Directors, representing one third of the Board.

2. In addition to the Audit Committee, the Remuneration Committee and the Nomination Committee, the Company has also established the Development and Planning Committee and Occupational Health and Safety and Environment Committee.

3. All members of the Audit Committee are independent non-executive Directors, of whom Mr. Lie-A-Cheong Tai Chong, David, the chairman of such committee, possesses extensive professional experience in finance, auditing and business operation and is the financial expert of the Board of the Company.

The Board of the Company has reviewed its corporate governance documents and Internal Control Guidelines, and is of the view that, the Company has complied with the code provisions in the CG Code and Internal Control Guidelines for the year ended 31 December 2019.

SECURITIES DEALINGS BY THE DIRECTORS, SUPERVISORS AND RELEVANT EMPLOYEES

The Board has formulated written guidelines on securities dealings by the Directors, Supervisors and relevant employees of the Company, the terms of which are more stringent than the required standards set out in the Model Code under Appendix 10 of the Hong Kong Listing Rules and the Rules Governing Listing of Securities of the Shanghai Stock Exchange. After a specific enquiry by the Company, all Directors, Supervisors and relevant employees have confirmed their compliance with the required standards set out in the written guidelines.

THE BOARD

According to the Articles of Association, the Board of the Company consists of nine Directors. During the reporting period, the term of the sixth session of the Board of the Company had expired. As considered and approved at the 43th meeting of the sixth session of the Board of the Company held on 28 May 2019 and the 2018 annual general meeting held on 25 June 2019, the seventh session of the Board of the Company was elected. As of the date of this report, the composition of the seventh session of Board of the Company is as follows:

Executive Directors:

Mr. Lu Dongliang	(Chairman, re-appointed on 25 June 2019)
Mr. He Zhihui	(re-appointed on 25 June 2019)
Mr. Jiang Yinggang	(re-appointed on 25 June 2019)
Mr. Zhu Runzhou	(re-appointed on 25 June 2019)

Non-executive Directors:

Mr. Ao Hong	(re-appointed on 25 June 2019)
Mr. Wang Jun	(re-appointed on 25 June 2019)

Independent Non-executive Directors:

Ms. Chen Lijie	(re-appointed on 25 June 2019)
Mr. Hu Shihai	(re-appointed on 25 June 2019)
Mr. Lie-A-Cheong Tai Chong, David	(re-appointed on 25 June 2019)

The term of the seventh session of the Board of the Company shall be expired until the Directors of the eighth session of the Board are elected at the 2021 annual general meeting of the Company by the end of June 2022. However, given that Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David, were elected as the independent non-executive Directors of the Company in February 2015, June 2015 and December 2015, respectively, according to the relevant requirements that the term of independent directors shall not exceed six years, the term of the above three independent non-executive Directors will expire successively in 2021, and then the Company will elect new independent non-executive Directors.

The Board of the Company confirmed that it has received the annual written confirmation of independence from each independent non-executive Director pursuant to Rule 3.13 of the Hong Kong Listing Rules, and after careful consultation, it considered that Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David were all independent.

The Directors currently serving in the Company are experts in their respective fields and have deep knowledge and rich experience in metal mining, energy, corporate management, finance, law, financial affairs and capital operation. All Directors of the Company have performed their duties diligently for the interests of the Company and shareholders in accordance with relevant laws, rules and the Articles of Association.

The duties of the Board of the Company include: deciding on the Company's business plans and investment proposals, formulating the Company's profit distribution and loss recovery proposals; formulating the Company's debt and finance policies, and the issuance of bonds, etc.; determining plans for material acquisitions or disposals as well as mergers, demergers and dissolution of the Company; determining the establishment of internal management department and branch of the Company; appointment and dismissal of senior management; formulating basic management system of the Company; formulation the share incentive plan; deciding on the Company's external investment, purchase or sale of assets, equity and other capital operation plans within the scope of the authorization of general meeting, and organizing the convening of general meeting and implementing the resolutions of general meeting, etc.. Details of the functions of the Board are set out in the Articles of Association. Please refer to the "Articles of Association of Aluminum Corporation of China Limited" and the "Rules of Procedures for the Board of Directors of Aluminum Corporation of China Limited" under "Listing Announcements" on the page of "Investor Relations" on the website of the Company.

In 2019, the Board of the Company held a total of twelve meetings (including nine physical meetings and three telecommunication meetings), and reviewed and approved 51 proposals. The content of the proposals mainly involved the Company's periodic reports, annual corporate social responsibility report, annual internal control report, annual profit distribution plan, production plan and financial budget, issuance of debt financing instruments, providing guarantees for affiliated companies, annual target remuneration for Directors, Supervisors and senior management of the Company, reappointment of an accounting firm, nomination of candidates for Directors of the seventh session of Board of the Company, election of the chairman of the seventh session of the Board of the Company and members of the respective professional committees of the Board, appointment and dismissal of senior management, changes in the Company's accounting policies, amendments to the Articles of Association and the rules of procedures for the general meeting, the Board meeting and the Supervisory Committee meeting, related-party transactions and acquisitions, disposal of equity or assets, and other capital operations. The details of the meetings are as follows:

Date of Meeting	Session	Type of Meeting
2019.01.22	The 37th meeting of the sixth session of the Board	Physical meeting
2019.02.20	The 38th meeting of the sixth session of the Board	Physical meeting
2019.02.21	The 39th meeting of the sixth session of the Board	Telecommunication meeting
2019.03.21	The 40th meeting of the sixth session of the Board	Telecommunication meeting
2019.03.28	The 41th meeting of the sixth session of the Board	Physical meeting
2019.04.29	The 42th meeting of the sixth session of the Board	Physical meeting
2019.05.28	The 43th meeting of the sixth session of the Board	Telecommunication meeting
2019.06.25	The 1st meeting of the seventh session of the Board	Physical meeting
2019.08.27	The 2nd meeting of the seventh session of the Board	Physical meeting
2019.10.29	The 3rd meeting of the seventh session of the Board	Physical meeting
2019.11.21	The 4th meeting of the seventh session of the Board	Physical meeting
2019.12.10	The 5th meeting of the seventh session of the Board	Physical meeting

In addition to the above Board meetings, the Board of the Company convened and organised 4 general meetings in 2019, including 1 annual general meeting and 3 extraordinary general meetings. A total of 34 proposals (including those voted separately) were considered and approved. Please refer to the "General Meeting" in this section for details about the general meetings.

In 2019, attendances of all Directors at the Board meetings and general meetings were as follows:

Name of Director	Required attendance at physical meetings	Actual attendance	Attendance rate of physical meetings (%)	Required attendance at telecommunication meetings	Actual attendance	Attendance rate of telecommunication meetings	Required attendance at general meetings	Actual attendance	Attendance rate of general meetings (%)
Yu Dehui (resigned) Note 1	2	1	50	0	0	N/A	1	0	0
Lu Dongliang Note 2	9	7	77.78	3	3	100	4	4	100
He Zhihui Note 3	6	5	83.33	1	1	100	2	2	100
Jiang Yinggang Note 4	9	8	88.89	3	3	100	4	4	100
Zhu Runzhou Note 5	9	7	77.78	3	3	100	4	3	75
Ao Hong Note 6	9	3	30	3	3	100	4	1	25
Wang Jun	9	9	100	3	3	100	4	4	100
Chen Lijie Note 7	9	7	77.78	3	3	100	4	2	50
Hu Shihai	9	9	100	3	3	100	4	4	100
Lie-A-Cheong Tai Chong, David Note 8	9	8	88.89	3	3	100	4	4	100

Note 1: Mr. Yu Dehui resigned as the chairman and the executive Director of the Company on 21 February 2019, and the Company held a total of two Board meetings and 1 general meeting from 1 January 2019 up to his resignation. Mr. Yu Dehui didn't attend the 37th meeting of the six session of the Board of the Company held on 22 January 2019 due to other major business affairs, and he entrusted Mr. Ao Hong as his alternate to attend the meeting and vote according to his expressed intention.

Note 2: Mr. Lu Dongliang didn't attend the 3rd meeting of the seven session of the Board of the Company held on 29 October 2019 and the 4th meeting of the seven session of the Board on 21 November 2019 due to other major business affairs. For such two meetings, Mr. Lu Dongliang entrusted Mr. He Zhihui as his alternate to attend the meetings and vote according to his expressed intention.

Note 3: Mr. He Zhihui has been serving as an executive Director of the Company since 29 April 2019, and the Company held 7 Board meetings and 2 general meetings from the date of his appointment up to 31 December 2019. Mr. He Zhihui didn't attend the 42rd meeting of the six session of the Board of the Company held on 29 April 2019 due to other major business affairs, and he entrusted Mr. Lu Dongliang as his alternate to attend the meeting and vote according to his expressed intention.

Note 4: Mr. Jiang Yinggang didn't attend the 3rd meeting of the seven session of the Board of the Company held on 29 October 2019 due to other major business affairs, and he entrusted Mr. Zhu Runzhou as his alternate to attend the meeting and vote according to his expressed intention.

Note 5: Mr. Zhu Runzhou didn't attend the 4th meeting of the seven session of the Board of the Company held on 21 November 2019 and the 5th meeting of the seven session of the Board on 10 December 2019 due to other major business affairs. For such two meetings, Mr. Zhu Runzhou entrusted Mr. Jiang Yinggang as his alternate to attend the meetings and vote according to his expressed intention.

Note 6: Mr. Ao Hong didn't attend the 41st meeting of the six session of the Board of the Company held on 28 March 2019, the 42nd meeting of the six session of the Board held on 29 April 2019 and the 1st meeting of the seven session of the Board held on 25 June 2019 due to other major business affairs. For such three meetings, Mr. Ao Hong entrusted Mr. Lu Dongliang as his alternate to attend the meetings and vote according to his expressed intention. Mr. Ao Hong didn't attend the 3rd meeting of the seven session of the Board of the Company held on 29 October 2019 due to other major business affairs, and he entrusted Mr. He Zhihui as his alternate to attend the meeting and vote according to his expressed intention. Mr. Ao Hong didn't attend the 4th meeting of the seven session of the Board of the Company held on 21 November 2019 and the fifth meeting of the seven session of the Board held on 10 December 2019 due to other major business affairs. For such two meetings, Mr. Ao Hong entrusted Mr. He Zhihui and Mr. Lu Dongliang as his respective alternate to attend the meetings. However, only one resolution in relation to a connected transaction between the Company and Chinalco was considered at each of such two meetings, for which Mr. Ao Hong, as a related Director who also has served in Chinalco, should have abstained from voting on the resolution.

Note 7: Ms. Chen Lijie didn't attend the 38th meeting of the six session of the Board of the Company held on 20 February 2019 and the 42nd meeting of the six session of the Board held on 29 April 2019 due to other major affairs. For such two meetings, Ms. Chen Lijie entrusted Mr. Hu Shihai as her alternate to attend the meetings and vote according to her expressed intention. Ms. Chen Lijie didn't attend the 2019 first extraordinary general meeting of the Company held on 20 February 2019 and the 2019 second extraordinary general meeting held on 29 April 2019 due to other major affairs.

Note 8: Mr. Lie-A-Cheong Tai Chong, David didn't attend the 2nd meeting of the seven session of the Board of the Company held on 27 August 2019 due to other major affairs, and he entrusted Mr. Hu Shihai as his alternate to attend the meeting and vote according to his expressed intention.

In 2019, the independent non-executive Directors of the Company did not raise any objection or abstain from the proposals proposed by the Company for review by the Board.

The Company generally formulates the plans for the Board and general meetings and major topics of the meetings earlier for half a year, and informs them to all Directors to facilitate the Directors' schedule and ensure that each Director has the opportunity to raise matters for discussion and being included in the agenda of the Board meetings; for the matters which are required temporarily for consideration by the Board, the Company also communicates and reports with the Directors in advance and arranges the time reasonably so that the Directors have sufficient time to review the proposals and make decisions.

The chairman was responsible for ensuring that the Directors perform their requisite duties and obligations, and maintaining effective operation of the Board, as well as ensuring timely discussion and consideration of all significant matters of the Company needed to be reported to Directors or submitted to the Board. The chairman has separately discussed with the non-executive Directors to fully understand their opinions and advices on the operation and development of the Company and the work of the Board.

The management of the Company reports to the Board on the Company's production and operation, the implementation of matters authorized by general meetings and the Board, and the progress of major contracts and capital operation projects signed by the Company. The Board also oversees the management's work to ensure the Board can keep abreast of the Company's actual situation in a timely manner and thus guarantee the interests of the Company and its shareholders as a whole.

The total pretax remuneration received by Directors from the Company, including the basic salary and performance-linked salary in 2019 amounted to RMB3.64 million, among which independent non-executive Directors are only entitled to receive director's fees but no other remuneration. The remuneration of each Director for the year is set out in Note 30 to the consolidated financial statements. As of 31 December 2019, no share appreciation rights scheme had been adopted by the Company.

Other than their appointments in the Company, none of the Directors, Supervisors or the senior management had any financial, business, family or other significant relationships with each other. Other than their respective service contracts, none of the Directors or the Supervisors had any significant personal interest, directly or indirectly, in any transaction, arrangement or contract of significance entered into by the Company or any of its subsidiaries during 2019.

CHAIRMAN AND CHIEF EXECUTIVE PRESIDENT

In order to ensure a balance of power and authority and avoid undue concentration of power, the chairman and president of the Company are two explicit defined separate positions, which are acted by different individuals with clear and definite scope of official duty. In 2019, the position of chairman of the Company has been served by Mr. Yu Dehui (resigned on 21 February 2019) and Mr. Lu Dongliang (elected as the chairman of the sixth session of the Board of the Company on 21 February 2019 and re-appointed as the chairman of the seventh session of the Board of the Company on 25 June 2019), the position of president has been served by Mr. Lu Dongliang (appointed on 13 February 2018 and resigned on 21 February 2019) and Mr. He Zhihui (appointed on 21 February 2019).

As a legal representative of the Company, the chairman presides over the Board, aiming to ensure that the Board is acting in the best interests of the Company, operates effectively, duly performs its responsibilities and engages in discussions of significant and appropriate matters, as well as Director's access to accurate, timely and clear information. On the other hand, the president heads the management and is responsible for the daily operation of the Company, including the implementation of policies adopted by the Board and decision-making matters, and reporting to the Board in respect of the overall operation of the Company.

IMPLEMENTATION OF SHAREHOLDERS' RESOLUTIONS BY DIRECTORS

During the year, all Board members of the Company implemented the shareholders' resolutions and completed all matters delegated by the general meetings in accordance with provisions of the relevant laws and regulations and the Articles of Association. The chairman of the Company reported the production and operation of the Company, and the progress and completion of significant matters decided by general meetings to the shareholders at the general meeting of the Company.

DIRECTOR'S RECEIPT OF THE COMPANY'S INFORMATION AND TRAINING

The Company's Board Office offered comprehensive services to the Directors and provided all Directors with sufficient information in a timely manner. The Board Office sent Directors' Newsletter (《董事通訊》) to the Directors every month to inform the Directors about the industry, the current development of the Company and the latest information. It organises the Company's external directors to conduct on-site surveys of subsidiaries twice a year, enables them be familiar with the production process of the enterprise, and understand the production and operation and management status of the enterprise, and the progress of the Company's major investment projects. The Board Office also checked the latest amendments of the laws, regulations and regulatory rules of securities at any time to ensure that the Directors, Supervisors and senior management of the Company are able to fulfill their duties in accordance with laws and regulations. It organises Directors, Supervisors and senior management of the Company to participate in relevant securities business training to ensure that they obtain the corresponding qualifications and complete the annual training plan as required by regulatory authorities. In 2019, all Directors of the Company have participated in or educated themselves about continuous professional trainings with relevance to their roles and duties to develop and refresh their knowledge and skill to ensure that they continue to make relevant contribution to the Board with comprehensive information as necessary. The detailed trainings received by the Directors of the Company in 2019 is as follows:

Name of Director	Training (Note)
Yu Dehui (resigned)	B
Ao Hong	B
Lu Dongliang	A, B
He Zhihui	A, B
Zhu Runzhou	B
Jiang Yinggang	B
Wang Jun	A, B
Chen Lijie	A, B
Hu Shihai	A, B
Lie-A-Cheong Tai Chong, David	A, B, C

Note:

A. Training for Directors, Supervisors and senior management organised by the Securities Regulatory Authorities

B. Self-study on the domestic and foreign securities laws and regulations

C. Participation in trainings organized by other domestic and foreign institutions

FUNCTIONS OF CORPORATE GOVERNANCE OF THE BOARD

The followings are corporate governance functions performed by the Board which were implemented by the special committees thereof:

(a) Formulation and review of the policies and practice on corporate governance of the Company;

(b) Review and supervision on the training and continuous professional development of the Directors and senior management;

(c) Review and supervision on the policies and practice in compliance with laws and regulatory requirements of the Company;

(d) Formulation, review and supervision on the compliance of employees and Directors with applicable Code of Conduct and Compliance Manual; and

(e) Review of the compliance of the Company with the Corporate Governance Code and Corporate Governance Report under Appendix 14 of the Hong Kong Listing Rules. The Board had supervised and reviewed the implementation of the corporate governance policies of the Company, updated and prepared documents related to the internal control of the Group as well as analyzed the compliance of the Company with the CG Code in 2019. It convened four general meetings and twelve Board meetings, and completed the relevant trainings of the Directors and Supervisors. The Board also supervised and inspected the implementation of the Board's resolutions by the management to further enhance initiatives such as the management of the investor relations.

AUDIT COMMITTEE

The Audit Committee has been established under the Board, and the duties of which mainly include reviewing the financial reports, audits of financial reports, internal control system, risk management, corporate governance and financial position of the Company, considering the appointment of independent auditors and approving audit and audit-related services, and supervising the Company's internal financial reporting procedures and management policies.

Pursuant to Rule 3.21 of the Hong Kong Listing Rules, the Audit Committee of the Company shall comprise of at least three members. During the reporting period, the Audit Committee of the sixth session of the Board of the Company consists of three independent non-executive Directors, namely Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David, among which, Mr. Lie-A-Cheong Tai Chong, David serves as the chairman of the committee. On 25 June 2019, as considered and approved at the first meeting of the seventh session of the Board of the Company, such three independent non-executive Directors were re-appointed as the members of the Audit Committee of the seventh session of the Board of the Company, among which, Mr. Lie-A-Cheong Tai Chong was re-appointed the chairman of the committee.

The Company has established work procedures for the Audit Committee for the performance of its supervisory role in auditing of the annual report. Before the external auditors commenced their annual audit, the Audit Committee reviewed the Company's financial position and negotiated with the external auditors about audit timetable for the year. Throughout the audit by the external auditors, the Audit Committee maintained communications with them at all time and ensured completion of audit within the designated timeframe. The Audit Committee further reviewed the financial report of the Company after the external auditors issued their preliminary audit opinions and passed a written resolution to submit the audited financial report to the Board of the Company for review.

The Audit Committee and the management discussed the risk management and internal control systems of the Company, so as to make sure that effective risk management and internal control systems have been established, which included considering whether or not the Company had sufficient resources with qualified and experienced staff to perform accounting, internal auditing and financial reporting duties, and whether or not relevant staff were well trained and the relevant budget was sufficient. The Audit Committee is of the view that the Company had complied with the requirements of the above corporate risk management and internal control systems during 2019.

In 2019, the Audit Committee of the Board of the Company held 8 meetings which were attended by all members of the committee (included attendance by proxy), at which 36 proposals were considered and approved. All meetings were convened and held in accordance with the relevant provisions of the "Working Rules of the Audit Committee of the Board of Directors of Aluminum Corporation of China Limited", at which the Company's periodic financial reports, internal control, risk assessment, internal and external audit work, anti-fraud work, related-party transactions and other relevant important matters were reviewed and considered. All members of the committee had performed their duties diligently and earnestly, and provided their views and recommendations on the Company's financial reporting, internal control, risk management, auditing, and related-party transactions on an independent, objective, and fair basis.

Minutes of each meeting of the Audit Committee are recorded, then signed and confirmed by all members of the committee, and such minutes are filed and kept in reserve in accordance with relevant requirements.

REMUNERATION COMMITTEE

During the reporting period, the Remuneration Committee of the sixth session of the Board of the Company consists of two independent non-executive Directors namely Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David. Mr. Hu Shihai serves as the chairman of the committee. On 25 June 2019, as considered and approved at the first meeting of the seventh session of the Board of the Company, the Remuneration Committee of the seventh session of the Board of the Company consists of one non-executive Director namely Mr. Ao Hong and two independent non-executive Directors namely Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David, among which Mr. Hu Shihai serves as the chairman of the committee.

Duties of the Remuneration Committee of the Company include: to prepare the remuneration management scheme and remuneration proposal for Directors, employee representative Supervisors and senior management, and provide suggestions to the Board; to prepare measures on performance evaluation, performance assessment procedures and relevant rewards and punishments of senior management, and provide suggestions to the Board; to monitor the implementation of the remuneration system of the Company; to review senior management's fulfilment of duties and conduct performance assessment.

In 2019, the Remuneration Committee of the Board held one meeting which was attended by all members of the committee, at which the Proposal on Formulating the Remuneration Standards for Directors, Supervisors and Senior Management of the Company for 2019 was considered and approved, and the remuneration standard proposal was submitted to the Board for review. The Board of the Company adopted the remuneration standard proposal submitted by the Remuneration Committee.

All members of the Remuneration Committee have carefully studied the remuneration plan on Directors, Supervisors and senior management and are of view that the remuneration plan made by the Company is in line with the remuneration policy of the Company with reference to the remuneration for same positions of comparable enterprises (in terms of the size, industry and nature). Meanwhile, it is also based on the annual operation results of the Company, the performance of Directors and Supervisors and the performance appraisal results of senior management and is fair and reasonable. They agreed to submit the remuneration plan on Directors, employees' representative Supervisors and senior management to the Board.

Minutes of each meeting of the Remuneration Committee are recorded, then signed and confirmed by all members of the committee, and such minutes are filed and kept in reserve in accordance with relevant requirements.

NOMINATION COMMITTEE

During the reporting period, the Nomination Committee of the sixth session of the Board of the Company consists of one executive Director namely Mr. Yu Dehui (resigned on 21 February 2019), one non-executive Director namely Mr. Ao Hong and three independent non-executive Directors, namely Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David. Mr. Yu Dehui serves as the chairman of the committee. On 25 June 2019, as considered and approved at the first meeting of the seventh session of the Board of the Company, the Nomination Committee of the seventh session of the Board of the Company consists of two executive Directors namely Mr. Lu Dongliang and Mr. He Zhihui and three independent non-executive Directors namely Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David. Mr. Lu Dongliang serves as the chairman of the committee.

Duties of the Nomination Committee of the Company mainly include: to study the selection standards and procedures for Directors, senior management and members of special committees under the Board and provide suggestions to the Board; to review the qualification of candidates for Directors, senior management and members of special committees under the Board and provide advices on inspection and appointment; to assess the independence of independent non-executive Directors. At the same time, in accordance with the relevant provisions of the "Detailed Implementation Rules for the Nomination Committee under the Board of Directors", the Nomination Committee under the Board of Directors shall review the structure, number and composition of the Board of Directors at least once a year, and consider the diversity of members of the Board of Directors from various aspects (including but not limited to gender, age, professional ability, educational background and experience, etc.) based on the business model and specific needs of the Company.

According to the relevant provisions of the Articles of Association and the Rules of Procedure for the Board of Directors of the Company, the candidates for the Company's directors (other than the candidates for the Company's independent directors) shall be nominated by the Board of Directors, the Supervisory Committee and shareholders who alone or together hold 3% or more of the shares of the Company carrying voting rights and shall be decided through election by the shareholders' general meeting; the candidates for the Company's independent directors shall be nominated by the Board of Directors, the Supervisory Committee and shareholders who alone or together hold 1% or more of the shares of the Company carrying voting rights and shall be decided through election by the shareholders' general meeting; the candidates for the Company's senior management shall be nominated by the chairman or president and appointed by the Board of Directors. The Nomination Committee under the Board of Directors of the Company shall review the resumes and qualifications of candidates for Directors and senior management, and makes recommendations to the Board of Directors. In 2019, nominations of candidates for directors and senior management of the Company have been implemented in accordance with the aforementioned nomination policies.

In 2019, the Nomination Committee of the Board held 5 meetings which were attended by all members of the committee, at which five resolutions were approved, including nomination of candidates for senior management, nomination of candidates for directors and members of the Board committees, which recommended such candidates to the Board for consideration.

Minutes of each meeting of the Nomination Committee are recorded, then signed and confirmed by all members of the committee, and such minutes are filed and kept in reserve in accordance with relevant requirements.

DEVELOPMENT AND PLANNING COMMITTEE

During the reporting period, the Development and Planning Committee of the sixth session of the Board of the Company consists of two executive Directors namely Mr. Yu Dehui (resigned on 21 February 2019) and Mr. Jiang Yinggang, one non-executive Director namely Mr. Ao Hong and one independent non-executive Director namely Mr. Hu Shihai. Mr. Yu Dehui serves as the chairman of the committee. On 25 June 2019, as considered and approved at the first meeting of the seventh session of the Board of the Company, the Development and Planning Committee of the seventh session of the Board of the Company consists of three independent non-executive Directors namely Mr. Lu Dongliang, Mr. He Zhihui, Mr. Zhu Runzhou and one independent non-executive Director namely Mr. Hu Shihai. Mr. Lu Dongliang serves as the chairman of the committee.

Duties of the Development and Planning Committee include reviewing and evaluation of the Company's long-term development strategy, financial budget, investment, business operation and strategic plan of annual investment returns.

In 2019, the Development and Planning Committee of the Board held one meeting attended by all members of the committee, at which considered and approved the production guidance plan for 2019, the capital expenditure plan for 2019 and the operating plan for 2019, and submitted to the Board for consideration.

Minutes of each meeting of the Development and Planning Committee are recorded, then signed and confirmed by all members of the committee, and such minutes are filed and kept in reserve in accordance with relevant requirements.

OCCUPATIONAL HEALTH AND SAFETY AND ENVIRONMENT COMMITTEE

During the reporting period, the Occupational Health and Safety and Environment Committee of the sixth session of the Board of the Company consists of two executive Directors, namely Mr. Lu Dongliang and Mr. Jiang Yinggang and one non-executive Director, namely Mr. Wang Jun. Mr. Jiang Yinggang serves as the chairman of the committee. On 25 June 2019, as considered and approved at the first meeting of the seventh session of the Board of the Company, Mr. Lu Dongliang, Mr. Jiang Yinggang and Mr. Wang Jun were re-appointed as the members of the Occupational Health and Safety and Environment Committee of the seventh session of the Board of the Company. Mr. Jiang Yinggang serves as the chairman of the committee.

Duties of the Occupational Health and Safety and Environment Committee of the Board of the Company mainly include considering of the Company's annual planning on health, environmental protection and safety, supervision of the Company's effective implementation of the planning on health, environmental protection and safety initiatives, inquiring into serious incidents and inspecting and supervising over the handling of such incidents, as well as making recommendations to the Board on major decisions on health, environmental protection and safety etc..

No meeting was held formally by the Occupational Health and Safety and Environment Committee in 2019. However, in the daily operation of the Board, the members of the committee had fully communicated and exchanged views and recommendations on the Company's safety and environmental protection issues. The work of the committee was carried out in an orderly manner in accordance with its working rules.

SUPERVISORY COMMITTEE

During the reporting period, the composition and work of the Supervisory Committee of the Company is set out in the section "Report of the Supervisory Committee" of this annual report.

GENERAL MEETING

General meeting is the highest authority of the Company. It provides a good opportunity for direct communications and building a sound relationship between the shareholders of the Company, the Board and senior management. The Company attaches great importance to general meetings. During the reporting period, the Company convened a total of four general meetings, including one annual general meeting and three extraordinary general meetings, namely 2019 first extraordinary general meeting of the Company held on 20 February 2019, 2019 second extraordinary general meeting of the Company held on 29 April 2019, 2018 annual general meeting of the Company held on 25 June 2019 and 2019 third extraordinary general meeting of the Company held on 10 December 2019. The meetings mentioned above were held in the conference room at Headquarters of the Company, No. 62, North Xizhimen Street, Haidian District, Beijing.

A total of 34 resolutions (including those voted separately) were considered and approved at the above four general meetings, including the annual report of the Board, the annual report of Supervisory Committee, the audited financial report, annual proposal for profit allocation, annual financing plan, issue of debt financing instruments, re-appointment of auditors, provision of guarantees, connected transactions involving acquisition and disposal of assets, and election of Directors, etc. The convening, holding and voting procedures for each general meeting are legal and valid, and all the resolutions submitted at the general meetings were passed.

EXTRAORDINARY GENERAL MEETING

According to the Articles of Association of the Company, a single shareholder or any two or more shareholders together holding more than 10% of the Company's issued shares is (are) entitled to request an extraordinary general meeting or class general meeting to be convened. Such requests must specify the resolutions of the meeting in writing and must be submitted to the convener, the contact information of whom is set out in the section entitled "Inquiry to the Board" in this chapter. Shareholders should follow the Rules of Procedures for the Shareholders' Meeting of Aluminum Corporation of China Limited set out in the "IPO Release" under the section of "Investors Relations" on the website of the Company.

PROPOSALS AT THE GENERAL MEETING

According to the Articles of Association of the Company, a single shareholder or any two or more shareholders together holding more than 3% of the Company's issued shares is (are) entitled to submit additional proposals to the convener by written request ten working days prior to the relevant general meeting. The contact information of the convener is set out in the section entitled "Inquiry to the Board" in this chapter. Shareholders should follow the Rules of Procedures for the Shareholders' Meeting of Aluminum Corporation of China Limited as set out in the "Listing Announcements" under the section of "Investors Relations" on the website of the Company.

In 2019, in accordance with relevant requirements, Chinalco, the controlling shareholder of the Company, issued a written letter to the convener of general meeting (being the Board of the company) to propose an interim proposal before the 2019 first extraordinary general meeting, 2019 second extraordinary general meeting, 2018 annual general meeting and 2019 third extraordinary general meeting, and all of the interim proposals were considered and approved.

INQUIRY TO THE BOARD

For any inquiry to the Board, please contact the Board Office at 12B/F, Chalco Building, No. 62 North Xizhimen Street, Haidian District, Beijing (email: IR@chalco.com.cn).

TRAININGS FOR THE COMPANY SECRETARY

The company secretary (secretary to the Board) is responsible for organizing and completing procedures relating to Board meetings and general meetings, coordinating and arranging information disclosure, dealing with investor relations and helping maintain smooth communications among the management, Directors and shareholders. During the reporting period, Mr. Zhang Zhankui, the company secretary (secretary to the Board) resigned on 20 February 2019, and Mr. Wang Jun was appointed as the company secretary (secretary to the Board) at the 38th meeting of the sixth session of the Board of the Company on the same day. Mr. Wang Jun is a full-time employee of the Company, and participated in the qualification training to secretary to the Board held by the Shanghai Stock Exchange in March 2019 and obtained the qualification certificate of secretary to the Board. Mr. Wang Jun was also a joint member of the Hong Kong Institute of Chartered Secretaries. In 2019, Mr. Wang Jun has completed no less than 15 hours of relevant professional training.

INVESTOR RELATIONS

The Company has established a designated department for investor relationship, which is responsible for matters concerning investor relationship. The Company's management maintains close communications with investors, analysts and the media by various means including roadshows, meetings, individual interviews, group visits to the Company and corporate research, thereby further increasing their recognition of the Company, and making the Company obtain a recognition from investors and maintaining its image in the capital market.

In 2019, the Company conducted the following activities on investor relations:

Routine Investors Reception

- The Company received 224 visits from 42 batches of domestic and overseas institutional investors and analysts; and held 6 telephone meetings with 17 participants and answered approximately 900 telephone calls from investors and analysts.
- The Company participated in 10 large-scale investor summits, during which a total of 45 investor meetings were held with 127 investors.

Results Presentations and Roadshows

- The Company held 4 annual, half-year and quarterly results presentations, attracting 191 investment institutions and 284 investors and analysts.
- The Company carried out annual and interim roadshows in Beijing, Shanghai, Shenzhen, Hong Kong, Singapore and Europe, respectively, during which a total of 90 investor meetings were held with about 285 investors.

Corporate Research Activities

- In June 2019, 24 well-known domestic and overseas investment institutions and 26 investors and analysts carried out researches on Zunyi Aluminum
- In November 2019, a team of 10 investors from Morgan Stanley conducted researches on Chalco Shandong

SSE E-interactive Communications

- In 2019, the Company answered 36 questions raised by investors through the E-interactive platform of Shanghai Stock Exchange.
- On 18 July 2019, the Company participated in the "investors open day organized by listed companies in Beijing for 2019" and immediately answered 17 questions raised by investors through the SSE E-interactive platform.

Through the above work, the results in structural adjustment, transformation and upgrading, cost reduction and efficiency enhancement as well as reform of mechanisms carried out by the Company in recent years and the strengthening of the cost competitiveness and the continuous improvement of results of the Company in recent years have been generally recognized by investors. The Company's position in the capital market has been further boosted. In February 2019, the A shares of the Company were added to the MSCI China A Onshore Index. In June 2019, the A shares of the Company were included in the FTSE Global Equity Index Series. In addition, the Company has been awarded various honors in the capital market, including:

At the 2019 third extraordinary general meeting of the Company held on 10 December 2019, it was considered and approved the resolutions for the amendments to the Articles of Association, the Rules of Procedure for the General Meeting, the Rules of Procedure for the Board of Directors, and the Rules of Procedure for the Supervisory Committee. Such details are set out in the section of "Significant Events" section.

INFORMATION DISCLOSURE

The Company has always been upholding the high sense of responsibility to investors and discloses information in a true, accurate, complete, timely and fair manner in strict accordance with the listing rules of the Shanghai Stock Exchange, the Hong Kong Stock Exchange and the New York Stock Exchange. In 2019, the Company disclosed a total of 195 A-share announcements and related documents (including periodic reports) on the Shanghai Stock Exchange, and a total of 287 H-share Chinese and English announcements and relevant documents (including periodic reports) on the Hong Kong Stock Exchange. On the New York Stock Exchange, it disclosed a total of 119 U.S. stock report 20-F and 6-K announcements. In 2019, the company obtained a Grade A evaluation of information disclosure from the Shanghai Stock Exchange.

The Company attaches consistent importance to information disclosure and cautiously cope with the proposed information disclosure, especially sensitive information that is likely to cause price and market fluctuation, enabling investors to obtain information of the Company in a timely, accurate and fair manner to minimize investors' investment risks. The Company has formulated Management Measures of Information Disclosure of Aluminum Corporation of China Limited (《中國鋁業股份有限公司信息披露管理制度》) and Rules Governing Inside Information and Persons with Knowledge Thereof of Aluminum Corporation of China Limited (《中國鋁業股份有限公司內幕信息及知情人管理制度》), and such measures strictly specify the process of information screening, review, release and usage, and the provisions on persons with knowledge of inside information including registration and filing, confidentiality and punishment.

The general approval flow of the proposed information disclosure of the Company are in due order of the Board Office, responsible personnel of business units related to the announcement, representative for the Company's securities related affairs, the company secretary (secretary to the Board), president, chairman and the Board (as authorized). Upon approval, the information manuscript will not be disclosed until executed by representative for the Company's securities related affairs and the company secretary (secretary to the Board).

Chairman of the Company takes primary responsibility for information disclosure; the Board of the Company is the management organ of information disclosure; the company secretary (secretary to the Board) is in charge of work regarding information disclosure management in the ordinary course of business of the Company; and Office of the Board is the routine executive organ of information disclosure of the Company.

The Supervisory Committee of the Company reviews and supervises the work of information disclosure of the Company on a regular or occasional basis. The Board of the Company conducts self-assessment on annul information disclosure and includes the assessment results in the assessment report on internal control of the Company.

In 2020, the Company will continue to implement its corporate governance in accordance with laws and regulations, further improve the corporate governance systems of the Company, continuously improve the level of corporate governance, continue to strengthen internal control, with the goal of protecting the interests of the Company and its shareholders to maintain the Company's continuous, stable and healthy development.

MEETINGS OF THE MANAGEMENT

The management of the Company is responsible for implementation of daily production and operation management and strategy of the Company, implementation of board resolutions, and reporting to the Board. Its main functions include: presiding over the daily production and operation management of the Company; organising and implementing the Board resolutions, corporate development strategies, and annual business plans, investment plans, financial budget plans, etc.; formulating and organising to implement performance appraisal and salary incentives within the scope authorized by the Board.

In principle, the Company holds weekly presidential meetings chaired by the president and attended by management of the Company, and presidential office meeting chaired by other senior management in charge of different businesses of the Company and attended by heads of relevant business departments to discuss and make decisions on the organization and implementation of the matters during the process of the production and operation of the Company and financial management. In addition, the Company organised annual and mid-year work conferences after the end of the previous year and the end of the semi-annual period, respectively. The management of the Company, including managers of branches (subsidiaries) and heads of headquarter departments, attended the meetings to discuss the business of segments of the Company, summarize and deploy annual and semi-annual work. The meetings have facilitated the organization, coordination, communication and supervision on the commencement and implementation of the Company's various operations.

In 2019, the management of the Company performed its duties with due diligence, and ensured the effective implementation of the Company's business strategy and the smooth development of its various businesses, and achieved good results.

RISK MANAGEMENT AND INTERNAL CONTROL

The objectives of risk management and internal control are to give a reasonable assurance that the Company's operation and management is lawful and compliant, that the assets are safe and that the financial reporting and related information are true and complete; to improve the operational efficiency and effectiveness; and to facilitate the achievement of the Company's development strategy. Internal control has its inherent limitations, so it only provides a reasonable guarantee for the achievement of the above goals. In addition, given inapplicability of internal control due to contingent changes or deterioration in the compliance of control policies and relevant procedures, projections on the effectiveness of the internal control in the future over the assessment results of the internal control are subject to certain risks.

The responsibilities of the Board of the Company include the establishment of complete risk management and internal control and its effective implementation. As a special committee established under the Board, Audit Committee of the Company has supervised and inspected the establishment, comprehensiveness and implementation of the risk management and internal control system of the Company, and regularly discussed with the management on the implementation of the risk management and internal control in order to ensure that the Company has established an effective risk management and internal control system. The Supervisory Committee conducts supervision on the establishment and implementation of risk management and internal control by the Board. The management is responsible for arrangement and leadership of the daily operation of the risk management and internal control of the Company. The Internal Audit Department of the Company, a functional department of the Company, is responsible for the risk management and internal control of the Company and carries out the specific implementation work.

In 2019, the efforts made by the Company in respect of risk management and internal control mainly include:

1. The Company further improved the risk prevention systems (including internal control system) of the head office and subsidiaries of the Company, implemented supervision and guidance for companies with an incomplete system and improved the risk prevention and control systems of enterprises, so as to proactively facilitate the full coverage of risk prevention and control systems (including internal control system).

2. The Internal Audit Department of the Company randomly carried out independent unannounced inspection on internal control for the Company's subsidiaries, arranged mutual inspection on internal control for subsidiaries, and communicated with companies in terms of internal control issues and defects discovered in the inspections and urged them to proactively conduct rectification, guaranteeing the effectiveness of internal control.

3. While enhancing establishment of internal control institution and personnel training, the Company streamlined the setting of internal control institution, personnel allocation and concrete work implementation of the Internal Audit Department and affiliated enterprises of the Company, supervised the self-assessment of internal control and implemented internal control mentoring program.

4. Further efforts were exerted to promote the inclusion of risk management into enterprise operation management and innovation in respect of risk management thoughts and methods. The Company further intensified the prevention and control of major risks including safety and environmental risks, market price risks and cash flow risks, and prepared effective measures.

The Audit Committee conducts two reviews over the risk management and internal control of the Company on an annual basis. On 27 March 2019, at the 23th meeting of the Audit Committee under the sixth session of the Board of the Company, the Audit Committee reviewed the implementation of risk management and internal control of the Company in 2018 and its results as well as the work plan for 2019, approved resolutions including the 2018 Work Report on Internal Control, the 2018 Assessment Report on Internal Control, the 2018 Auditing Report on Internal Control and the 2019 Comprehensive Risk Management Report. On 27 August 2019, completion condition of the internal control assessment of the Company for the first half year of 2019 and the work arrangement of the second half year were discussed at the first meeting of the Audit Committee under the seventh session of the Board of the Company, and the Audit Committee of the Board of the Company reported to the Board for the aforesaid matters. On 28 March 2019, the 2018 Assessment Report on Internal Control, the 2018 Auditing Report on Internal Control and the 2019 Comprehensive Risk Management Report were also considered and approved at the 41th meeting of the sixth session of the Board of the Company.

On 26 March 2020, the 2019 Work Report on Internal Control, the 2019 Assessment Report on Internal Control, the 2019 Auditing Report on Internal Control and the 2020 Comprehensive Risk Management Report was considered and approved at the fifth meeting of the Auditing Committee of the seventh session of the Board. Such reports were considered and approved at the seventh meeting of the seventh session of the Board held on 26 March 2020. According to such reports, the Board of the Company concluded that in 2019, the Company's risk management and internal control systems were effectively implemented, and its internal control objectives were achieved without major and important defects in 2019; there were no material or significant defects in the internal control over the financial report and non-financial reports of the Company and Ernst & Young Hua Ming LLP, auditor of the Company, also confirmed that the Company had maintained effective internal control over financial report in all material aspects.

AUDITORS' REMUNERATION

Upon the approval at the 2018 annual general meeting of the Company held on 25 June 2019, Ernst & Young Hua Ming LLP and Ernst & Young were re-appointed by the Company as the 2019 domestic and international auditors of the Company. Ernst & Young Hua Ming LLP is mainly responsible for domestic and the United States annual report of the Company; Ernst & Young is mainly responsible for Hong Kong annual report of the Company. Ernst & Young is a certified public accountant firm registered in the Hong Kong Institute of Certified Public Accountant.

In 2019, the total remuneration for audit services provided by Ernst & Young Hua Ming LLP and Ernst & Young to the Group was RMB25.44 million, including: the overall remuneration of RMB22.72 million for domestic and overseas audit services of annual report and internal control audit services and the remuneration of RMB2.72 million of audit services for other projects. In addition, the remuneration for non-audit services provided by Ernst & Young Hua Ming LLP and Ernst & Young to the Group was RMB2.39 million in 2019, mainly including: issuance of comfort letters for the reasonableness of the parameters assumptions under income method in the valuation reports for disposal of 60% equity interest in Ningxia Fenghao Electricity Allocation and Sales Co., Ltd.* (寧夏豐昊配售電有限公司) by Chalco Energy and the Company's capital contribution to China Rare Metals and Rare Earths Company Ltd.* (中國稀有稀土股份有限公司) by gallium assets, issuance of capital verification report for the additional share capital in respect of acquisition of assets by the Company by issuing shares, provision of consulting services for Zhongzhou Aluminum and its subsidiaries and acting as a consultant for the revision of the Company's accounting manual.

DIRECTORS' AND AUDITORS' ACKNOWLEDGMENT

All Directors acknowledged their responsibility for preparing the accounts for the year ended 31 December 2019. Auditor's reporting responsibilities are set out in the independent auditor's report on page 182 to 184.

COMPLIANCE AND EXEMPTION OF CORPORATE GOVERNANCE OBLIGATIONS IMPOSED BY NEW YORK STOCK EXCHANGE

Based on its listing rules, New York Stock Exchange (“**NYSE**”) imposed a series of corporate governance standards for companies listed on the NYSE. However, NYSE has granted permission to listed companies of foreign issuers to follow their respective “home country” practice and has granted waivers for compliance with corporate governance standards under NYSE listing rules. One of the conditions for such waiver is for the listed company to disclose in its annual report how the corporate governance practices in its “home country” differ from those followed by companies under NYSE listing standards.

The Company had compared the corporate governance standards generally adopted by the companies incorporated in the PRC (including the Company) and the standards developed by NYSE, as follows:

INDEPENDENT DIRECTORS CONSTITUTING THE MAJORITY

NYSE requires that the board of a listed company must comprise a majority of independent directors. There is no identical corporate governance requirement in the PRC. During the reporting period, the Board of the Company comprises three independent Directors and six non-independent Directors, which is in compliance with the requirement by the PRC securities regulatory authorities that the board of a listed company shall comprise at least one-third of independent directors.

CORPORATE GOVERNANCE COMMITTEE

NYSE requires a listed company to establish a Corporate Governance Committee under the board which comprises entirely of independent directors. The Corporate Governance Committee shall be co-established with the Nomination Committee and have a written articles of association. The Corporate Governance Committee is responsible (i) for recommending to the board a set of corporate governance guidelines applicable to the corporation; and (ii) for supervising the operation of the board and the management. The Corporate Governance Committee shall also be subject to evaluation annually.

Like most of the other companies incorporated in the PRC, the Company believes that corporate governance measures are of critical importance and should be implemented by the Board. The Company accordingly does not separately maintain a Corporate Governance Committee.

1. CORPORATE GOVERNANCE

The Company has strictly complied with the requirements of the Company Law, the Securities Law of the People's Republic of China, relevant provisions of the CSRC, Rules Governing the Listing of Stocks on Shanghai Stock Exchange and the Hong Kong Listing Rules and seriously performed its governance obligations in line with the relevant requirements of the CSRC. The Company has also strictly complied with requirements on corporate governance under the Hong Kong Listing Rules.

The Company will continue to strictly comply with the requirements of the relevant regulatory bodies including the CSRC, Beijing Securities Regulatory Bureau, the Shanghai Stock Exchange and the Hong Kong Stock Exchange. The Company will continue to enhance its corporate governance measures in compliance with regulations and take initiatives to further enhance the corporate governance and internal control system of the Company. Aiming at protecting the interest of shareholders of the Company, the Company will maintain consistent, stable and sound developments and contribute to the society and its shareholders by means of its satisfactory performance results. The Company will also continue to comply with the requirements on corporate governance under the Hong Kong Listing Rules.

Since its incorporation, the Company has completely separated its business, staff, assets, organization and finance from its controlling shareholder. The Company has its independent and complete business and its own operations.

2. ACQUISITIONS

In 2019, the Company had no material acquisition required to be disclosed.

3. TRUST ARRANGEMENT

In 2019, the Company had no trust arrangement required to be disclosed.

4. SUB-CONTRACTING

In 2019, the Company had no sub-contracting arrangement required to be disclosed.

5. CHARGE AND PLEDGES

As at 31 December 2019, the Group charged and pledged assets with a total amount of RMB7,283 million, including property, plant and equipment, land use rights, intangible assets, investment in associates, and trade and notes receivables for bank borrowings. In the meantime, the Group also obtained certain bank borrowings by pledging its contractual rights to charge users for electricity generated and investment in a subsidiary. For details, please refer to note 24 to the financial statements.

6. GUARANTEES

On 25 December 2016, Ningxia Energy, a controlled subsidiary of the Company, entered into a guarantee contract with China Construction Bank Yinchuan Xicheng Branch, providing a third-party joint and several liability for RMB35 million out of RMB70 million, the aggregate amount of project loan of Ningxia Tian Jing Shen Zhou Wind Power Co., Ltd. (寧夏天淨神州風力發電有限公司) (50% of its equity interest was previously held by Ningxia Energy, which was fully transferred to Ningxia Yinxing Energy Co., Ltd. (寧夏銀星能源股份有限公司), a controlled subsidiary of Ningxia Energy, in 2014) with a loan term of 14 years. As of 31 December 2019, the balance of the guarantee provided by Ningxia Energy amounted to RMB12 million.

As of 31 December 2019, the balance of the guarantee mutually provided between Ningxia Energy, a controlled subsidiary of the Company, and its subsidiaries amounted to RMB2,755 million.

In October 2016, Chalco Hong Kong and its certain subsidiaries provided guarantee for senior perpetual bonds of USD500 million issued by Chalco Hong Kong Investment Company Limited. In September 2018, Chalco Hong Kong provided guarantee for senior perpetual bonds of USD400 million issued by Chalco Hong Kong Investment Company Limited. As of 31 December 2019, the balance of the guarantee provided by Chalco Hong Kong and its certain subsidiaries amounted to USD900 million (equivalent to approximately RMB6,327 million).

In February 2015, the Company entered into a guarantee contract with the Kunming Branch of Ping An Bank, pursuant to which the Company would provide guarantee in respect of a loan of up to RMB1,000 million in total in proportion to its 60% shareholding for its controlled subsidiary Guizhou Huajin. The guarantee period was two years from the date of expiry of the term for repayment of each loan under the principal contract. As of 31 December 2019, the balance of guarantee provided by the Company to Guizhou Huajin amounted to RMB6 million.

In March 2017, Baotou Aluminum, a wholly-owned subsidiary of the Company, entered into a maximum financial guarantee agreement (《最高額保證合同》) with Baotou Branch of Shanghai Pudong Development Bank, pursuant to which Baotou Aluminum would provide guarantee in respect of financing up to RMB2,000 million in total for its controlled subsidiary Inner Mongolia Huayun. The guarantee period was two years from the date of expiry of the term for repayment of each loan under the principal contract. As of 31 December 2019, the balance of guarantee provided by Baotou Aluminum to Inner Mongolia Huayun amounted to RMB1,250 million.

In April 2018, Shandong Huayu, a controlled subsidiary of the Company, entered into a guarantee contract with Linyi Luozhuang Sub-branch of China Minsheng Bank, pursuant to which Shandong Huayu would provide guarantee in respect of a loan of RMB100 million for its controlled subsidiary Shandong Yixing Carbon New Materials Co., Ltd. (山東沂興炭素新材料有限公司) ("**Yixing Carbon**"). As of 31 December 2019, the balance of guarantee provided by Shandong Huayu to Yixing Carbon amounted to RMB17.0 million.

In October 2018, Chalco Logistics, a wholly-owned subsidiary of the Company, entered into a guarantee contract with the Shanghai Futures Exchange, pursuant to which Chalco Logistics would provide guarantee of RMB1,000 million for its controlled subsidiary Chalco Logistics Group Central International Port Co., Ltd. (中鋁物流集團中部國際陸港有限公司) ("**Central Port**"). As of 31 December 2019, the balance of guarantee provided by Chalco Logistics to Central Port amounted to RMB1,000 million.

In August 2018, Chalco Trading, a wholly-owned subsidiary of the Company, entered into a guarantee contract with the Dalian Commodity Exchange, pursuant to which Chalco Trading would provide a guarantee of RMB1,000 million for its controlled subsidiary Chalco Inner Mongolian International Trading Co., Ltd. (中鋁內蒙古國際貿易有限公司) ("**Inner Mongolian Trading**"). As of 31 December 2019, the balance of guarantee provided by Chalco Trading to Inner Mongolian Trading amounted to RMB390 million.

For the financing of Boffa mining project in Guinea, the Company provided financing guarantee for its subsidiary, Chalco Energy Holdings Limited* (中國鋁業能源控股有限公司) ("**Chalco Energy Holdings**"). As of 31 December 2019, the balance of guarantee provided by the Company to Chalco Energy Holdings amounted to RMB2,200 million.

7. ENTRUSTED ASSET MANAGEMENT AND SHORT-TERM INVESTMENTS

Details of significant short-term investments of the Group for the year subject to disclosure are set out in note 14 to the financial statements.

8. PERFORMANCE OF UNDERTAKINGS

In 2019, the Company had no undertaking required to be performed.

9. PUNISHMENTS AND RECTIFICATIONS INVOLVED BY LISTED COMPANIES AND THEIR DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, SHAREHOLDERS, AND DE FACTO CONTROLLERS

In 2019, the Company and its Directors, Supervisors, senior management, shareholders, and de facto controllers were not under any investigation, administrative punishment, and public criticism from the CSRC and public censures from stock exchanges.

10. EXPLANATION OF OTHER SIGNIFICANT EVENTS

Capital contribution to Shanxi Zhongrun and investment in construction of phase I of aluminum recycle industrial base project in Shanxi Lvliang - 500,000 tonnes of alloy aluminum project by the Company

On 28 March 2019, the Resolution in Relation to Proposed Capital Contribution to Shanxi Chalco China Resources Co., Ltd. and Investment in Phase I of Aluminum Recycle Industrial Base Project in Shanxi Lvliang - 500,000 Tonnes of Alloy Aluminum Project by the Company was considered and approved at the 41st meeting of the sixth session of the Board of the Company, pursuant to which the Board approved the Company and other shareholders to make capital contribution in cash to Shanxi Zhongrun in proportion to their respective shareholdings. Upon completion of the capital contribution, the paid-in capital received by Shanxi Zhongrun and contributed by the Company was RMB1,641,750,000 and RMB656,700,000, respectively.

Shanxi Zhongrun, a controlled subsidiary of the Company, was held as to 40% equity interests by the Company. Shanxi Zhongrun undertakes the construction and operation of aluminum recycle industrial base project in Shanxi Lvliang. The total investment in phase I of the project - 500,000 tonnes of alloy aluminum project amounted to RMB4,104,380,000, 40% of which or RMB1,641,750,000 was used as the capital of the project.

For details of the aforesaid matter, please refer to the announcement dated 28 March 2019 of the Company.

Change of accounting policies

On 29 April 2019, the Resolution on Proposed Application of New Lease Standards by the Company was considered and approved at the 42nd meeting of the sixth session of the Board of the Company, pursuant to which the Board approved the Company to adopt the new lease standards from 1 January 2019 in accordance with the relevant requirements of the International Financial Reporting Standard No. 16 - Leases and Accounting Standard for Business Enterprises No. 21 - Leases.

The new lease standards stipulate that, at the commencement date of the leasing period, the lessee shall recognize right-of-use assets and lease liabilities for leases. Meanwhile, the Company shall recognize right-of-use assets and lease liabilities according to the present value of future minimum lease payments payable (other than short-term leases and low-value asset leases for which the simplified approach is elected) for all leased assets since 1 January 2019, and separately recognize depreciation and will not recognise financing costs, with no comparable period information adjusted.

The change in lease standards increases the total assets and liabilities of the Company, resulting in an increase of RMB6,929 million in total assets and liabilities of the Company, respectively, and an increase of about 1.2 percentage points in gearing ratio as of 1 January 2019 as compared with those of 31 December 2018. It is expected that the change in accounting policies will not have a material impact on the equity attributable to the owners and net profits of the Company.

For details of the aforesaid matter, please refer to the announcement of the Company dated 29 April 2019.

Carrying out capital preservation and appreciation businesses by the Company by utilizing daily reserve fund

On 29 April 2019, the Resolution on Proposed Utilisation of Daily Reserve Fund to Carry out Capital Preservation and Appreciation Businesses by the Company was considered and approved at the 42nd meeting of the sixth session of the Board of the Company, pursuant to which the Company was approved to conduct capital preservation and appreciation businesses by utilizing daily reserve fund, with investment type including but not limited to structural deposits, monetary funds, treasury bonds buy-back and other low risks businesses, for a term of not exceeding 90 days. The balance of the funds used for capital preservation and appreciation business by the Company at any time shall not exceed RMB5 billion and may be used within the limit on a rolling basis.

For details of the above matter, please refer to the announcement of the Company dated 29 April 2019.

Amendments to the Articles of Association and the rules of procedures for shareholders' meeting, the board meeting and the supervisory committee meeting by the Company

On 28 May 2019, the Resolution in relation to the Proposed Amendments to the Articles of Association of Aluminum Corporation of China Limited, the Rules of Procedures for Shareholders' Meeting of Aluminum Corporation of China Limited and the Rules of Procedures for the Board Meeting of Aluminum Corporation of China Limited was considered and approved at the 43rd meeting of the sixth session of the Board of the Company. On the same day, the Resolution in relation to the Proposed Amendments to the Rules of Procedures for the Supervisory Committee Meeting of Aluminum Corporation of China Limited was considered and approved at the 20th meeting of the sixth session of the Supervisory Committee of the Company. On 10 December 2019, the Resolution in relation to the Proposed Amendments to the Articles of Association of Aluminum Corporation of China Limited, the Rules of Procedures for Shareholders' Meeting of Aluminum Corporation of China Limited, the Rules of Procedures for the Board Meeting of Aluminum Corporation of China Limited and the Rules of Procedures for the Supervisory Committee Meeting of Aluminum Corporation of China Limited was considered and approved at the 2019 third extraordinary general meeting of the Company.

For details of the aforesaid matter, please refer to the announcements of the Company dated 28 May 2019, the circular dated 25 October 2019 and the announcement dated 10 December 2019.

11. SIGNIFICANT SUBSEQUENT EVENTS

For other significant events after the reporting period, please refer to relevant disclosures made in note 43 to the financial statements.

Details of significant related party transactions of the Group for the year ended 31 December 2019 are set out in note 35 to the financial statements. Certain related party transactions also constitute connected transactions or continuing connected transactions under Chapter 14A of the Hong Kong Listing Rules and the Company confirms that such related party transactions have complied with applicable disclosure requirements in accordance with Chapter 14A of the Hong Kong Listing Rules. The details of the non-exempted one-off connected transactions, major exempted one-off connected transaction and non-exempted continuing connected transactions under Chapter 14A of the Hong Kong Listing Rules undertaken by the Group during the reporting period are set out below.

NON-EXEMPTED CONTINUING CONNECTED TRANSACTIONS

Set out below are the annual caps for the continuing connected transactions and the actual transaction amounts incurred by the Group in 2019. For the year ended 31 December 2019, the continuing connected transactions of the Group were calculated on an aggregated basis as follows:

		Aggregated consideration (for the year ended 31 December 2019) *(in RMB million)*	Percentage of turnover (for the year ended 31 December 2019)	Annual cap for the year 2019 *(in RMB million)*
Purchases of goods or services:				
(A)	Comprehensive Social and Logistics Services Agreement (Counterparty: Chinalco)	309	0.16%	500
(B)	General Agreement on Mutual Provision of Production Supplies and Ancillary Services (Note) (Counterparty: Chinalco)	8,903	4.68%	14,100
(C)	Mineral Supply Agreement (Counterparty: Chinalco)	22	0.01%	360

		Aggregated consideration (for the year ended 31 December 2019) *(in RMB million)*	Percentage of turnover (for the year ended 31 December 2019)	Annual cap for the year 2019 *(in RMB million)*
(D)	Provision of Engineering, Construction and Supervisory Services Agreement (Counterparty: Chinalco)	2,950	1.55%	9,500
(E)	Land Use Rights Leasing Agreement (Counterparty: Chinalco)	437	0.23%	500
(F)	Fixed Assets Leases Framework Contract (Counterparty: Chinalco)	62	0.03%	200
(G)	Financial Services Agreement (Counterparty: Chinalco Finance Co., Ltd.* (中鋁財務有限責任公司))			
	Daily cap of deposit balance (including accrued interests)	3,285	1.73%	Daily cap of deposit balance 12,000
	Daily cap of loan balance (including accrued interests)	2,065	1.09%	Daily cap of loan balance 15,000
	Other financial services	–	0%	50
(H)	Finance Lease Agreement (Counterparty: Chinalco Finance Lease Co., Ltd.* (中鋁融資租賃有限公司))	1,418	0.75%	10,000
(I)	Factoring Cooperation Agreement (Counterparty: Chinalco Commercial Factoring (Tianjin) Co., Ltd.*(中鋁商業保理(天津)有限公司))	158	0.08%	3,000
(J)	Labor and Engineering Services Framework Agreement (Counterparty: Chalco Steering Intelligent Technology Co., Ltd.* (中鋁視拓智能科技有限公司))	36	0.02%	100

	Aggregated consideration (for the year ended 31 December 2019) *(in RMB million)*	Percentage of turnover (for the year ended 31 December 2019)	Annual cap for the year 2019 *(in RMB million)*
Sales of goods or services:			
(B) General Agreement on Mutual Provision of Production Supplies and Ancillary Services (Counterparty: Chinalco) Note	14,300	7.52%	28,400
(F) Fixed Assets Leases Framework Agreement (Counterparty: Chinalco)	53	0.03%	100

Note: As considered and approved at the 2018 second extraordinary general meeting of the Company held on 11 December 2018, the annual caps for the expenditure transactions under General Agreement on Mutual Provision of Production Supplies and Ancillary Services between the Group and Chinalco for the three years from 2019 to 2021 amounted to RMB8,600 million, RMB9,300 million and RMB10,000 million, respectively, and the annual caps for the revenue transactions thereunder for the three years from 2019 to 2021 amounted to RMB17,700 million, RMB19,100 million and RMB20,700 million, respectively. At the end of the year 2018, Yunnan Metallurgical Group Co., Ltd.* (雲南冶金集團股份有限公司) ("**Yunnan Metallurgical Group**") become a subsidiary of Chinalco and the transactions in relation to mutual provision of production supplies and ancillary services between the Group and Yunnan Metallurgical Group constituted connected transactions. Based on the above, as considered and approved at the 2018 annual general meeting of the Company on 25 June 2019, the annual caps for the expenditure transactions under General Agreement on Mutual Provision of Production Supplies and Ancillary Services between the Group and Chinalco for the three years from 2019 to 2021 were revised to RMB14,100 million, RMB15,300 million and RMB17,500 million, respectively, and the annual caps for the revenue transactions thereunder for the three years from 2019 to 2021 were revised to RMB28,400 million, RMB30,800 million and RMB33,500 million, respectively. For the details of aforesaid revisions to the caps for the continuing connected transactions, please refer to announcements dated 28 March 2019 and 3 June 2019 and the supplemental circular dated 10 June 2019 published by the Company.

1. The Company has adopted effective internal control policies to daily monitor the continuing connected transactions of the Group. The Audit Committee of the Company continuously conducts strict review on the continuing connected transactions to ensure the completeness and effectiveness of the internal control measures regarding the continuing connected transactions. The independent non-executive Directors of the Company have reviewed the above transactions and confirmed:

   (i) the transactions have been entered into in the ordinary and usual course of business of the Group;

   (ii) the terms of the transactions are fair and reasonable, and are in the interest of the Company's shareholders as a whole;

   (iii) the transactions have been entered into on normal commercial terms or, where there are not sufficient comparable transactions to judge whether they are on normal commercial terms, they are on terms no less favourable than those available to or offered to independent third parties; and

   (iv) the transactions have been undertaken in accordance with the terms of relevant agreements governing such transactions.

2. Pursuant to Rule 14A.56 of the Hong Kong Listing Rules, the Board engaged the auditor of the Company to conduct a limited assurance engagement on the above continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to 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. The auditor has reported the results of their procedures to the Board stating that:

   a. nothing has come to the auditor's attention that causes the auditor to believe that the disclosed continuing connected transactions have not been approved by the Company's Board of Directors.

   b. for transactions involving the provision of goods or services by the Group, nothing has come to the auditor's attention that causes the auditor to believe that the transactions were not, in all material respects, in accordance with the pricing policies of the Company.

   c. nothing has come to the auditor's attention that causes the auditor to believe that the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions.

   d. 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 causes the auditor to believe that such continuing connected transactions have exceeded the maximum aggregate annual cap made by the Company in respect of each of the disclosed continuing connected transactions.

FURTHER INFORMATION ON THE CONTINUING CONNECTED TRANSACTIONS OF THIS YEAR

1. Continuing Connected Transactions

(A) Comprehensive Social and Logistics Services Agreement

Date of initial agreement:	5 November 2001
Date of supplemental agreement:	17 September 2018
Parties:	Chinalco as provider (for itself and on behalf of its subsidiaries) The Company as recipient (for itself and on behalf of its subsidiaries)
Term:	Three years from 1 January 2019 to 31 December 2021
Nature of transaction:	(i) Social services: public security and firefighting services, education and training, schools, hospitals and health facilities, cultural and sports undertakings, newspapers and magazines, broadcasting, printing and other relevant or similar services; and (ii) Logistics services: property management, environmental and hygiene service, greenery, nurseries, kindergartens, sanatoriums, canteens, hotels, hostels, offices, public transportation, retirement management and other relevant or similar services.

Price determination:	The prices in respect of the relevant services under the Comprehensive Social and Logistics Services Agreement will be determined with reference to comparable market prices. The comparable local market prices refer to the prices arrived at with reference to those charged or quoted by at least two independent third parties providing services with comparable scale in areas where such services were provided under normal trading conditions around that time.
Payment term:	Monthly payment

For more detailed information on this continuing connected transaction, please refer to the announcements dated 17 September 2018 and the supplemental circular dated 26 November 2018 of the Company.

(B) General Agreement on Mutual Provision of Production Supplies and Ancillary Services

Date of initial agreement:	5 November 2001
Date of supplemental agreement:	17 September 2018, 3 June 2019
Parties:	Chinalco as provider and recipient (for itself and on behalf of its subsidiaries) The Company as provider and recipient (for itself and on behalf of its subsidiaries)
Term:	Three years from 1 January 2019 to 31 December 2021

Nature of transaction:

(a) Production supplies and ancillary services provided by Chinalco to the Company

(i) Supplies: carbon products, cement, coal, oxygen, bottled water, steam, fire brick, aluminum fluoride, cryolite, lubricant, resin, clinker, aluminum profiles, copper, zinc ingot and other relevant or similar supplies;

(ii) Storage and transportation services: vehicle transportation, loading and unloading, railway transportation and other relevant or similar services;

(iii) Ancillary production services: communications, testing, processing and fabrication, engineering design, repair, environmental protection, road maintenance and other relevant or similar services

(b) Production supplies and ancillary services provided by the Company to Chinalco

(i) Products: electrolytic aluminum products (aluminum ingots) and alumina products, zinc ingot, slag, petroleum coke other relevant or similar supplies;

(ii) Supporting services and ancillary production services: water, electricity, gas and heat supply, measurement, spare parts, repair, testing, transportation, steam and other relevant or similar services

Price determination:

(1) Production supplies and ancillary services provided by Chinalco to the Company:

(a) Supplies: the price is determined with reference to the comparable local market prices. The comparable local market prices refer to the reference made to the prices charged or quoted by at least two independent third parties providing products or services with comparable scale in areas where such products or services were provided under normal trading conditions around that time;

(b) Storage and transportation services: the price is determined with reference to the contractual price, which refers to a mutually agreed price set by all relevant parties for the provision of services. Such price is equivalent to reasonable costs incurred in providing such services plus reasonable profit. Reasonable costs mainly comprise fuel costs, transportation facility fees, relevant labour costs and etc. The reasonable profit (which shall be not more than 5% of such costs) for the storage and transportation services provided by Chinalco to the Company is arrived at through arm's length negotiation between the Company and Chinalco after taking comprehensive consideration of the normal profit margin of such services provided by Chinalco to the Company, and is not higher than the profit margin charged to independent third parties. Such profit margin is considered reasonable by the Company as following the above reasons;

(c) Ancillary production services: the price is determined with reference to the contractual price, which refers to a mutually agreed price set by all relevant parties for the provision of services. Such price is equivalent to reasonable costs incurred in providing such services plus reasonable profit. Reasonable costs mainly comprise expenses for raw materials, labour costs, manufacturing fees, other indirect costs and etc. The reasonable profit (which shall be not more than 5% of such costs) for the ancillary production services provided by Chinalco to the Company is arrived at through arm's length negotiation between the Company and Chinalco after taking comprehensive consideration of the normal profit margin of such services provided by Chinalco to the Company, and is not higher than the profit margin charged to independent third parties. Such profit margin is considered reasonable by the Company as following the above principle.

(2) Production supplies and ancillary services provided by the Company to Chinalco:

(a) Products:

(i) Alumina products: the selling price is determined according to a method where both the alumina spot market price and the weighted average price of settlement price for three-month aluminum ingot futures on the Shanghai Futures Exchange weighted in proportion. The Company will consider the geographical location of the customers, the seasonality demands, the transportation costs, and other relevant factors to determine the proportion of weight to be allocated to aforementioned alumina spot market price and the weighted average price of settlement price for three-month aluminum ingot futures on the Shanghai Futures Exchange;

(ii) Electrolytic aluminum products (aluminum ingots): the trading price is determined according to the prices of futures in the current month, the weekly or monthly average spot market prices quoted on the Shanghai Futures Exchange;

(iii) Other products: the price is determined with reference to the contractual price or the comparable local market price. The contractual price refers to a mutually agreed price set by all relevant parties for the provision of products. Such price is equivalent to reasonable costs incurred in providing such products plus reasonable profit. Reasonable costs mainly comprise expenses for raw materials, labour costs, manufacturing fees and etc. The reasonable profit (which shall be not more than 5% of such costs) for other products provided by the Company to Chinalco is arrived at through arm's length negotiation between the Company and Chinalco after taking comprehensive consideration of the normal profit margin of such products provided by the Company to Chinalco, and is not lower than the profit margin charged to independent third parties. Such profit margin is considered reasonable by the Company as following the above principle. The comparable local market prices refer to the prices arrived at with reference to those charged or quoted by at least two independent third parties providing products with comparable scale in areas where such products were provided under normal trading conditions around that time.

(b) Supporting services and ancillary production services:

(i) Electricity supply: According to the provisions of relevant national laws and regulations, and based on the benchmark electricity price set up by the National Development and Reform Commission, local governments will determine their respective local electricity prices in consideration of their respective actual conditions. The price for electricity supply of the Company is determined with reference to the ongrid electricity prices and electricity sales prices proposed to be executed by enterprises set out in the notices issued by the bureau of commodity price in each province published on their websites according to the above local electricity prices from time to time;

(ii) Gas, heat and water supply, measurement, spare parts, repair, testing, transportation, steam: the price is determined with reference to the contractual price, which refers to a mutually agreed price set by all relevant parties for the provision of services. Such price is equivalent to reasonable costs incurred in providing such services plus reasonable profit. Reasonable costs mainly comprise expenses for raw materials, fuel costs, transportation facility fees, labour costs, manufacturing fees and etc. The reasonable profit (which shall be not more than 5% of such costs) for provision of a series of services including gas, heat, water supply and etc. by the Company to Chinalco is arrived at through arm's length negotiation between the Company and Chinalco after taking comprehensive consideration of the normal profit margin of such services provided by the Company to Chinalco, and is not lower than the profit margin charged to independent third parties. Such profit margin is considered reasonable by the Company as following the above principle;

(iii) Other services: the price is determined with reference to the comparable local market prices, which refer to the reference made to the prices charged or quoted by at least two independent third parties providing services with comparable scale in areas where such services were provided under normal trading conditions around that time.

Payment term:	Payment on delivery (payment shall generally be made (a) within a period of time after the delivery of the relevant products at the place designated by the purchasing party or the provision of the relevant services, and the completion of necessary inspections and internal approval procedures; or (b) after setting off the amounts due between the parties where there is mutual provision of products and services. The relevant payment term shall be no less favorable than those under comparable transactions between the Company and independent third parties.)

For more detailed information on this continuing connected transaction, please refer to the announcements dated 17 September 2018, 28 March 2019 and 3 June 2019 and the supplemental circulars dated 26 November 2018 and 10 June 2019 of the Company, respectively.

(C) Mineral Supply Agreement

Date of initial agreement：	5 November 2001
Date of supplemental agreement：	17 September 2018
Parties：	Chinalco as supplier (for itself and on behalf of its subsidiaries)

	The Company as recipient (for itself and on behalf of its subsidiaries)
Term：	Three years from 1 January 2019 to 31 December 2021
Nature of transaction:	Supply of bauxite and limestone to the Company by Chinalco; before meeting the Company's bauxite and limestone requirements, Chinalco is not entitled to provide bauxite and limestone to any third parties
Price determination：	(i) For the supplies of bauxite and limestone from Chinalco's own mining operations, at reasonable costs incurred in providing the same (which mainly comprise fuel and energy costs, labour costs, security expenses and etc.), plus not more than 5% of such reasonable costs (a buffer for surges in the price level and labour costs, which is arrived at through arm's length negotiation between the Company and Chinalco after taking comprehensive consideration of the normal profit margin of such products provided by Chinalco to the Company, and is not higher than the profit margin charged to independent third parties); and (ii) For the supplies of bauxite and limestone from jointly operated mines, at contractual price paid by Chinalco to such third parties
Payment term：	Payment on delivery (payment shall generally be made (a) within a period of time after the delivery of the relevant products at the place designated by the purchasing party or the provision of the relevant services, and the completion of necessary inspections and internal approval procedures; or (b) after setting off the amounts due between the parties where there is mutual provision of products and services. The relevant payment term shall be no less favorable than those under comparable transactions between the Company and independent third parties.)

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 17 September 2018 and the supplemental circular dated 26 November 2018.

(D) Provision of Engineering, Construction and Supervisory Services Agreement

Date of initial agreement:	5 November 2001
Date of supplemental agreement:	17 September 2018
Parties:	Chinalco as provider (for itself and on behalf of its subsidiaries) The Company as recipient (for itself and on behalf of its subsidiaries)
Term:	Three years from 1 January 2019 to 31 December 2021
Nature of Transaction:	Services provided by Chinalco to the Company include engineering design, construction and supervisory services as well as relevant research and development operations.
Price determination:	(a) Engineering design: the price is determined by comparable local market prices or through public bidding on a case by case basis. The comparable local market prices refer to the prices arrived at with reference to those charged or quoted by at least two independent third parties providing services with comparable scale in areas where such services were provided under normal trading conditions around that time. Price determination through public bidding refers to the prices determined in accordance with the public bidding and tender procedure required by the relevant supervision and administration authorities in the areas where the projects are located. The bidding price shall be controlled within the reasonable range which is close to the base price.

	(b) Construction and supervisory services: the price is determined through public bidding. In such case, the prices will be determined in accordance with the public bidding and tender procedure required by the relevant supervision and administration authorities in the areas where the projects are located. The bidding price shall be controlled within the reasonable range which is close to the base price.
	(c) Other relevant services: the price is determined with reference to the comparable local market prices, which refer to the prices arrived at with reference to those charged or quoted by at least two independent third parties providing services with comparable scale in areas where such services were provided under normal trading conditions around that time.
Payment term:	Payment shall generally be made (a) as to 10% to 20% of the contract price before the provision of the relevant services, up to a maximum of 70% of the contract price during the provision of the relevant services and as to the remaining 10% to 20% of the contract price upon successful provision of the relevant services; (b) in accordance with the prevailing market practice; or (c) in accordance with the arrangement to be agreed by the parties. The relevant payment term shall be no less favorable than those under the comparable transactions between the Company and independent third parties.

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 17 September 2018 and the supplemental circular dated 26 November 2018, respectively.

(E) Land Use Rights Leasing Agreement

Date of initial agreement：	5 November 2001
Parties:	Chinalco as landlord (for itself and on behalf of its subsidiaries) The Company as tenant (for itself and on behalf of its subsidiaries)
Term:	50 years expiring on 30 June 2051 As previously disclosed in the letter dated 27 December 2006 from Taifook Capital Limited, the then independent financial adviser to the independent board committee and independent shareholders in relation to certain continuing connected transactions, it is in the interests of the Company and the independent shareholders to have a longer lease term of the land to minimize the disruption of the Group's production and business operations arising from relocation. Given that (i) the size of the leased land and the facilities erected thereon; and (ii) the resources to be expended in establishing new production plants and related facilities, such relocation may be deemed difficult and infeasible. The Directors are of the view that it is normal business practice for contracts of this type to be of such duration.
Nature of transactions:	Pursuant to the Land Use Rights Leasing Agreement entered into between the Company and Chinalco, the Company can continue to lease relevant lands (all of which are located in the PRC) from Chinalco for the purpose of the operations and businesses of the Company and its subsidiaries.
Price determination:	The rent shall be negotiated every three years at a rate not higher than prevailing market rent as confirmed by an independent valuer.
Payment term:	Monthly payment

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 17 September 2018 and the supplemental circular dated 26 November 2018, respectively.

(F) The Fixed Assets Lease Framework Agreement

Date of initial agreement:	28 April 2015
Date of renewed agreement:	19 November 2018
Parties:	Chinalco (as both lessor and lessee) (for itself and on behalf of its subsidiaries); the Company (as both lessor and lessee)(for itself and on behalf of its subsidiaries)
Term:	Three years from 1 January 2019 to 31 December 2021
Fixed assets:	Buildings, constructions, machinery, apparatus, transportation as well as equipment, appliance or tools and other fixed assets owned by either party in relation to the production and operation.
Price determination:	The rent shall be adjusted every two years and shall not be higher than prevailing market rent as confirmed by an independent valuer. When determining the rent, the parties will also make reference to the prices charged or quoted by at least two independent third parties providing services of similar size and nature under normal trading conditions in the market around that time.
Payment term:	Monthly payment

For more detailed information on this continuing connected transaction, please refer to the announcement dated 19 November 2018 and the supplemental circular dated 26 November 2018 of the Company, respectively.

(G) Financial Services Agreement

Date of initial agreement：	26 August 2011
Date of renewed agreement：	26 October 2017
Parties：	the Company (as the recipient) (for itself and on behalf of its subsidiaries); Chinalco Finance Co., Ltd.* (中鋁財務有限責任公司) ("**Chinalco Finance**") (as the provider), a subsidiary of Chinalco
Term：	Three years from 26 October 2017 to 25 October 2020
Nature of Transaction：	Chinalco Finance agreed to provide deposit services, settlement services, credit services and miscellaneous financial services to the Group in accordance with the terms and conditions set out in the renewed financial services agreement. Within the validity period of the renewed financial services agreement, the maximum daily deposit balance (including accrued interests) of the Group on the settlement account in Chinalco Finance shall not exceed RMB12.0 billion; the maximum daily loan balance (including accrued interests) provided by Chinalco Finance to the Group shall not exceed RMB15.0 billion; the annual service fees charged by Chinalco Finance for miscellaneous financial services provided to the Group shall not exceed RMB50 million and Chinalco Finance will provide the Company with settlement services for free.

For more detailed information on this continuing connected transaction, please refer to the announcement dated 26 October 2017 and the circular dated 5 December 2017 of the Company.

(H) Finance Lease Agreement

Date of initial agreement：	27 August 2015
Date of renewed agreement：	17 September 2018
Parties：	The Company as lessee (for itself and on behalf of its subsidiaries) Chinalco Finance Lease Co., Ltd.* (中鋁融資租賃有限公司) ("**Chinalco Lease**") (as lessor), a subsidiary of Chinalco
Term：	Three years from 1 January 2019 to 31 December 2021
Nature of Transaction：	Pursuant to the finance lease framework agreement, Chinalco Lease will provide finance lease services to the Group, and at any time within the period from 1 January 2019 to 31 December 2021, the financing balance acquired by the Group from Chinalco Lease shall not exceed RMB10 billion.
Price determination：	The financing costs mainly include lease interest and commission fees, etc. The costs of finance leasing services provided by Chinalco Lease shall not be higher than the financing costs of services of same or similar nature provided by independent third party finance lease companies in the PRC (the after-tax internal rate of return shall prevail). The lease interest shall be determined with reference to the benchmark interest rates for RMB-denominated loans published by the People's Bank of China on a regular basis; if such rates are not available, then the lease interest shall be determined by reference to the rate charged or quoted by other major finance organizations for the same or similar service.

Payment term:	The Company and Chinalco Lease will, based on the actual cash flows, design flexible payment methods, including but not limited to payment of principal in equal instalments on a quarterly basis, payment of principal and interest in equal instalments on a quarterly basis, payment of principal in unequal instalments on a quarterly basis, payment of principal in equal instalments on a semi-annual basis, payment of principal and interest in equal instalments on an annual basis, etc.

For more detailed information on this continuing connected transaction, please refer to the announcement dated 17 September 2018 and the supplemental circular of the Company dated 26 November 2018, respectively.

(I) Factoring Cooperation Agreement

Date of initial agreement：	27 September 2017
Date of renewed agreement：	17 September 2018
Parties：	The Company as recipient (for itself and on behalf of its subsidiaries) Chinalco Commercial Factoring (Tianjin) Co., Ltd.*(中鋁商業保理(天津)有限公司) ("**Chinalco Factoring**") (as provider), a subsidiary of Chinalco
Term：	Three years from 1 January 2019 to 31 December 2021
Nature of Transaction：	Pursuant to the Factoring Cooperation Agreement, Chinalco Factoring shall provide factoring financing services to the Company and the cap (including factoring payment, factoring fee and charges) for the transactions between the Company and Chinalco Factoring shall not exceed RMB3 billion at any time within the term of the agreement.
Price determination：	The financing costs for the services to be provided by Chinalco Factoring to the Company shall not be higher than those charged by independent third party factoring companies in the PRC for similar services.

Payment term:	The Company and Chinalco Factoring shall design the payment methods on a flexible basis according to the specific factoring services, including but not limited to payment by the financing party to accounts receivable or by debtors to accounts receivable or both.

For more detailed information on this continuing connected transaction, please refer to the announcement dated 17 September 2018 and the supplemental circular dated 26 November 2018 of the Company, respectively.

(J) Labour Services and Engineering Services Agreement

Date of agreement：	17 September 2018
Parties：	The Company as recipient (for itself and on behalf of its subsidiaries) Chalco Steering Intelligent Technology Co., Ltd.* (中鋁視拓智能科技有限公司) ("**Chalco Steering**") (as provider), an associate of Chinalco
Term：	Three years from 1 January 2018 to 31 December 2020
Nature of Transaction：	Pursuant to the agreement, Chalco Steering shall provide the Group with engineering services and labor services such as equipment repairs, intelligent industrial design and maintenance, etc.
Price determination：	The price is determined with reference to the comparable local market prices, which refer to the reference made to the prices charged or quoted by at least two independent third parties providing services with comparable scale in areas where such services were provided under normal trading conditions around that time.
Payment term:	The Company shall make payment within three months after Chalco Steering renders its services and completes the settlement thereof.

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 17 September 2018.

ONE-OFF CONNECTED TRANSACTIONS (NON-EXEMPTED) RELATED TO ACQUISITION AND DISPOSAL OF ASSETS

1. Acquisition of Assets by Issuance of Shares and the Related-party Transaction of the Company

The Company issued 2,118,874,715 A shares to Huarong Ruitong Equity Investment Management Co., Ltd.* (華融瑞通股權投資管理有限公司), China Life Insurance Company Limited* (中國人壽保險股份有限公司), Shenzhen Zhaoping Chalco Investment Center LLP* (深圳市招平中鋁投資中心(有限合夥)), China Pacific Life Insurance Co., Ltd.* (中國太平洋人壽保險股份有限公司), China Cinda Asset Management Co., Ltd.* (中國信達資產管理股份有限公司), BOC Financial Asset Investment Co., Ltd.* (中銀金融資產投資有限公司), ICBC Financial Asset Investment Co., Ltd.* (工銀金融資產投資有限公司) and ABC Financial Asset Investment Company Limited* (農銀金融資產投資有限公司) to acquire 30.7954% equity interests in Chalco Shandong, 36.8990% equity interests in Zhongzhou Aluminum, 25.6748% equity interests in Baotou Aluminum and 81.1361% equity interests in Chalco Mining jointly held by the above eight investors.

On 20 February 2019, the shares of four target companies held by the above eight investors have been transferred and the formalities for the commercial and industrial registration of relevant changes were duly completed. The four target companies have become subsidiaries of the Company. On 25 February 2019, the share registration procedure regarding the additional shares for acquisition of assets by issuance of shares have been completed with Shanghai Branch of China Securities Depository and Clearing Corporation Limited. As of this point, transaction regarding acquisition of assets by issuance of shares of the Company has been completed.

As China Life Insurance Company Limited is a substantial shareholder of Chalco Shandong and Baotou Aluminum, it is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the Company's acquisition of the equity interests in the target companies held by China Life Insurance Company Limited by the issuance of consideration shares constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio of the transaction is higher than 5%, it shall be subject to reporting, announcement and independent shareholders' approval requirements.

For the details of the Company's acquisition of assets by issuance of shares, please refer to the circular of 2018 first extraordinary general meeting dated 31 July 2018, supplemental circular of 2018 first extraordinary general meeting dated 31 August 2018 and related announcements published.

2. Acquisition of Certain assets of Shanxi Aluminum by Shanxi New Material

On 22 January 2019, the Resolution on Proposed Acquisition of Certain Assets of Chinalco Shanxi Aluminum Co., Ltd. by Chalco Shanxi New Material Co., Ltd was considered and approved at the 37th meeting of the sixth session of the Board of the Company, which agreed that Shanxi New Material, a subsidiary of the Company, acquired certain assets of Shanxi Aluminum by a consideration of RMB177,159,400. On 30 January 2019, Shanxi New Material and Shanxi Aluminum entered into the assets transfer agreement,

As Shanxi Aluminum is a subsidiary of Chinalco, the controlling shareholder of the Company, Shanxi Aluminum is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules, and the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction contemplated exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholder's approval requirement.

For the details of the aforesaid matter, please refer to related announcements dated 22 January 2019 and 30 January 2019 of the Company, respectively.

3. Capital Contribution to Chinalco Factoring by Chalco International Trading and Chalco Logistics

On 22 January 2019, the Resolution on the Proposed Capital Contribution to Chinalco Commercial Factoring (Tianjin) Co., Ltd.* by Chalco International Trading Group Co., Ltd.* and Chalco Logistics Group Co., Ltd.* was considered and approved at the 37th meeting of the sixth session of the Board of the Company, pursuant to which the Board approved Chalco International Trading and Chalco Logistics, each being a wholly-owned subsidiary of the Company, made a capital contribution of RMB100 million in cash to Chinalco Factoring, respectively, and Chinalco Factoring will be owned as to 17.1915% by each of Chalco International Trading and Chalco Logistics. On 30 January 2019, Chalco International Trading and Chalco Logistics entered into the conditional capital contribution agreement with Chinalco Factoring and Chinalco Capital Holdings Co., Ltd.*(中鋁資本控股有限公司) ("**Chinalco Capital**"), the shareholder of Chinalco Factoring..

As Chinalco Capital is a subsidiary of Chinalco, the controlling shareholder of the Company, and thus it is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. As such, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholder's approval requirement. According to the relevant requirements of the Listing Rules of the Shanghai Stock Exchange, the proposed capital contribution to Chinalco Factoring by Chalco International Trading and Chalco Logistics shall be submitted to a general meeting for consideration. On 29 April 2019, the resolution on the aforesaid capital contribution was considered and approved at the 2019 second extraordinary general meeting.

For the details of the aforesaid matter, please refer to the announcements dated 22 January 2019 and 30 January 2019 and the circular of the 2019 second extraordinary general meeting dated 31 January 2019 of the Company, respectively.

4. Capital contribution to Chinalco Innovative Development Investment Company Limited* (中鋁創新開發投資有限公司) by the Company

On 22 January 2019, the Resolution in Relation to Proposed Capital Contribution to Chinalco Innovative Development Investment Company Limited* by the Company was considered and approved at the 37th meeting of the sixth session of the Board of the Company, pursuant to which the Board approved the Company to make a capital contribution to Chinalco Innovative Development Investment Company Limited* ("**Chinalco Innovative**") with its 100% equity interests in China Aluminum Nanhai Alloy Co., Ltd.* (中鋁南海合金有限公司) ("**Nanhai Alloy**"). The capital contribution amounted to RMB350,925,200, being the appraised value of 100% equity interests in Nanhai Alloy. Upon completion of the capital contribution, the Company acquired 19.4852% equity interests in Chinalco Innovative. On 30 January 2019, the Company entered into the capital contribution agreement with conditions precedent with Chinalco and Chinalco Innovative.

As Chinalco is the controlling shareholder of the Company and Chinalco Innovative is a subsidiary of Chinalco, Chinalco and Chinalco Innovative are connected persons of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement. According to the relevant requirements of the Listing Rules of the Shanghai Stock Exchange, the proposed capital contribution to Chinalco Innovative by the Company with its 100% equity interests in Nanhai Alloy shall be submitted to a general meeting for consideration. On 20 February 2019, the aforesaid capital contribution was considered and approved at the 2019 first extraordinary general meeting of the Company.

For details of the aforesaid matter, please refer to the announcements dated 22 January 2019 and 30 January 2019, and the supplemental circular of 2019 first extraordinary general meeting dated 31 January 2019 of the Company.

5. Acquisition of Equity Interests in Two Electricity Allocation and Sales Companies from Chalco Energy by Chinalco Environmental Protection and Energy Conservation Co., Ltd.* (中鋁環保節能集團有限公司)

On 20 February 2019, the Resolution in Relation to Proposed Acquisition of Equity Interests in Two Electricity Allocation and Sales Companies from Chalco Energy Co., Ltd. by Chinalco Environmental Protection and Energy Conservation Co., Ltd. was considered and approved at the 38th meeting of the sixth session of the Board of the Company, pursuant to which the Board approved Chalco Energy, a wholly-owned subsidiary of the Company, to transfer its 40% equity interests in Inner Mongolia Fengrong Electricity Allocation and Sales Co., Ltd.* (內蒙古豐融配售電有限公司) and 60% equity interests in Ningxia Fenghao Electricity Allocation and Sales Co., Ltd.* (寧夏豐昊配售電有限公司) to Chinalco Environmental Protection and Energy Conservation Co., Ltd.* ("**Chinalco Environmental Protection**") by way of agreement transfer at consideration of RMB20,041,300 and RMB21,531,300, respectively. On the same day, Chalco Energy and Chinalco Environmental Protection entered into the equity transfer agreements in respect of the aforesaid equity transfer.

As Chinalco Environmental Protection is a subsidiary of Chinalco, the controlling shareholder of the Company, Chinalco Environmental Protection is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement.

For details of the aforesaid matter, please refer to the announcements dated 20 February 2019 and 12 March 2019 of the Company.

6. Transfer of Electrolytic Aluminum Capacity Quota by Shanxi Huasheng to Yixin Aluminum

On 20 February 2019, the Resolution in Relation to Proposed Transfer of Electrolytic Aluminum Capacity Quota by Shanxi Huasheng Aluminum Co., Ltd. was considered and approved at the 38th meeting of the sixth session of the Board of the Company, pursuant to which the Board approved Shanxi Huasheng, a controlled subsidiary of the Company, to transfer the electrolytic aluminum capacity quota of 190,000 tonnes to Yixin Aluminum by way of agreement at a consideration (tax inclusive) of RMB950 million (the final consideration shall be subject to the valuation report issued by a professional appraisal institution and the number of the electrolytic aluminum capacity quota finally determined by the province to which it is transferred). On 28 May 2019, Shanxi Huasheng entered into the electrolytic aluminum capacity quota transfer agreement with conditions precedent with Yixin Aluminum.

As Yixin Aluminum is a subsidiary of Chinalco, the controlling shareholder of the Company, Yixin Aluminum is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement. According to the relevant requirements of the Listing Rules of the Shanghai Stock Exchange, the proposed transfer of electrolytic aluminum capacity quota by Shanxi Huasheng shall be submitted to a general meeting for consideration. On 25 June 2019, the aforesaid transfer of electrolytic aluminum capacity quota was considered and approved at the 2018 annual general meeting of the Company.

For details of the aforesaid matter, please refer to the announcements dated 20 February 2019 and 28 May 2019 and the supplemental circular of 2018 annual general meeting dated 10 June 2019 of the Company, respectively.

7. Capital Contribution to China Rare Metals and Rare Earths Company Ltd.* (中国稀有稀土股份有限公司) with Gallium Assets by The Company

On 27 August 2019, the Resolution in Relation to Proposed Capital Contribution to China Rare Metals and Rare Earths Company Ltd. with Gallium Assets by The Company was considered and approved at the second meeting of the seventh session of the Board of the Company, pursuant to which the Board approved the Company to make a capital contribution to China Rare Metals and Rare Earths Company Ltd* ("**China Rare Earth**") with the net assets and liabilities related to its gallium production line at a consideration of RMB352,848,100. Upon completion of the capital contribution, the shareholding proportion in China Rare Earth held by the Company increased from 14.62% to 23.94%. On the same day, the Company signed the capital contribution agreement with China Rare Earth.

As China Rare Earth is a subsidiary of Chinalco, the controlling shareholder of the Company, China Rare Earth is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement.

For details of the aforesaid matter, please refer to the announcements dated 27 August 2019 and 12 September 2019 of the Company.

8. Subscription for Shares by the Company of Yunnan Aluminum to Be Issued Through Non-Public Offering

On 21 November 2019, the Resolution in Relation to the Proposed Subscription for Shares by the Company of Yunnan Aluminum Co., Ltd. to be Issued through Non-Public Offering was considered and approved at the fourth meeting of the seventh session of the Board of directors of the Company, pursuant to which the Board approved the Company to subscribe for shares of Yunnan Aluminum to be issued through non-public offering with its subscription proportion not less than 5% of Yunnan Aluminum's total equity after no-public offering, and subscription amount not less than RMB1.5 billion.

On 19 December 2019, Share Subscription Agreement for non-public issued shares of Yunnan Aluminum Co., Ltd. was entered into between the Company and Yunnan Aluminum, pursuant to which the Company agreed to subscribe for 314,050,688 A shares of Yunnan Aluminum at a price of RMB4.10 per share with the total subscription amount of about RMB1.288 billion. Upon completion of the subscription, around 10.04% equity of Yunnan Aluminum is held by the Company, and Yunnan Aluminum will not become a subsidiary of the Company.

As Yunnan Aluminum is a subsidiary of Chinalco, the controlling shareholder of the Company, Yunnan Aluminum is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement. Pursuant to the Shanghai Stock Exchange Listing Rules, the proposed subscription of the Company for A shares of Yunnan Aluminum to be issued through non-public offering is requited to be considered and approved by the general meeting of shareholders. According to the relevant requirements of the Listing Rules of the Shanghai Stock Exchange, the proposed subscription for shares of Yunnan Aluminum to be issued through non-public offering by the Company shall be submitted to a general meeting for consideration. On 10 December 2019, the aforesaid subscription for shares of Yunnan Aluminum to be issued through non-public offering was considered and approved at the 2019 third extraordinary general meeting of the Company.

For details of the aforesaid matter, please refer to the announcements dated 21 November 2019 and 19 December 2019 of the Company, and the supplemental circular for 2019 third extraordinary general meeting of the Company dated 25 November 2019, respectively.

9. Capital Contribution to Yixin Aluminum of the Company

On 10 December 2019, the Resolution on the Proposed Capital Contribution of the Company to Heqing Yixin Aluminum Co., Ltd. was considered and approved at the fifth meeting of the seventh session of the Board of directors of the Company, pursuant to which the Company agreed to make a capital contribution of RMB850 million in cash to Yixin Aluminum. Upon completion of the capital contribution, Yixin Aluminum will be held as to approximately 38.90% by the Company, and Yixin Aluminum will not become a subsidiary of the Company. On the same day, the Company entered into the capital contribution agreement with Yixin Aluminum and its original shareholder in relation to the aforesaid matter.

As each of Yixin Aluminum and its original shareholders Yunnan Aluminum and Yunnan Wenshan Aluminum Co., Ltd.*(雲南文山鋁業有限公司) is a subsidiary of Chinalco, the controlling shareholder of the Company, each of Yixin Aluminum and its original shareholders Yunnan Aluminum and Yunnan Wenshan Aluminum Co., Ltd.*(雲南文山鋁業有限公司) is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement.

For the details of the aforesaid matter, please refer to the announcement dated 10 December 2019.

THE CONNECTED TRANSACTIONS WITH THE CONNECTED PARTIES THROUGH JOINT CONTRIBUTION (NON-EXEMPTED)

Capital Contribution to Chinalco Capital by the Company

On 28 March 2019, the Resolution in Relation to Proposed Capital Contribution by the Company to Chinalco Capital Holdings Co., Ltd. was considered and approved at 41st meeting of the sixth session of the Board of the Company, pursuant to which the Company was approved to make a capital contribution of RMB176,520,000 to Chinalco Capital. On the same day, the Company entered into the capital contribution agreement with Chinalco and Chinalco Capital. Prior to the capital contribution, Chinalco Capital was also held as to 14.71% by the Company. The capital contribution was made by the Company and Chinalco in proportion to their respective shareholdings on a pro rata basis. The shareholding of the Company in Chinalco Capital remained unchanged following the capital contribution

As Chinalco is the controlling shareholder of the Company, Chinalco is a connected person of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction exceeds 0.1% but is less than 5%, the transaction is subject to reporting and announcement requirements but exempt from independent shareholders' approval requirement.

For details of the aforesaid matter, please refer to the announcement dated 28 March 2019.

ONE-OFF CONNECTED TRANSACTION (EXEMPTED) RELATED TO ACQUISITION AND DISPOSAL OF ASSETS

Acquisition of Equity Interests of Suzhou Nonferrous Metals Materials Science and Technical Development Co., Ltd.* (蘇州中色金屬材料科技有限公司) by Chalco Shanghai

On 29 April 2019, the Resolution in Relation to Proposed Acquisition of Equity Interests in Suzhou Nonferrous Metals Materials Science and Technical Development Co., Ltd by Chalco Shanghai Company Limited was considered and approved at the 42nd meeting of the sixth session of the Board of the Company, pursuant to which the Board approved Chalco Shanghai, a wholly-owned subsidiary of the Company, to acquire 100% equity interests in Suzhou Nonferrous Metals Materials Science and Technical Development Co., Ltd.* ("**Suzhou Nonferrous Metals**") at a consideration of RMB237,400. On the same day, Chalco Shanghai entered into the equity transfer agreement with China Nonferrous Metals Processing Technology Co., Ltd.* (中色科技股份有限公司) ("**CNPT**") and Suzhou Engineering & Research Institute for Nonferrous Metal Research Co., Ltd.* (蘇州有色金屬研究院有限公司) ("**Suzhou Nonferrous Institute**"), two shareholders of Suzhou Nonferrous Metals.

As CNPT and Suzhou Nonferrous Institute are subsidiaries of Chinalco, the controlling shareholder of the Company, they are connected persons of the Company under Chapter 14A of the Hong Kong Listing Rules. Therefore, the transaction constitutes a connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules. As the highest applicable percentage ratio in respect of the transaction is less than 0.1%, the transaction is exempt from complying with reporting, announcement and independent shareholders' approval requirements.

For details of the aforesaid matter, please refer to the announcement dated 29 April 2019.

To the shareholders of Aluminum Corporation of China Limited
(Established in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of Aluminum Corporation of China Limited (the "Company") and its subsidiaries (the "Group") set out on pages 185 to 426, which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs") issued by the International Auditing and Assurance Standards Board ("IAASB"). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the Code of Ethics for Professional Accountants (the "Code"), issued by the Hong Kong Institute of Certified Public Accountants, 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.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

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

INDEPENDENT AUDITOR'S REPORT (CONTINUED)

Key audit matter	How our audit addressed the key audit matter
Impairment of property, plant and equipment	
At 31 December 2019, the Group's property, plant and equipment ("PPE") was RMB103,331 million. As described in Notes 2.8, 3 and 6 to the consolidated financial statements, the Group is required to review PPE for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. Management performed an impairment assessment on such PPE by determining the recoverable amounts of the cash generating units ("CGUs") that the PPE are allocated to. As a result of the impairment assessment, impairment losses of RMB259 million were recognised during the year ended 31 December 2019. Auditing management's impairment assessment of PPE was complex due to the significant estimates and judgments involved in the projections of future cash flows, including the future prices of aluminum and alumina, expected production and sales volumes, production costs, operating expenses and discount rates applied to these forecasted future cash flows. These estimates and judgments may be affected by unexpected changes in the future market or economic conditions.	We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the PPE impairment assessment process including tests of controls over management's review of the significant assumptions used in the impairment assessment. Amongst other audit procedures performed, we compared the methodology used by the Group, that is, recoverable amount calculations based on future discounted cash flows, to industry practice and tested the completeness and accuracy of the underlying data used in the projection. We also assessed the reasonableness of the significant assumptions used in the calculations which comprised of, amongst others, future prices of aluminum and alumina, expected production and sales volumes, production costs, operating expenses and discount rates, by comparing them to external industry outlook reports from a number of sources and by analysing the historical accuracy of management's estimates. In addition, we involved our valuation specialist to assist us with assessing the appropriateness of the valuation methodologies and the reasonableness of assumptions used, including the discount rates. We performed a sensitivity analysis around the significant assumptions described above to assess the changes to the recoverable amounts of the CGUs resulting from changes in these assumptions, both individually and in aggregate. We also assessed the adequacy of the Group's disclosures included in Note 6 to the consolidated financial statements regarding the significant assumptions of impairment testing.

KEY AUDIT MATTERS (CONTINUED)

Key audit matter	How our audit addressed the key audit matter
Impairment of goodwill	
At 31 December 2019, the Group's goodwill was RMB3,511 million. As described in Notes 2.1, 2.8, 3 and 5 to the consolidated financial statements, the Group is required to, at least annually, perform impairment assessments of goodwill. For the purpose of performing impairment assessments, goodwill was allocated to CGUs. Management performed the impairment testing by comparing the recoverable amount of the CGUs and the carrying amount of the CGUs. Auditing management's annual goodwill impairment assessment was complex because the determination of the recoverable amount of the underlying CGUs involved estimates and judgments, including future prices of aluminum and alumina, expected production and sales volumes, production costs, operating expenses, terminal growth rates used to estimate future cash flows and discount rates applied to these forecasted future cash flows of the underlying CGUs. These estimates and judgments may be affected by unexpected changes in future market or economic conditions.	We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the impairment assessment process including testing controls over management's review of the key assumptions used in the goodwill impairment assessment. Amongst other audit procedures performed, we compared the methodology used (recoverable amount calculations based on future discounted cash flows) by the Group to industry guidelines, and tested the completeness and accuracy of the underlying data used in the forecast. We evaluated the reasonableness of management's key assumptions used in the calculations, which comprised of, among others, future prices of aluminum and alumina, expected production and sales volumes, production costs, operating expenses, growth rate and discount rate, by comparing them to external industry outlook reports from a number of sources and analysing the historical accuracy of management's estimates. In addition, we involved our valuation specialist to assist us with assessing the appropriateness of the valuation methodologies and the reasonableness of assumptions used, including the discount rates. We performed a sensitivity analysis around the key assumptions described above to evaluate the changes to the recoverable amounts of the CGUs resulting from changes in these assumptions, both individually and in aggregate. We also assessed the adequacy of the Group's disclosures included in Note 5 to the consolidated financial statements regarding the key assumptions of impairment testing.

KEY AUDIT MATTERS (CONTINUED)

Key audit matter	How our audit addressed the key audit matter
Recognition of deferred tax assets	
At 31 December 2019, the Group had deferred tax assets on deductible temporary differences and tax losses carried forward of RMB1,522 million. As described in Notes 2.26, 3 and 10 to the consolidated financial statements, the Group recognised these deferred tax assets to the extent that it is probable that future taxable profits will be available to utilise the deferred tax assets. Auditing management's recoverability assessment of deferred tax assets involved subjective estimation and complex auditor judgment because the forecast of future taxable profits is complex and judgmental and is based on significant assumptions, including future tax rates, the possible utilisation of loss carry forwards and future taxable profits that are affected by unexpected changes in the tax law framework and future market or economic conditions.	We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the recoverability assessment of deferred tax assets including testing controls over management's review of the significant assumptions used in the forecast. Among other audit procedures performed, we compared the tax rates and the possible utilisation of loss carry forwards with the tax law framework and tested the completeness and accuracy of the underlying data used in the forecast. We tested the Group's scheduling of the timing and amount of reversal of taxable temporary differences. We also evaluated management's significant assumptions in determining the future available taxable profits, for example, the future prices of aluminum and alumina, expected production and sales volumes, production costs and operating expenses by comparing them with the market trend forecasted by external industry analysts and analysing the historical accuracy of management's estimates. In addition, we involved our tax professionals to assist us in evaluating the technical merits from a tax perspective of management's analysis. We also assessed the adequacy of the Group's disclosures included in Note 10 to the consolidated financial statements regarding deferred tax assets.

OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

The directors of the Company are responsible for the other information. The other information comprises the information included in the Annual Report, other than the consolidated financial statements and our auditor's report thereon.

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

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs issued by the IASB and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

The directors of the Company are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Our report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

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

The engagement partner on the audit resulting in this independent auditor's report is Mr. Cheong Ming Yik.

Ernst & Young
Certified Public Accountants
22/F CITIC Tower
1 Tim Mei Avenue
Central, Hong Kong

26 March 2020

(Amounts expressed in thousands of RMB
unless otherwise stated)

Consolidated Statement of Financial Position

	Notes	**31 December 2019**	31 December 2018 (Restated)
ASSETS			
Non-current assets			
Intangible assets	5	**13,764,460**	12,879,365
Property, plant and equipment	6	**103,331,456**	106,249,116
Investment properties	7	**1,503,266**	1,156,006
Land use rights	19 (a)	**–**	4,306,865
Right-of-use assets	19 (b)	**15,890,437**	–
Investments in joint ventures	8 (a)	**3,385,582**	3,393,349
Investments in associates	8 (b)	**9,512,401**	6,363,462
Equity investments designated at fair value through other comprehensive income	9	**2,239,251**	1,729,825
Deferred tax assets	10	**1,522,216**	1,542,655
Other non-current assets	11	**3,207,843**	4,442,645
Total non-current assets		**154,356,912**	142,063,288
Current assets			
Inventories	12	**19,515,420**	20,459,668
Trade and notes receivables	13	**7,393,123**	8,104,017
Other current assets	14	**9,237,063**	9,025,514
Financial assets at fair value through profit or loss	36.2	**3,503,175**	16,141
Restricted cash and time deposits	15	**1,305,781**	2,165,288
Cash and cash equivalents	15	**7,759,190**	19,130,835
Total current assets		**48,713,752**	58,901,463
Total assets		**203,070,664**	200,964,751

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	31 December 2019	31 December 2018 (Restated)
EQUITY AND LIABILITIES			
EQUITY			
Equity attributable to owners of the parent			
Share capital	16	**17,022,673**	14,903,798
Other reserves	17	**39,853,906**	40,367,573
Accumulated losses		**(2,216,946)**	(2,856,064)
		54,659,633	52,415,307
Non-controlling interests		**16,065,427**	15,254,312
Total equity		**70,725,060**	67,669,619
LIABILITIES			
Non-current liabilities			
Interest-bearing loans and borrowings	18	**59,243,563**	54,207,386
Other non-current liabilities	21	**2,219,574**	2,438,164
Deferred tax liabilities	10	**1,712,739**	1,812,805
Total non-current liabilities		**63,175,876**	58,458,355

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	**31 December 2019**	31 December 2018 (Restated)
Current liabilities			
Trade and notes payables	23	**12,584,755**	14,009,264
Other payables and accrued liabilities	22	**12,442,184**	11,567,152
Contract liabilities	4	**1,638,826**	1,579,322
Financial liabilities at fair value through profit or loss	36.2	**805**	1,766
Income tax payable		**216,554**	113,783
Interest-bearing loans and borrowings	18	**42,286,604**	47,565,490
Total current liabilities		**69,169,728**	74,836,777
Total liabilities		**132,345,604**	133,295,132
Total equity and liabilities		**203,070,664**	200,964,751
Net current liabilities		**20,455,976**	15,935,314
Total assets less current liabilities		**133,900,936**	126,127,974

The accompanying notes are an integral part of these financial statements.

Lu Dongliang
Director

Wang Jun
Chief Financial Officer

Consolidated Statement of Profit or Loss and Other Comprehensive Income

Year ended 31 December 2019
(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	2019	2018 (Restated)
Revenue	4	**190,074,161**	180,241,414
Cost of sales		**(177,946,276)**	(167,029,416)
Gross profit		**12,127,885**	13,211,998
Selling and distribution expenses		**(1,673,139)**	(2,496,933)
General and administrative expenses		**(3,956,604)**	(3,959,177)
Research and development expenses		**(940,828)**	(626,873)
Impairment losses on property, plant and equipment	6	**(259,354)**	(46,484)
Impairment losses on financial assets		**(169,751)**	(107,956)
Impairment losses on investments in joint ventures		**–**	(216,953)
Other income	26	**79,469**	135,367
Other gains, net	27	**1,247,269**	921,904
Finance income	28	**261,151**	492,234
Finance costs	28	**(4,921,179)**	(4,882,496)
Share of profits and losses of:			
Joint ventures	8 (a)	**270,115**	(199,452)
Associates	8 (b)	**48,767**	39,335
Profit before income tax	25	**2,113,801**	2,264,514
Income tax expense	31	**(625,720)**	(822, 519)
Profit for the year		**1,488,081**	1,441,995
Profit attributable to:			
Owners of the parent		**850,999**	707,460
Non-controlling interests		**637,082**	734,535
		1,488,081	1,441,995

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	**2019**	2018 (Restated)
Profit for the year		**1,488,081**	1,441,995
Other comprehensive income that will not be reclassified to profit or loss in subsequent periods, net of tax:			
Equity investments designated at fair value through other comprehensive income:			
Changes in fair value		**57,815**	(15,491)
Income tax effect		**(14,642)**	3,769
		43,173	(11,722)
Other comprehensive income that may be reclassified to profit or loss in subsequent periods, net of tax:			
Exchange differences on translation of foreign operations		**(32,323)**	(120,756)
Other comprehensive income/(loss) for the period, net of tax		**10,850**	(132,478)
Total comprehensive income for the year		**1,498,931**	1,309,517

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	2019	2018 (Restated)
Attributable to:			
Owners of the parent		**861,599**	575,621
Non-controlling interests		**637,332**	733,896
		1,498,931	1,309,517
Basic and diluted earnings per share attributable to ordinary equity holders of the parent (expressed in RMB per share)	32	**0.037**	0.034

Details of the dividends payable and proposed for the year are disclosed in Note 33 to the financial statements.

The accompanying notes are an integral part of these financial statements.

(Amounts expressed in thousands of RMB unless otherwise stated)

Consolidated Statement of Changes in Equity

	Attributable to owners of the parent											
		Capital reserves										
	Share capital (Note 16)	Share premium	Other capital reserves	Statutory surplus reserve	Special reserve	Fair value reserve	Other equity instruments	Foreign currency translation reserve	Accumulated losses	Total	Non-controlling interests	Total equity
At 31 December 2018	14,903,798	18,414,678	11,690,292	5,867,557	145,938	6,588	3,988,000	214,520	(2,816,481)	52,414,890	15,254,312	67,669,202
Adjustment due to business combinations under common control *(Note 38)*	–	40,000	–	–	–	–	–	–	(39,583)	417	–	417
At 31 December 2018 (Restated)	14,903,798	18,454,678	11,690,292	5,867,557	145,938	6,588	3,988,000	214,520	(2,856,064)	52,415,307	15,254,312	67,669,619
Profit for the year	–	–	–	–	–	–	–	–	850,999	850,999	637,082	1,488,081
Other comprehensive income for the year												
Changes in fair value of equity investments at fair value through other comprehensive income, net of tax	–	–	–	–	–	42,923	–	–	–	42,923	250	43,173
Exchange differences on translation of foreign operations	–	–	–	–	–	–	–	(32,323)	–	(32,323)	–	(32,323)
Total comprehensive income for the year	–	–	–	–	–	42,923	–	(32,323)	850,999	861,599	637,332	1,498,931
Business combinations under common control *(Note 38)*	–	(237)	–	–	–	–	–	–	–	(237)	–	(237)
Capital injection from non-controlling shareholders	–	–	4,144	–	–	–	–	–	–	4,144	706,970	711,114
Acquisition of non-controlling interests	–	–	149,322	–	–	–	–	–	–	149,322	(149,322)	–
Disposal of subsidiaries	–	–	–	–	(1,666)	–	–	–	119	(1,547)	(26,234)	(27,781)
Issuance of senior perpetual securities *(Note 40)*	–	–	–	–	–	–	1,499,104	–	–	1,499,104	–	1,499,104
Issuance of share capital *(Note 16)*	2,118,875	8,564,661	(10,735,214)	–	–	–	–	–	–	(51,678)	–	(51,678)
Other appropriations	–	–	–	–	(5,317)	–	–	–	–	(5,317)	(17,768)	(23,085)
Share of reserves of joint ventures and associates	–	–	–	–	936	–	–	–	–	936	–	936
Dividends distribution of subsidiaries to non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	(199,215)	(199,215)
Distribution of other equity instruments	–	–	–	–	–	–	–	–	(212,000)	(212,000)	(140,648)	(352,648)
At 31 December 2019	17,022,673	27,019,102*	1,108,544*	5,867,557*	139,891*	49,511*	5,487,104*	182,197*	(2,216,946)	54,659,633	16,065,427	70,725,060

(Amounts expressed in thousands of RMB
unless otherwise stated)

Consolidated Statement of Changes In Equity (Continued)

	Attributable to owners of the parent											
		Capital reserves										
	Share capital (Note 16)	Share premium	Other capital reserves	Statutory surplus reserve	Special reserve	Fair value reserve	Other equity instruments	Foreign currency translation reserve	Accumulated losses	Total	Non-controlling interests	Total equity
At 31 December 2017	14,903,798	18,787,833	952,878	5,867,557	146,934	17,671	2,019,288	335,276	(3,465,717)	39,565,518	26,037,642	65,603,160
Adjustment due to business combinations under common control	–	40,000	–	–	–	–	–	–	(566)	39,434	–	39,434
At 1 January 2018 (Restated)	14,903,798	18,827,833	952,878	5,867,557	146,934	17,671	2,019,288	335,276	(3,466,283)	39,604,952	26,037,642	65,642,594
Profit for the year	–	–	–	–	–	–	–	–	707,460	707,460	734,535	1,441,995
Other comprehensive income for the year												
Changes in fair value of equity investments at fair value through other comprehensive income, net of tax	–	–	–	–	–	(11,083)	–	–	–	(11,083)	(639)	(11,722)
Exchange differences on translation of foreign operations	–	–	–	–	–	–	–	(120,756)	–	(120,756)	–	(120,756)
Total comprehensive income for the year	–	–	–	–	–	(11,083)	–	(120,756)	707,460	575,621	733,896	1,309,517
Business combinations under common control	–	(443,582)	–	–	–	–	–	–	–	(443,582)	–	(443,582)
Capital injection from non-controlling shareholders	–	78,271	–	–	–	–	–	–	–	78,271	759,350	837,621
Capital injection before business combinations under common control	–	69,885	–	–	–	–	–	–	–	69,885	–	69,885
Acquisition of non-controlling interests	–	(218)	–	–	–	–	–	–	–	(218)	(3,547)	(3,765)
Restructure of subsidiaries	–	(77,511)	–	–	–	–	–	–	–	(77,511)	77,511	–
Disposal of subsidiaries	–	–	–	–	–	–	–	–	–	–	(1,160)	(1,160)
Issuance of senior perpetual securities	–	–	–	–	–	–	1,988,000	–	–	1,988,000	–	1,988,000
Release of deferred government subsidies	–	–	2,200	–	–	–	–	–	–	2,200	–	2,200
Equity exchange arrangement *(note 16 (c))*	–	–	10,735,214	–	–	–	–	–	–	10,735,214	(10,735,214)	–
Other appropriations	–	–	–	–	8,119	–	–	–	–	8,119	(1,514)	6,605
Share of reserves of joint ventures and associates	–	–	–	–	2,051	–	–	–	–	2,051	–	2,051
Step acquisition of a subsidiary	–	–	–	–	(11,166)	–	–	–	–	(11,166)	–	(11,166)
Distribution of other equity instruments*	–	–	–	–	–	–	(19,288)	–	(90,722)	(110,010)	(300,538)	(410,548)
Dividends distribution before business combinations under common control	–	–	–	–	–	–	–	–	(6,519)	(6,519)	–	(6,519)
Dividends distribution of subsidiaries to non-controlling shareholders	–	–	–	–	–	–	–	–	–	–	(605,416)	(605,416)
Acquisition of subsidiaries	–	–	–	–	–	–	–	–	–	–	1,468,435	1,468,435
Repayment of senior perpetual securities	–	–	–	–	–	–	–	–	–	–	(2,175,133)	(2,175,133)
At 31 December 2018 (Restated)	14,903,798	18,454,678	11,690,292	5,867,557	145,938	6,588	3,988,000	214,520	(2,856,064)	52,415,307	15,254,312	67,669,619

* These reserves accounts comprise the consolidated other reserves of RMB39,854 million (31 December 2018 (Restated): RMB40,368 million) in the consolidated statement of financial position.

The accompanying notes are an integral part of these financial statement.

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	2019	2018 (restated)
Net cash flows from operating activities	34	**12,473,489**	13,032,076
Investing activities			
Purchases of intangible assets		**(149,756)**	(103,304)
Purchases of property, plant and equipment		**(8,891,529)**	(6,746,616)
Purchases of investment properties		**(44,063)**	–
Purchases of land use rights		**–**	(2,838)
Prepaid land lease payments		**(6,034)**	–
Proceeds from disposal of property, plant and equipment		**1,132,839**	564,791
Proceeds from disposal of intangible assets		**5,764**	–
Proceeds from disposal of a joint venture and an associate		**367,867**	30,816
Purchase of financial products		**(3,500,000)**	–
Acquisition of a subsidiary		**–**	255,650
Proceeds from disposal and deemed disposal of subsidiaries and business, net of cash		**23,797**	6,558
Investments in joint ventures		**(50,000)**	(90,000)
Investments in associates		**(2,653,244)**	(266,300)
(Purchase of)/Proceeds from equity investments designated at fair value through other comprehensive income		**(700)**	198,000
Dividend from equity investments designated at fair value through other comprehensive income		**97,775**	109,914
Dividend received		**236,708**	327,983
Cash paid for settlement of futures, options and forward foreign exchange contracts		**(67,253)**	(13,288)
Loans repaid by related parties		**–**	32,215
Proceeds from disposal of financial assets at fair value through profit or loss		**2,155**	–
Asset-related government grants received		**103,373**	167,314
Net cash flows used in investing activities		**(13,392,301)**	(5,529,105)

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	2019	2018 (restated)
Financing activities			
Proceeds from a gold leasing arrangement		**6,921,860**	2,323,105
Share issue expense		**(51,678)**	–
Repayments of gold leasing arrangement		**(1,607,905)**	(7,519,283)
Proceeds from issuance of bonds and notes, net of issuance costs		**37,965,385**	13,185,034
Repayments of senior perpetual securities		**–**	(2,417,758)
Proceeds from issuance of perpetual securities, net of issuance costs		**1,499,104**	1,988,000
Repayments of bonds and notes		**(22,400,000)**	(21,815,000)
Cash consideration paid for business combinations under common control		**(237)**	(373,495)
Drawdown of short-term and long-term loans		**40,669,197**	76,899,591
Repayments of short-term and long-term loans		**(66,105,388)**	(70,560,667)
Senior Perpetual securities' distribution paid		**(352,648)**	(410,548)
Proceeds from sale and leaseback finance leases, net of deposit and transaction costs		**–**	1,204,843
Purchase of non-controlling interests		**–**	(3,765)
Capital injection from the parent company to the entity acquired under common control		**–**	69,885
Principal portion of lease payment		**(3,032,106)**	–
Finance lease instalment paid		**–**	(3,915,404)
Capital injection from non-controlling shareholders		**711,114**	837,621
Dividends paid by subsidiaries to non-controlling shareholders		**(222,930)**	(327,645)
Interest paid		**(4,467,803)**	(5,445,120)
Net cash flows used in financing activities		**(10,474,035)**	(16,280,606)

(Amounts expressed in thousands of RMB unless otherwise stated)

	Notes	**2019**	2018 (restated)
Net decrease in cash and cash equivalents		**(11,392,847)**	(8,777,635)
Cash and cash equivalents at beginning of year		**19,130,835**	27,851,106
Effect of foreign exchange rate changes, net		**21,202**	57,364
Cash and cash equivalents at 31 December	15	**7,759,190**	19,130,835

The accompanying notes are an integral part of these financial statements.

1. GENERAL INFORMATION

Aluminum Corporation of China Limited (the "Company") (中國鋁業股份有限公司) and its subsidiaries (together the "Group") are principally engaged in the manufacture and distribution of alumina, primary aluminum and energy products. The Group is also engaged in the development of bauxite related resources, the production, fabrication and distribution of bauxite, carbon and relevant non-ferrous metal products and the trading and logistics and transport services of non-ferrous metal products and coal products.

The Company is a joint stock company which was established on 10 September 2001 and is domiciled in the People's Republic of China (the "PRC") with limited liability. The address of its registered office is No. 62 North Xizhimen Street, Haidian District, Beijing, the PRC.

The Company's shares have been listed on the Main Board of the Hong Kong Stock Exchange and the New York Stock Exchange since 2001. The Company also listed its A shares on the Shanghai Stock Exchange in 2007.

In the opinion of the directors, the ultimate holding company and parent of the Company is Aluminum Corporation of China ("Chinalco") (中國鋁業集团有限公司), a company incorporated and domiciled in the PRC and wholly owned by the State-owned Assets Supervision and Administration Commission of the State Council.

(Amounts expressed in thousands of RMB unless otherwise stated)

1. GENERAL INFORMATION (CONTINUED)

Information about subsidiaries

Particulars of the Company's principal subsidiaries are as follows:

Name	Place of registration and business	Registered capital	Principal activities	Percentage of equity attributable to the Company Direct	Indirect
Shanxi Huaxing Aluminum Co. Ltd. ("Shanxi Huaxing") (山西華興鋁業有限公司)	PRC/Mainland China	1,850,000	Manufacture and distribution of alumina	60.00%	40.00%
Baotou Aluminum Co., Ltd. ("Baotou Aluminum") (包頭鋁業有限公司)	PRC/Mainland China	2,245,510	Manufacture and distribution of primary aluminum, aluminum alloy and related fabricated products and carbon products	100.00%	–
China Aluminum International Trading Co., Ltd. ("Chalco Trading") (中鋁國際貿易有限公司)	PRC/Mainland China	1,731,111	Import and export activities	100.00%	–
Chalco Shanxi New Material Co., Ltd. ("Shanxi New Material") (中鋁山西新材料有限公司)	PRC/Mainland China	4,279,601	Manufacture and distribution of alumina, primary aluminum and anode carbon products and electricity generation and supply	85.98%	–
China Aluminum International Trading Group Co., Ltd. ("Trading Group") (中鋁國際貿易集團有限公司)	PRC/Mainland China	1,030,000	Import and export activities	100.00%	
Zunyi Aluminum Co., Ltd. (遵義鋁業股份有限公司)	PRC/Mainland China	3,204,900	Manufacture and distribution of primary aluminum and alumina	67.45%	–
Chalco Hong Kong Ltd. ("Chalco Hong Kong") (中國鋁業香港有限公司)	Hong Kong	HKD849,940 in thousand	Overseas investments and alumina import and export activities	100.00%	–
Chalco Mining Co., Ltd. ("Chalco Mining") (中鋁礦業有限公司)	PRC/Mainland China	4,028,859	Manufacture, acquisition and distribution of bauxite mines, limestone ore, manufacturing and distribution of alumina	100.00%	–
Chalco Energy Co., Ltd. (中鋁能源有限公司)	PRC/Mainland China	1,384,398	Thermoelectric supply and investment management	100.00%	–
China Aluminum Ningxia Energy Group Co., Ltd. ("Ningxia Energy") (中鋁寧夏能源集團)	PRC/Mainland China	5,025,800	Thermal power, wind power and solar power generation, coal mining, and power-related equipment manufacturing	70.82%	–

(Amounts expressed in thousands of RMB
unless otherwise stated)

1. GENERAL INFORMATION (CONTINUED)

Information about subsidiaries (Continued)

Name	Place of registration and business	Registered capital	Principal activities	Percentage of equity attributable to the Company Direct	Indirect
Guizhou Huajin Aluminum Co., Ltd. ("Guizhou Huajin") (貴州華錦鋁業有限公司)	PRC/Mainland China	1,000,000	Manufacture and distribution of alumina	60.00%	–
Chalco Zhengzhou Research Institute of Non-ferrous Metal Co., Ltd. (中國鋁業鄭州有色金屬研究院有限公司)	PRC/Mainland China	214,858	Research and development services	100.00%	–
Chalco Shandong Co., Ltd. ("Chalco Shandong") (中鋁山東有限公司)	PRC/Mainland China	4,052,847	Manufacture and distribution of alumina	100.00%	–
Chalco Zhongzhou Aluminum Co., Ltd. ("Zhongzhou Aluminum") (中鋁中州鋁業有限公司)	PRC/Mainland China	5,071,235	Manufacture and distribution of alumina	100.00%	–
China Aluminum Logistics Group Corporation Co., Ltd. (中鋁物流集團有限公司)	PRC/Mainland China	964,291	Logistics transportation	100.00%	–
Chinalco Shanxi Jiaokou Xinghua Technology Ltd. ("Xinghua Technology") (中鋁集團山西交口興華科技股份有限公司)	PRC/Mainland China	588,182	Manufacture and distribution of primary aluminum	33.00%	33.00%
Chinalco Shanghai Company Limited ("Chinalco Shanghai") (中鋁(上海)有限公司)	PRC/Mainland China	968,300	Trading and engineering project management	100.00%	–
Shanxi China Huarun Co., Ltd. ("Shanxi Huarun") (山西中鋁華潤有限公司)	PRC/Mainland China	1,641,750	Manufacture and distribution of primary aluminum	43.39%	–
Guizhou Huaren New Material Co., Ltd. ("Guizhou Huaren") (貴州華仁新材料有限公司)	PRC/Mainland China	1,200,000	Manufacture and distribution of primary aluminum	40.00%	–
Chinalco Materials Co., Ltd. (中鋁物資有限公司)	PRC/Mainland China	1,000,000	Import and export activities	100.00%	

1. GENERAL INFORMATION (CONTINUED)

Information about subsidiaries (Continued)

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results of the year or formed a substantial part of the net assets of the Group. To give details of the other subsidiaries would, in the opinion of the directors, result in particulars of excessive of length.

The English name represents the best effort made by management of the Group in translating its Chinese name as it does not have any official English names.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board (the "IASB") and the disclosure requirements of the Hong Kong Companies Ordinance. They have been prepared on a historical cost basis, except for equity investments at fair value through other comprehensive income, financial assets and liabilities at fair value through profit or loss and debt instruments at fair value through other comprehensive income which have been measured at fair value.

These financial statements are presented in thousands of Renminbi ("RMB") unless otherwise stated.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Going concern

As at 31 December 2019, the Group's current liabilities exceeded its current assets by approximately RMB20,456 million (31 December 2018 (Restated): RMB15,935 million). The directors of the Company have considered the Group's available sources of funds as follows:

- The Group's expected net cash inflows from operating activities in 2020;
- Unutilised banking facilities of approximately RMB118,084 million as at 31 December 2019, of which amounts totalling RMB108,360 million will be subject to renewal during the next 12 months. The directors of the Company are confident that these banking facilities could be renewed upon expiration based on the Group's past experience and good credit standing; and
- Other available sources of financing from banks and other financial institutions given the Group's credit history.

The directors of the Company believe that the Group has adequate resources to continue operations for the foreseeable future of not less than 12 months from 31 December 2019. The directors of the Company therefore are of the opinion that it is appropriate to adopt the going concern basis in preparing the consolidated financial statements.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation

The consolidated financial statements comprise the financial statements of the Company and all of its subsidiaries for the year ended 31 December 2019. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e, existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee; and
- The ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights result in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements; and
- The Group's voting rights and potential voting rights.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of financial position and consolidated statement of profit and loss and other comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income ("OCI") are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

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

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

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

(a) Merger accounting for business combinations under common control

The consolidated financial statements incorporate the financial statements of the combining entities or businesses in business combination under common control as if they had been combined from the date when the combining entities or businesses first came under the control of the ultimate holding company.

The net assets of the combining entities or businesses are consolidated using the carrying amount from the ultimate holding company's perspective. No amount is recognised for goodwill or excess of the Group's interest in the book value of the net assets over cost at the time of the common control combination, to the extent of the continuation of the ultimate holding company's interest.

The consolidated statement of comprehensive income includes the results of each of the combining entities or businesses from the earliest date presented or since the date when the combining entities or businesses first came under common control, where this is a shorter period, regardless of the date of the common control combination.

The comparative financial data have been restated to reflect the business combinations under common control occurred during this year as disclosed in Note 38.

Transaction costs, including professional fees, registration fees, costs of furnishing information to shareholders, costs or losses incurred in combining operations of the previously separate businesses and other costs incurred in relation to the common control combination that is to be accounted for by using the merger accounting method are recognised as expenses in the period in which they are incurred.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

(b) Acquisition method of accounting for other business combinations and goodwill

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group, other than common control combinations. The consideration transferred is measured at the acquisition date fair value which is the sum of acquisition date fair value of assets transferred by the Group, liabilities assumed by the Group to the former owner of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. The consideration transferred included the fair value of any assets and liabilities resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at fair value at the acquisition date. All other components of non-controlling interests are measured at fair value. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportional share of net assets in the event of liquidation at fair value or at the proportional share of the acquiree's identifiable net assets.

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

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

(b) Acquisition method of accounting for other business combinations and goodwill (Continued)

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment at least annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash- generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

(b) Acquisition method of accounting for other business combinations and goodwill (Continued)

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

(c) Subsidiaries

A subsidiary is an entity, directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1 Basis of preparation (Continued)

Consolidation (Continued)

(c) Subsidiaries (Continued)

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee;

(b) rights arising from other contractual arrangements; and

(c) the Group's voting rights and potential voting rights.

Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

Inter-company transactions, balances, income and expenses on transactions between group companies are eliminated. Profits and losses resulting from inter-company transactions that are recognised in assets are also eliminated. Amounts reported by subsidiaries have been adjusted where necessary in the consolidated financial statements to conform with the policies adopted by the Group.

In the Company's statement of financial position, as permitted under IFRS 1, the investments in subsidiaries acquired prior to 1 January 2008, being the date of transition to IFRS, are stated at deemed cost as required under the previously adopted accounting standards. Subsidiaries acquired after that date that are not classified as held for sale in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations are stated at cost less provision for impairment losses. The results of subsidiaries are accounted for by the Company on the basis of dividends received and receivable.

(Amounts expressed in thousands of RMB
unless otherwise stated)

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures

The Group has adopted the following new and revised IFRSs for the first time for the current year's financial statements.

Amendments to IFRS 9	*Prepayment Features with Negative Compensation*
IFRS 16	*Leases*
Amendments to IAS 19	*Plan Amendment, Curtailment or Settlement*
Amendments to IAS 28	*Long-term Interests in Associates and Joint Ventures*
Amendments to IFRS 10 and IAS 28 (2011)	*Sale or Contribution of Assets between an Investors and its Associate or Joint Venture*
IFRIC Interpretation 23	*Uncertainty over Income Tax Treatments*
Annual Improvements 2015–2017 Cycle	*Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23*

Except for the amendments to IFRS 9 and IFRS 19 and Annual Improvements to IFRS 2015–2017 Cycle, which are not relevant to the preparation of the Group's financial statements, the nature and the impact of the new and revised IFRSs are described below:

IFRS 16 Leases

IFRS 16 replaces IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC 15 Operating Leases-Incentives and SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model to recognise and measure right-of-use assets and lease liabilities, except for certain recognition exemptions. Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors continue to classify leases as either operating or finance leases using similar principles as in IAS 17. Therefore, IFRS 16 did not have any financial impact on leases where the Group is the lessor.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

IFRS 16 Leases (Continued)

The Group has adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of 1 January 2019. Under this method, the standard has been applied retrospectively with the cumulative effect of initial adoption recognised as an adjustment to the opening balance of retained earnings at 1 January 2019, and the comparative information for 2018 was not restated and continues to be reported under IAS 17 and related interpretations.

New definition of a lease

Under IFRS 16, a contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to obtain substantially all of the economic benefits from use of the identified asset and the right to direct the use of the identified asset. The Group elected to use the transition practical expedient allowing the standard to be applied only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. Contracts that were not identified as leases under IAS 17 and IFRIC 4 were not reassessed. Therefore, the definition of a lease under IFRS 16 has been applied only to contracts entered into or changed on or after 1 January 2019.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

IFRS 16 Leases (Continued)

As a lessee- Leases previously classified as operating leases

Nature of the effect of adoption of IFRS 16

The Group has lease contracts for various items of property, machinery, vehicles and other equipment. As a lessee, the Group previously classified leases as either finance leases or operating leases based on the assessment of whether the lease transferred substantially all the rewards and risks of ownership of assets to the Group. Under IFRS 16, the Group applies a single approach to recognise and measure right-of-use assets and lease liabilities for all leases, except for two elective exemptions for leases of low-value assets (elected on a lease-by-lease basis) and leases with a lease term of 12 months or less ("short-term leases") (elected by class of underlying asset). Instead of recognising rental expenses under operating leases on a straight-line basis over the lease term commencing from 1 January 2019, the Group recognises depreciation (and impairment, if any) of the right-of-use assets and interest accrued on the outstanding lease liabilities (as finance costs).

Impacts on transition

Lease liabilities at 1 January 2019 were recognised based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at 1 January 2019 and included in interest-bearing loans and borrowings. The right-of-use assets were measured at the amount of the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to the lease recognised in the consolidated statement of financial position immediately before 1 January 2019.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

IFRS 16 Leases (Continued)

As a lessee- Leases previously classified as operating leases (Continued)

Impacts on transition (Continued)

All these assets were assessed for any impairment based on IAS 36 on that date. The Group elected to present the right-of-use assets separately in the statement of financial position. This includes the lease assets recognised previously under finance leases of RMB6,721 million that were reclassified from property, plant and equipment, land use right of RMB4,307 million that were disclosed separately in the statement of financial position, and prepaid rental of RMB20 million that were included in other non-current assets.

The Group has used the following elective practical expedients when applying IFRS16 at 1 January 2019:

- Applied the short-term leases exemptions to leases with a lease term that ends within 12 months from the date of initial application

- Applying a single discount rate to a portfolio of leases with reasonably similar characteristics when measuring the lease liabilities at 1 January 2019

- Using hindsight in determining the lease term where the contract contains options to extend or terminate the lease

- and excluding initial direct costs from the measurement of the right-of-use assets at the date of initial application

(Amounts expressed in thousands of RMB unless otherwise stated)

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

IFRS 16 Leases (Continued)

As a lessee- Leases previously classified as operating leases (Continued)

Impacts on transition (Continued)

The Group did not change the initial carrying amounts of recognised assets and liabilities at the date of initial application for leases previously classified as finance leases. Accordingly, the carrying amounts of the right-of-use assets and the lease liabilities at 1 January 2019 were the carrying amounts of the recognised assets and liabilities (i.e., finance lease payables) measured under IAS 17.

The impact arising from the adoption of IFRS16 at 1 January 2019 is as follows:

Assets	**Increase/ (decrease)**
Increase in right-of-use assets	17,976,851
Decrease in property, plant and equipment	(6,720,610)
Decrease in land use rights	(4,306,865)
Decrease in other non-current assets	(20,323)
Increase in total assets	6,929,053
Liabilities	
Increase in Interest-bearing loans and borrowings	11,010,323
Decrease in finance lease payables	(4,081,270)
Increase in total liabilities	6,929,053
Decrease in retained earnings	–
Decrease in non-controlling interests	–

(Amounts expressed in thousands of RMB
unless otherwise stated)

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

IFRS 16 Leases (Continued)

As a lessee- Leases previously classified as operating leases (Continued)

Impacts on transition (Continued)

The lease liabilities as at 1 January 2019 reconciled to the operating lease commitments as at 31 December 2018 is as follows:

Operating lease commitments as at 31 December 2018	12,989,524
Less: Commitments relating to short-term leases, low-value assets leases and those leases with a remaining lease term ending on or before 31 December 2019	59,819
Undiscounted Operating lease commitments as at 1 January 2019 under IFRS 16	12,929,705
Weighted average incremental borrowing rate as at 1 January 2019	4.97%
Discounted operating lease commitments as at 1 January 2019 under IFRS 16	6,929,053
Add: Recognised Finance leases as at 31 December 2018	4,081,270
Lease liabilities as at 1 January 2019	11,010,323

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

Amendments to IAS 28

Amendments to IAS 28 clarify that the scope exclusion of IFRS 9 only includes interests in an associate or joint venture to which the equity method is applied and does not include long-term interests that in substance form part of the net investment in the associate or joint venture, to which the equity method has not been applied. Therefore, an entity applies IFRS 9, rather than IAS 28, including the impairment requirements under IFRS 9, in accounting for such long-term interests. IAS 28 is then applied to the net investment, which includes the long-term interests, only in the context of recognising losses of an associate or joint venture and impairment of the net investment in the associate or joint venture. The Group assessed its business model for its long-term interests in associates and joint ventures upon adoption of the amendments on 1 January 2019 and concluded that the long-term interests in associates and joint ventures continue to be measured at amortised cost in accordance with IFRS 9. Accordingly, the amendments did not have any impact on financial position or performance of the Group.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

IFRIC 23

IFRIC 23 addresses the accounting for income taxes (current and deferred) when tax treatments involve uncertainty that affects the application of IAS 12 (often referred to as "uncertain tax positions"). The interpretation does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The interpretation specifically addresses (i) whether an entity considers uncertain tax treatments separately; (ii) the assumptions an entity makes about the examination of tax treatments by taxation authorities; (iii) how an entity determines taxable profits or tax losses, tax bases, unused tax losses, unused tax credits and tax rates; and (iv) how an entity considers changes in facts and circumstances. Upon adoption of the interpretation, the Group assessed whether it has any uncertain tax positions arising from transactions during the year. Based on the Group's assessment, the directors are of opinion that the eventual outcome of the uncertainty position shall not have a material adverse financial effect.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

Amendments to IFRS 10 and IAS 28

Amendments to IFRS 10 and IAS 28 (2011) address an inconsistency between the requirements in IFRS 10 and in IAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively.

The Group adopted the amendments on 1 January 2019, and assessed the sale or contribution of assets transaction with its associate or joint venture. The amendments did not have any significant impact on the Group's financial statements.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Issued but not yet effective International Financial Reporting Standards

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective, in these financial statements.

Amendments to IFRS 3	*Definition of a Business*[1]
Amendments to IFRS 9, IAS 39 and IFRS 7	*Interest Rate Benchmark Reform*[1]
IFRS 17	*Insurance Contracts*[2]
Amendments to IAS 1 and IAS 8	*Definition of Material*[1]

1 Effective for annual periods beginning on or after 1 January 2020
2 Effective for annual periods beginning on or after 1 January 2021

Further information about those IFRSs that are expected to be applicable to the Group is described below.

Amendments to IAS 1 and IAS 8 provide a new definition of material. The new definition states that information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. The amendments clarify that materiality will depend on the nature or magnitude of information. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. The Group expects to adopt the amendments prospectively from 1 January 2020. The amendments are not expected to have any significant impact on the Group's financial statements.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Issued but not yet effective International Financial Reporting Standards (Continued)

Amendments to IFRS 3 clarify and provide additional guidance on the definition of a business. The amendments clarify that for an integrated set of activities and assets to be considered a business, it must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. A business can exist without including all of the inputs and processes needed to create outputs. The amendments remove the assessment of whether market participants are capable of acquiring the business and continue to produce outputs. Instead, the focus is on whether acquired inputs and acquired substantive processes together significantly contribute to the ability to create outputs. The amendments have also narrowed the definition of outputs to focus on goods or services provided to customers, investment income or other income from ordinary activities. Furthermore, the amendments provide guidance to assess whether an acquired process is substantive and introduce an optional fair value concentration test to permit a simplified assessment of whether an acquired set of activities and assets is not a business. The Group expects to adopt the amendments prospectively from 1 January 2020. Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

Amendments to IFRS 9, IAS 39 and IFRS 7 address the effects of interbank offered rate reform on financial reporting. The amendments provide temporary reliefs which enable hedge accounting to continue during the period of uncertainty before the replacement of an existing interest rate benchmark. In addition, the amendments require companies to provide additional information to investors about their hedging relationships which are directly affected by these uncertainties. The amendments are effective for annual periods beginning on or after 1 January 2020. Early application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Investments in associates and joint ventures

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

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The Group's investments in associates and joint ventures are stated in the consolidated statement of financial position at the Group's share of net assets under the equity method of accounting, less any impairment losses. Adjustments are made to bring into line any dissimilar accounting policies that may exist. The Group's share of the post-acquisition results and other comprehensive income of associates and joint ventures is included in the consolidated statement of profit or loss and other comprehensive income. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's investments in the associates or joint ventures, except where unrealised losses provide evidence of an impairment of the assets transferred. Goodwill arising from the acquisition of associates or joint ventures is included as part of the Group's investments in associates or joint ventures.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.4 Investments in associates and joint ventures (Continued)

After application of the equity method, the Group determine whether it is necessary to recognise an impairment loss on its investment in its associate and joint venture in the profit or loss. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, then recognises the loss in the profit or loss.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

When an investment in an associate or a joint venture is classified as held for sale, it is accounted for in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.

2.5 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-makers. The chief operating decision-makers, who are responsible for allocating resources and assessing the performance of the operating segments, have been identified as the presidents of the Company that make strategic decisions.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.6 Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person:

(i) has control or joint control over the Group;

(ii) has a significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.6 Related parties (Continued)

(b) the party is an entity where any of the following conditions applies:

(iv) the entity and the Group are members of the same group;

(v) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);

(vi) the entity and the Group are joint ventures of the same third party;

(vii) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

(viii) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group; (If the Group is itself a plan) and the sponsoring employers of the post-employment benefit plan;

(ix) a person identified in (a) (i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and

(x) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

(xi) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.7 Fair value measurement

The Group measures its derivative financial instruments and equity investments at fair value at the end of each reporting period. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

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

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.7 Fair value measurement (Continued)

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 – Based on quoted (unadjusted) prices in active markets for identical assets or liabilities

Level 2 – Based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable，either directly or indirectly

Level 3 – Based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.8 Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets, non-current assets classified as held for sales and goodwill or intangible assets with indefinite useful life), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to the statement of profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to profit or loss in the period in which it arises.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.9 Foreign currency translation

Functional and presentation currency

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

Transactions and balances

Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of the reporting period. Differences arising on settlement or translation of monetary items are recognised in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item.

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.9 Foreign currency translation (Continued)

Group companies

The results and financial positions of all the group entities (none of which has the currency of a hyper-inflationary economy) that has a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities in each statement of financial position presented are translated at the closing rates at the end of the reporting period;

(ii) income and expenses in each statement of profit and loss and other comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rates at the dates of the transactions); and

(iii) all resulting exchange differences are recognised in other comprehensive income. Upon disposal of a foreign operation, the other comprehensive income related to the foreign operation is reclassified to profit or loss.

Goodwill and fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Exchange differences arising are recognised in other comprehensive income.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 Property, plant and equipment

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. When an item of property, plant and equipment is classified as held for sale or when it is part of a disposal group classified as held for sale, it is not depreciated and is accounted for in accordance with IFRS 5. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Buildings	8–45 years
Machinery	3–30 years
Transportation facilities	6–10 years
Office and other equipment	3–10 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.10 Property, plant and equipment (Continued)

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress ("CIP") represents buildings under construction, which is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. CIP is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

2.11 Investment properties

Investment properties are interests in land and buildings (including the leasehold property held as a right-of-use asset (2018: leasehold property under an operating lease) which would otherwise meet the definition of an investment property) held to earn rental income and/or for capital appreciation, rather than for use in the production or supply of goods or services or for administrative purposes; or for sale in the ordinary course of business. Such properties are measured initially at cost, including transaction costs. After initial recognition, the Group uses the cost methods to measure all of its investment properties.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Investment properties (Continued)

Depreciation is calculated on the straight-line basis to write off the cost to investment property's residual value over its estimated useful life. The estimated useful lives are as follows:

Buildings	50 years
Land use rights	40–70 years

The carrying amounts of investment properties measured using the cost method are reviewed for impairment when events or changes in circumstances indicate that the carrying amounts may not be recoverable.

Any gains or losses on the retirement or disposal of an investment property are recognised in profit or loss in the year of the retirement or disposal.

2.12 Non-current assets and disposal groups held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sales transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for the sale of such assets or disposal groups and its sale must be highly probable. All assets and liabilities of a subsidiary classified as a disposal group are reclassified as held for sale regardless of whether the Group retains a non-controlling interest in its former subsidiary after the sale.

Non-current assets and disposal groups (other than financial assets) classified as held for sale are measured at the lower of their carrying amounts and fair values less costs to sell. Property, plant and equipment and intangible assets classified as held for sale are not depreciated or amortised.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.13 Intangible assets (other than goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

(a) Mining rights and mineral exploration rights

The Group's mineral exploration rights and mining rights relate to coal, bauxite and other mines.

(i) Recognition

Except for mineral exploration rights and mining rights acquired in a business combination, mineral exploration rights and mining rights are initially recorded at cost which includes the acquisition consideration, qualifying exploration and other direct costs. The mineral exploration rights are stated at cost less any impairment, and the mining rights are stated at cost less any amortisation and impairment.

(ii) Reclassification

Mineral exploration rights are converted to mining rights when technical feasibility and commercial viability of extracting a mineral resource are demonstrable, and are subject to amortisation when commercial production has commenced.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.13 Intangible assets (other than goodwill) (Continued)

(a) Mining rights and mineral exploration rights (Continued)

(ii) Reclassification (Continued)

The Group assesses the stage of each mine under construction to determine when a mine moves into the production stage. The criteria used to assess the start date are determined based on the unique nature of each mine construction project. The Group considers various relevant criteria, such as completion of a reasonable period of testing of the mine and equipment, ability to produce in saleable form (within specifications) and ability to sustain ongoing production to assess when a mine is substantially complete and ready for its intended use.

(iii) Amortisation

Amortisation of bauxite and other mining rights (except for coal mining rights) is provided on a straight-line basis according to the shorter of the expiration date of the mining certificate and the mineable period of natural resources. Estimated mineable periods of the majority of the mining rights range from 3 to 30 years.

Coal mining rights are amortised on a unit-of-production basis over the economically recoverable reserves evaluated based on the reserves estimated in accordance with the standards in the Solid Mineral Resource/Reserve Classification of the PRC (GB/T17766–1999) of the mine concerned.

(iv) Impairment

An impairment review is performed when there are indicators that the carrying amount of the mineral exploration rights and mining rights may exceed their recoverable amounts. To the extent that this occurs, the excess is fully provided as an impairment loss.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.13 Intangible assets (other than goodwill) (Continued)

(b) Computer software

Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use specific software. These costs are amortised over their estimated useful lives, which do not exceed 10 years. Costs associated with maintaining computer software programmes are recognised as an expense as incurred.

(c) Electrolytic aluminum production quota

Electrolytic aluminum production quota are initially recorded at cost and subsequently states at cost less any amortisation and impairment. Amortisation is provided on a straight-line basis according to expected production period.

(d) Other intangible assets

Other intangible assets mainly include profit-sharing rights of Maochang mine, which are initially recorded at costs incurred to acquire the specific right. Amortisation is calculated on the straight-line basis over its estimated useful life. The estimated useful live of profit-sharing rights of Maochang mine is 22.5 years.

For intangible assets with finite useful life, the estimated useful lives and amortisation method are reviewed annually at the end of each reporting period and adjusted when necessary.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.14 Research and development costs

Research and development expenditures are classified as research expenditures and development expenditures according to the nature of the expenditures and whether there is significant uncertainty of development activities transforming to assets.

Research expenditures are recognised in profit or loss for the current period. Development expenditures are recognised as assets when all of the following criteria are met:

(i) it is technically feasible to complete the asset so that it will be available for use or sale;

(ii) management intends to complete the asset and intends and has the ability to use or sell it;

(iii) it can be demonstrated that the asset will generate probable future economic benefits;

(iv) there are adequate technical, financial and other resources to complete the development of the asset and management has the ability to use or sell the asset; and

(v) the expenditure attributable to the asset during its development phase can be reliably measured.

Development expenditures that do not meet the criteria above are recorded in profit or loss for the current period as incurred. Development expenditures that have been recorded in profit or loss in previous periods will be not recognised as assets in subsequent periods. The Group has not had any development expenditure capitalised.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.15 Leases (applicable from 1 January 2019)

The Group assesses at contract inception whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.15 Leases (applicable from 1 January 2019) (Continued)

Group as a lessee (Continued)

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-us assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payment made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Buildings	2–20 years
Machinery	2–10 years
Land use rights	10–50 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.15 Leases (applicable from 1 January 2019) (Continued)

Group as a lessee (Continued)

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g., a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

The Group's lease liabilities are included in interest-bearing bank and other borrowings.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.15 Leases (applicable from 1 January 2019) (Continued)

Group as a lessee (Continued)

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (that is those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the recognition exemption for leases of low-value assets to leases of office equipment that are considered to be of low value (i.e. below RMB30,000).

Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

Group as a lessor

When the Group acts as a lessor, it classifies at lease inception (or when there is a lease modification) each of its leases as either an operating lease or a finance lease.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. Rental income is accounted for on a straight-line basis over the lease terms and is included in revenue in profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.15 Leases (applicable from 1 January 2019) (Continued)

Group as a lessor (Continued)

Leases that transfer substantially all the risks and rewards incidental to ownership of an underlying assets to the lessee, are accounted for as finance leases. At the commencement date, the cost of the leased asset is capitalised at the present value of the minimum lease payments and related payments (including the initial direct costs), and presented as a receivable at an amount equal to the net investment in the lease. The finance costs of such leases are charged to profit or loss so as to provide a constant periodic rate of charge over the lease terms.

2.16 Leases (applicable before 1 January 2019)

Leases that transfer substantially all the rewards and risks of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalised at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under capitalised finance leases, including prepaid land lease payments under finance leases, are included in property, plant and equipment, and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The finance costs of such leases are charged to profit or loss so as to provide a constant periodic rate of charge over the lease terms.

Assets acquired through hire purchase contracts of a financing nature are accounted for as finance leases, but are depreciated over their estimated useful lives.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.16 Leases (applicable before 1 January 2019) (Continued)

Leases where substantially all the rewards and risks of ownership of assets remain with the lessor are accounted for as operating leases. Where the Group is the lessor, assets leased by the Group under operating leases are included in non-current assets, and rentals receivable under the operating leases are credited to profit or loss on the straight-line basis over the lease terms. Where the Group is the lessee, rentals payable under operating leases net of any incentives received from the lessor are charged to profit or loss on the straight-line basis over the lease terms.

Prepaid land lease payments under operating leases are initially stated at cost and subsequently recognised on the straight-line basis over the lease terms.

2.17 Investments and other financial assets

Initial recognition and measurement

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

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

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Initial recognition and measurement (Continued)

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

Financial assets at amortised cost (debt instruments)

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

Financial assets at fair value through other comprehensive income (debt instruments)

For debt investments at fair value through other comprehensive income, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to profit or loss.

Financial assets designated at fair value through other comprehensive income (equity investments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity investments designated at fair value through other comprehensive income when they meet the definition of equity under IAS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Subsequent measurement (Continued)

Financial assets designated at fair value through other comprehensive income (equity investments) (Continued)

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income. Equity investments designated at fair value through other comprehensive income are not subject to impairment assessment.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in profit or loss.

This category includes derivative instruments, wealth management products and equity investments which the Group had not irrevocably elected to classify at fair value through other comprehensive income. Dividends on equity investments classified as financial assets at fair value through profit or loss are also recognised as other gains in profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Subsequent measurement (Continued)

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

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

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

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

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

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The ECL at 31 December 2019 was estimated based on a range of forecast economic conditions as at that date. Since early January 2020, the coronavirus outbreak has spread across mainland China and beyond, causing disruption to business and economic activity. The impact on GDP and other key indicators have been considered when determining the severity and likelihood of downside economic scenarios that are used to estimate ECL under IFRS 9 in 2020.

General approach

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

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Impairment of financial assets (Continued)

General approach (Continued)

The Group considers a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Debt investments at fair value through other comprehensive income and financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables and contract assets which apply the simplified approach as detailed below.

Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs

Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs

Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Investments and other financial assets (Continued)

Impairment of financial assets (Continued)

Simplified approach

For trade receivables and contract assets that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For trade receivables and contract assets that contain a significant financial component and lease receivables, the Group chooses as its accounting policy to adopt the simplified approach in calculating ECLs with policies as described above.

2.18 Financial liabilities

Initial recognition and measurement

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

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

The Group’s financial liabilities include trade and other payables, derivative financial instruments and interest-bearing bank and other borrowings.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 Financial liabilities (Continued)

Subsequent measurement

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

Financial liabilities at fair value through profit or loss

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

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on liabilities held for trading are recognised in profit or loss. The net fair value gain or loss recognised in profit or loss does not include any interest charged on these financial liabilities.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 Financial liabilities (Continued)

Subsequent measurement (Continued)

Financial liabilities at amortised cost (loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in profit or loss.

Financial guarantee contracts

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. A financial guarantee contract is recognised initially as a liability at its fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequent to initial recognition, the Group measures the financial guarantee contracts at the higher of: (i) the ECL allowance determined in accordance with the policy as set out in "Impairment of financial assets"; and (ii) the amount initially recognised less, when appropriate, the cumulative amount of income recognised.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 Financial liabilities (Continued)

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

2.19 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the consolidated statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

2.20 Derivative financial instruments

Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as futures and option contracts, to reduce its exposure to fluctuation in the price of primary aluminium and other products, to hedge its foreign currency risk and interest rate risk, respectively. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Any gains or losses arising from changes in fair value of derivatives are taken directly to profit or loss.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.21 Inventories

Inventories comprise raw materials, work-in-progress, finished goods, spare parts and packaging materials and others, and are stated at the lower of cost and net realisable amount. Cost is determined using the weighted average method. Work-in-progress and finished goods comprise materials, direct labour and an appropriate proportion of all production overhead expenditure (based on the normal operating capacity). Borrowing costs are excluded.

Provision for impairment of inventories is usually determined by the excess of cost over the net realisable amount and recorded in profit or loss. Net realisable amounts are determined based on the estimated selling price less estimated conversion costs, selling expenses and related taxes in the ordinary course of business. The provision for or the reversal of provision for impairment of inventories is recognised within "Cost of sales" in profit or loss.

2.22 Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.23 Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in profit or loss.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.24 Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, which it is intended to compensate, are expensed.

Asset-related government grants are recognised when the government document designates that the government grants are used for constructing or forming long-term assets. If the government document is inexplicit, the Group should make a judgement based on the basic conditions to obtain the government grants, and recognises them as asset-related government grants if the conditions are to construct or to form long-term assets. Otherwise, the government grants should be income-related.

For asset-related government grants that is related to long lived assets that already exist at the time of recognising the government grant, the grant is deducted in calculating the carrying amount of the asset. The grant is recognised in profit or loss over the life of a depreciable asset as a reduced depreciation expense. If the asset is not yet purchased or constructed at the time of recognising the government grant, the grant is recognised as deferred income and will be deducted from the cost of the asset once the asset is recognised.

Income-related government grants that are specific to compensate expenses or costs that have already incurred, they are directly recognised in profit or loss for the current period as deduction of the related expenses or costs. If the income-related government grants are specific to compensate future expenses or costs of the Group, they are recognised as deferred income and will be released to profit or loss when the related expenses or costs are incurred.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.25 Employee benefits

Employee benefits mainly include salaries, bonuses, allowances and subsidies, pension insurance, social insurance and housing funds, labour union fees, employees' education fees and other expenses related to the employees for their services. The Group recognises employee benefits as liabilities during the accounting period when employees rendered the services and allocates the related cost of assets and expenses based on different beneficiaries.

(a) Bonus plans

The expected cost of bonus plans is recognised as a liability when the Group has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made.

(b) Retirement benefit obligations

The Group primarily pays contributions on a monthly basis to participate in a pension plan organised by the relevant municipal and provincial governments in the PRC. In 2019, the Group made monthly contributions at the rate of 17% (2018: 20%) of the qualified employees' salaries. The municipal and provincial governments undertake to assume the retirement benefit obligations of all existing and future retired employees payable under these plans. The Group has no legal or constructive obligations for further contributions if the fund does not hold sufficient assets to pay all employees the benefit relating to their current and past services.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.25 Employee benefits (Continued)

(c) Other social insurance and housing funds

The Group provides other social insurance and housing funds to the qualified employees in the PRC based on certain percentages of their salaries. These percentages are not to exceed the upper limits of the percentages prescribed by the Ministry of Human Resources and Social Security of the PRC. These benefits are paid to social security organisations and the amounts are expensed as incurred. The Group has no legal or constructive obligations for further contributions if the fund does not hold sufficient assets to pay all employees the benefit relating to their current and past services.

(d) Termination benefit obligations and early retirement benefit obligations

Termination and early retirement benefit obligations are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy and/or early retirement in exchange for these benefits. The Group recognises termination and early retirement benefit obligations when it is demonstrably committed to either: terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal; or providing termination benefits as a result of an offer made to encourage voluntary redundancy and/or early retirement. The specific terms vary among the terminated and early retired employees depending on various factors including position, length of service and district of the employees concerned. Benefits falling due for more than 12 months after the end of the reporting period are discounted to their present values.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 Income tax (Continued)

Deferred tax assets are recognised for all deductible temporary differences, and the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

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

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 Income tax (Continued)

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

2.27 Perpetual securities

Perpetual securities are classified as equity if they are non-redeemable, or redeemable only at the issuer's option, and any interest and distributions are discretionary. Interest and distributions on perpetual securities classified as equity are recognised as distributions within equity.

The perpetual securities issued by the Company are recognised as other equity instruments, and the perpetual securities issued by a subsidiary of the Company are recognised as non-controlling interests.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.28 Revenue recognition

Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

When the contract contains a financing component which provides the customer with a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in IFRS 15.

(a) Sale of industrial products

Revenue from the sale of industrial products (including sales of scrap and other materials) is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the industrial products.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.29 Revenue recognition (Continued)

Revenue from contracts with customers (Continued)

(b) Rendering of services

Revenue from services is recognised over time, using an input method to measure progress towards complete satisfaction of the service, because the customer simultaneously receives and consumes the benefits provided by the Group. Revenue is recognised on a straight-line basis because the entity's inputs are expended evenly throughout the performance period.

Revenue from other sources

Rental income

Rental income is recognised on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are incurred.

Other income

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Dividend income is recognised when the shareholders' right to receive payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.30 Contract liabilities

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

2.31 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

2.31 Dividend distribution

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's and Company's financial statements in the period in which the dividends are approved by the Company's shareholders in a general meeting.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these judgements, assumptions and estimates could result in outcomes that require a material adjustment to the carrying amounts of assets or liabilities affected in future periods.

Judgements

In the process of applying the Group's accounting policies and preparing the Group's consolidated financial statements, management has made the following judgements, apart from those involving estimates, which have a significant effect on the amounts recognised in the consolidated financial statements.

(a) Significant influence over an entity in which the Group holds less than 20% of voting rights

As disclosed in Note 8, the Group owned a 10.04% equity interest in Yunnan Aluminium Co., Ltd.* ("Yunnan Aluminum") (雲南鋁業股份有限公司). The Group considers that it has significant influence over Yunnan Aluminum even though it owns less than 20% of the voting rights, on the grounds that the Group is the second largest shareholders of Yunnan Aluminum and one out of the eleven directors of the board of directors of Yunnan Aluminum exercises director's rights on behalf of the Group.

At 31 December 2019, the Group owned a 6.68% equity interest in Chalco Mineral Resources Co.,Ltd.* ("Chalco Resources") (中鋁礦產資源有限公司). The Group considers that it has significant influence over Chalco Resources even though it owns less than 20% of the voting rights, on the grounds that the Group can appoint one out of the five directors of the board of directors of Chalco Resources.

At 31 December 2019, the Group owned 14.71% of the voting right of Chinalco Capital Holdings Co., Ltd.* ("Chinalco Capital") (中鋁資本控股有限公司). The Group considers that it has significant influence over Chinalco Capital since it can appoint one out of three directors of the board of directors of Chinalco Capital.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Judgements (Continued)

(a) Significant influence over an entity in which the Group holds less than 20% of voting rights (Continued)

At 31 December 2019, the Group owned a 16% equity interest in Baise New Aluminum Power Co., Ltd. * ("New Aluminum Power") (百色新鋁電力有限公司). The Group considers that the Group has significant influence over New Aluminum Power even though it owns less than 20% of the voting rights, on the grounds that the Group can appoint one out of the nine directors of the board of directors of New Aluminum Power.

At 31 December 2019, the Group owned a 14.29% equity interest in Inner Mongolia Geliugou Co., Ltd.* ("Inner Mongolia Qiliugou") (內蒙古圪柳溝能源有限公司). The Group considers that it has significant influence over Inner Mongolia Qiliugou even though it owns less than 20% of the voting rights, on the grounds that the Group can appoint one out of the seven directors of the board of directors of Inner Mongolia Qiliugou.

(b) Consolidation of entities in which the Group holds less than a majority of voting rights

At 31 December 2019, the Group owned a 40.23% equity interest in Ningxia Yinxing Energy Co., Ltd. * ("Yinxing Energy") (寧夏銀星能源股份有限公司). Since the remaining 59.77% of the equity shares in Yinxing Energy are held by a large number of individual shareholders, in opinion of the directors of the Company, the Group has control over Yinxing Energy, and Yinxing Energy continues to be included in the consolidation scope.

At 31 December 2019, the Company owned a 40% equity interest in Guizhou Huaren New Materials Co., Ltd.* ("Guizhou Huaren")(貴州華仁新材料有限公司). In accordance with the acting-in-concert agreement signed between the Company and Hangzhou Jinjiang Group Co., Ltd.* ("Hangzhou Jinjiang")(杭州錦江集團有限公司), Hangzhou Jinjiang would exercise the shareholders' and board of directors' votes in concert with the Group. Therefore, the directors of the Company believe that the Company has control over Guizhou Huaren and consolidated Guizhou Huaren's financial statements from the date the Group obtained control.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Judgements (Continued)

(b) Consolidation of entities in which the Group holds less than a majority of voting rights (Continued)

At 31 December 2019, the Company owned 43.39% of the shares of Shanxi China Aluminum China Resources Co., Ltd.* ("Shanxi Zhongrun")(山西中鋁華潤有限公司). In accordance with the acting-in-concert agreement signed between the Company and China Resources Coal Industry Group Co., Ltd. ("China Resources Coal Industry"), China Resources Coal Industry would exercise the shareholders' and board of directors' votes in concert with the Group. Therefore, the directors of the Company believe that the Company has control over Shanxi Zhongrun and consolidated Shanxi Zhongrun's financial statements from the date the Group obtained control.

(c) Determination of control over structured entities

As disclosed in Note 9, in 2017, the Company initiated the establishment of Beijing Chalco Bocom Size Industry Investment Fund Management Partnership (Limited Partnership)* ("Size Industry Investment Fund") (北京中鋁交銀四則產業投資基金管理合夥企業(有限合夥)). Pursuant to the Investment Agreements, the directors of the Company are of the opinion that as a limited partner, the Company neither had control over or joint control over nor significant influence over Size Industry Investment Fund. Therefore, the Company's investment in Size Industry Investment Fund was accounted for as equity investment designated at fair value through other comprehensive income.

* The English name represents the best effort made by management of the Group in translating its Chinese name as it does not have any official English names.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Group's assumptions and estimates are based on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

(a) Property, plant and equipment and intangible assets – recoverable amount (excluding goodwill)

In accordance with the Group's accounting policy, each asset or cash-generating unit is evaluated in every reporting period to determine whether there are any indications of impairment. If any such indication exists, an estimate of the net recoverable amount is performed and an impairment loss is recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an asset or cash-generating unit of assets is measured at the higher of fair value less costs of disposal and value in use.

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

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (Continued)

(a) Property, plant and equipment and intangible assets – recoverable amount (excluding goodwill) (Continued)

Value in use is generally determined as the present value of the estimated future cash flows of those expected to arise from the continued use of the asset in its present form and its eventual disposal. Present values are determined using a risk-adjusted pre-tax discount rate appropriate to the risks inherent in the asset. Future cash flow estimates are based on significant estimates and judgments involved in the projections of the future prices of aluminum and alumina, expected production and sales volumes, production costs, operating expenses, and discount rates applied to these forecasted future cash flows. These estimates and judgments may be affected by unexpected changes in the future market or economic conditions; hence, there is a possibility that changes in circumstances will alter these projections, which may impact on the recoverable amounts of the assets. In such circumstances, some or all of the carrying value of the assets may be impaired and the impairment would be charged against profit or loss.

(b) Property, plant and equipment and intangible assets (excluding goodwill) – estimated useful lives and residual values

The Group's management determines the estimated useful lives and residual values (if applicable) and consequently the related depreciation/amortisation charges for its property, plant and equipment and intangible assets (excluding goodwill). These estimates are based on the historical experience of the actual useful lives of property, plant and equipment of similar nature and functions, or based on value-in-use calculations or market valuations according to the estimated periods that the Group intends to derive future economic benefits from the use of intangible assets. Management will increase the depreciation/amortisation charge where useful lives are less than previously estimated, and it will write off or write down technically obsolete or non-strategic assets that have been abandoned or sold.

Actual economic lives may differ from estimated useful lives and actual residual values may differ from estimated residual values. Periodic review could result in change in depreciable lives and residual values and therefore change in depreciation/amortisation expense in future periods.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (Continued)

(c) Goodwill – recoverable amount

In accordance with the Group's accounting policy, goodwill is allocated to the Group's cash generating units ("CGU") as it represents the lowest level within the Group at which the goodwill is monitored for internal management purposes and is tested for impairment annually or more frequently if events or changes in circumstance indicated that the carrying amount may be impaired, by comparing the recoverable amount of the CGU and the carrying amount of the CGU. The recoverable amount is the higher of value in use and the fair value less costs of disposal. The recoverable amount of the underlying CGUs involved estimates and judgments, including future prices of aluminum and alumina, expected production and sales volumes, production costs, operating expenses, terminal growth rates used to estimate future cash flows and discount rates applied to these forecasted future cash flows of the underlying CGUs. These estimates and judgments may be affected by unexpected changes in future market or economic conditions.

(d) Provision for expected credit losses on trade receivables

The Group uses a provision matrix to calculate ECLs for trade receivables. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by product type, customer type, and coverage by letters of credit and other forms of credit insurance).

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic products) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (Continued)

(d) Provision for expected credit losses on trade receivables (Continued)

The assessment of the correlation among historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be presentative of customer's actual default in the future. The information about the ECLs on the Group's trade receivables is disclosed in Note 13 to the financial statements.

(e) Estimated impairment of inventories

In accordance with the Group's accounting policy, the Group's management tests whether inventories suffered any impairment based on estimates of the net realisable amount of the inventories. For different types of inventories, it requires the estimation on selling prices, costs of conversion, selling expenses and the related tax expense to calculate the net realisable amount of inventories. For inventories held for executed sales contracts, management estimates the net realisable amount based on the contracted price. For raw materials and work-in-progress, management has established a model in estimating the net realisable amount at which the inventories can be realised in the normal course of business after considering the Group's manufacturing cycles, production capacity and forecasts, estimated future conversion costs and selling prices. Management also takes into account the price or cost fluctuations and other related matters occurring after the end of the reporting period which reflect conditions that existed at the end of the reporting period.

It is reasonably possible that if there is a significant change in circumstances including the Group's business and the external environment, outcomes within the next financial year would be significantly affected.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (Continued)

(f) Coal reserve estimates and units-of-production amortisation for coal mining rights

External qualified valuation professionals evaluate "economically recoverable reserves" based on the reserves estimated by external qualified exploration engineers in accordance with the PRC standards. The estimates of coal reserves are inherently imprecise and represent only the approximate amounts of the coal reserves because of the subjective judgements involved in developing such information. Economically recoverable reserve estimates are evaluated on a regular basis and have taken into account recent production and technical information about each mine.

(g) Income tax

The Group estimates its income tax provision and deferred taxation in accordance with the prevailing tax rules and regulations, taking into account any special approvals obtained from the relevant tax authorities and any preferential tax treatment to which it is entitled in each location or jurisdiction in which the Group operates. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, the differences will impact on the income tax and deferred tax provisions in the period in which the determination is made.

Deferred tax assets are recognised for unused tax losses and deductible temporary differences, such as the provision for impairment of receivables, inventories and property, plant and equipment and accruals of expenses not yet deductible for tax purposes, to the extent that it is probable that taxable profits will be available against which the losses deductible temporary difference can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon forecast of future taxable profits which was complex and judgmental and was based on significant assumptions, including future tax rates, the possible utilisation of loss carry forwards and future taxable profits that are affected by unexpected changes in the tax law framework and future market or economic conditions.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (Continued)

(g) Income tax (Continued)

An entity shall recognise a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, except to the extent that both of the following conditions are satisfied:

- the parent, investor or joint venturer is able to control the timing of the reversal of the temporary difference; and

- it is probable that the temporary difference will not reverse in the foreseeable future.

The Group considers it has recorded adequate current tax provision and deferred taxes based on the prevailing tax rules and regulations and its current best estimates and assumptions. In the event that future tax rules and regulations or related circumstances change, adjustments to current and deferred taxation may be necessary which would impact on the Group's results or financial position.

(h) Investments in joint ventures and associates – recoverable amount

In accordance with the Group's accounting policy, each investment in a joint venture and an associate is evaluated in every reporting period to determine whether there are any indicators of impairment. If any such indicators exists, an estimate of the recoverable amount is performed and an impairment loss is recognised to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of the investment in a joint venture and an associate is measured at the higher of fair value less costs of disposal and value in use.

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

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (Continued)

(h) Investments in joint ventures and associates – recoverable amount (Continued)

Value in use is also generally determined as the present value of the estimated future cash flows of those expected to arise from the continued use of the asset in its present form and its eventual disposal. Present values are determined using a risk-adjusted pre-tax discount rate appropriate to the risks inherent in the asset. Future cash flow estimates are based on expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors) and operating costs. This policy requires management to make these estimates and assumptions which are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these projections, which may impact on the recoverable amounts of the investments. In such circumstances, some or all of the carrying value of the investments may be impaired and the impairment would be charged against profit or loss.

(i) Leases – Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate ("IBR") to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group "would have to pay", which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when it needs to be adjusted to reflect the terms and conditions of the lease. The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION

(a) Revenue

Revenue recognised during the year is as follows:

	2019	2018 (Restated)
Revenue from contracts with customers (net of value-added tax)		
Sale of goods	**189,569,543**	179,785,704
Rendering of services	**186,703**	215,557
Revenue from other sources		
Rental income	**317,915**	240,153
	190,074,161	180,241,414

Revenue from the rendering of services includes revenue from the supply of heat and water and the provision of machinery processing, transportation, packaging and other services.

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(a) Revenue (Continued)

(i) Disaggregated revenue information

	For the year ended 31 December 2019						
	Alumina segment	Primary Aluminum segment	Energy Segment	Trading	Corporate and other operating segments	Inter-segment elimination	Total
Type of goods or services							
Sales of goods	43,690,995	49,043,864	7,148,644	158,633,447	492,624	(69,440,031)	189,569,543
Rendering of services	–	–	186,703	–	–	–	186,703
Total revenue	43,690,995	49,043,864	7,335,347	158,633,447	492,624	(69,440,031)	189,756,246
Geographical markets							
Mainland China	43,690,995	49,043,864	7,335,347	152,857,432	492,624	(69,440,031)	183,980,231
Outside of mainland China	–	–	–	5,776,015	–	–	5,776,015
Total revenue from contracts with customers	43,690,995	49,043,864	7,335,347	158,633,447	492,624	(69,440,031)	189,756,246
Timing of revenue recognition							
Goods transferred at a point in time	43,690,995	49,043,864	7,148,644	158,633,447	492,624	(69,440,031)	189,569,543
Services transferred over time	–	–	186,703	–	–	–	186,703
Total revenue from contracts with customers	43,690,995	49,043,864	7,335,347	158,633,447	492,624	(69,440,031)	189,756,246

(Amounts expressed in thousands of RMB
unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(a) Revenue (Continued)

(i) Disaggregated revenue information (Continued)

	For the year ended 31 December 2019						
	Alumina segment	Primary Aluminum segment	Energy Segment	Trading	Corporate and other operating segments	Inter-segment elimination	Total
Revenue from contracts with customers							
External customers	14,117,594	37,349,482	7,099,211	130,864,398	325,561	–	189,756,246
Intersegment sales	29,573,401	11,694,382	236,136	27,769,049	167,063	–	69,440,031
	43,690,995	49,043,864	7,335,347	158,633,447	492,624	–	259,196,277
Intersegment adjustments and eliminations	(29,573,401)	(11,694,382)	(236,136)	(27,769,049)	(167,063)	–	(69,440,031)
Total revenue from contracts with customers	14,117,594	37,349,482	7,099,211	130,864,398	325,561	–	189,756,246

(Amounts expressed in thousands of RMB
unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(a) Revenue (Continued)

(i) Disaggregated revenue information (Continued)

The following table shows the amounts of revenue recognised in the current reporting period that were included in the contract liabilities at the beginning of the reporting period:

	2019	2018
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:		
– Sale of goods	**1,543,164**	1,277,125
– Others	**36,158**	32,947
	1,579,322	1,310,072

(ii) Performance obligations

Information about the Group's performance obligations is summarised below:

Revenue from sales of products (including sales of the other materials)

The performance obligation is satisfied upon delivery of the industrial products and payment is generally due within 30 to 90 days from delivery, except for new customers, where payment in advance is normally required.

Sales of goods were made in a short period of time and the performance obligation was mostly satisfied in one year or less at the end of each year.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(a) Revenue (Continued)

(ii) Performance obligations (Continued)

Rendering of services

The performance obligation is satisfied over time as services are rendered and payment is generally due upon completion of the relevant services.

Amounts expected to be recognised as revenue:

	2019	2018
Within one year	**1,638,826**	1,579,322
After one year	**125,758**	132,844
	1,764,584	1,712,166

The remaining performance obligations expected to be recognised in more than one year relate to rendering of services that are to be satisfied within 1–10 years. All the other remaining performance obligations are satisfied in one year or less at the end of each year.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information

The presidents of the Company have been identified as the chief operating decision-makers. They are responsible for the review of internal reports in order to allocate resources to operating segments and assess their performance of these operating segments.

The presidents monitor the business from a product perspective comprising alumina, primary aluminum and energy products which are identified as separate reportable operating segments. In addition, the Group's trading business is identified as a separate reportable operating segment. The Group's operating segments also include corporate and other operating activities.

The presidents assess the performance of operating segments based on profit or loss before income tax in related periods. Unless otherwise stated below, the manner of assessment used by the presidents is consistent with that applied in these financial statements. Management has determined the operating segments based on the reports reviewed by the presidents that are used to make strategic decisions.

The Group's five reportable operating segments are summarised as follows:

- The alumina segment, which consists of the mining and purchase of bauxite and other raw materials, the refining of bauxite into alumina, and the sale of alumina both internally to the Group's aluminum enterprises and trading enterprises and externally to customers outside the Group. This segment also includes the production and sale of chemical alumina and metal gallium.

- The primary aluminum segment, which consists of the procurement of alumina and other raw materials, supplemental materials and electricity power, and the smelting of alumina to produce primary aluminum which is sold to internal trading enterprises and external customers, including Chinalco and its subsidiaries. This segment also includes the production and sale of carbon products and aluminum alloy and other aluminum products.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

- The energy segment, which consists of the research and development, production and operation of energy products, mainly includes coal mining, electricity generation by thermal power, wind power and solar power, and new energy related equipment manufacturing business. Sales of coals are mainly made to the Group's internal and external coals consuming customers, electricity is sold to regional power grid corporations.

- The trading segment, which consists of the trading of alumina, primary aluminum, aluminum fabrication products, other non-ferrous metal products, coal products, raw materials and supplemental materials and logistics and transport services to internal manufacturing plants and external customers in the PRC. The products are sourced from fellow subsidiaries of the Group, and international and domestic suppliers of the Group. Sales of products manufactured by the Group's manufacturing business are included in the total revenue of the trading segment and are eliminated with the segment revenue of the respective segments which supply the products to the trading segment.

- Corporate and other operating segments, which mainly include corporate management, research and development activities and others.

Prepaid current income tax and deferred tax assets are excluded from segment assets, and income tax payable and deferred tax liabilities are excluded from segment liabilities. All sales among the operating segments were conducted on terms mutually agreed among group companies, and have been eliminated on consolidation.

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Year ended 31 December 2019						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	Total
Total revenue	**43,899,982**	**49,089,019**	**7,345,971**	**158,686,280**	**492,940**	**(69,440,031)**	**190,074,161**
Inter-segment revenue	(29,573,401)	(11,694,382)	(236,136)	(27,769,049)	(167,063)	69,440,031	–
Sales of self-produced products *(Note (i))*				24,374,356			
Sales of products sourced from external suppliers				106,542,875			
Revenue from external customers	**14,326,581**	**37,394,637**	**7,109,835**	**130,917,231**	**325,877**	**–**	**190,074,161**
Segment profit/(loss) before income tax	**844,848**	**687,246**	**403,479**	**952,848**	**(987,704)**	**213,084**	**2,113,801**
Income tax expense							(625,720)
Profit for the year							**1,488,081**

(Amounts expressed in thousands of RMB
unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Year ended 31 December 2019						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	Total
Other items							
Finance income	61,644	53,252	35,093	105,622	5,540	–	261,151
Finance costs	(651,238)	(1,328,730)	(1,064,769)	(223,928)	(1,652,514)	–	(4,921,179)
Share of profits and losses of joint ventures	86,245	–	(22,272)	3,767	202,375	–	270,115
Share of profits and losses of associates	(6,319)	11,621	(32,660)	36,579	39,546	–	48,767
Amortisation of right-of-use assets	(495,693)	(338,975)	(146,139)	(45,541)	(49,477)	–	(1,075,825)
Depreciation and amortisation (excluding the amortisation of right-of-use assets)	(2,830,152)	(3,235,356)	(1,488,077)	(79,366)	(81,467)	–	(7,714,418)
(Loss)/gain on disposal of property, plant and equipment and land use rights	(587,503)	830,205	(1,010)	(7,216)	(5,948)	–	242,960
Gain on disposal of business	262,677	–	–	–	–	–	262,677
Realised loss on futures, forward and option contracts, net	–	–	–	60,671	–	–	60,671
Other income	21,252	716	47,666	6,241	2,757	–	78,632
Impairment loss on property, plant and equipment	(8,743)	(247,112)	(3,499)	–	–	–	(259,354)
Unrealised loss on futures, forward and option contracts,net	–	–	–	(9,851)	–	–	(9,851)

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Year ended 31 December 2019						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	Total
Gain on share of associates' net assets	–	–	–	–	295,288		295,288
Gain on disposal of a subsidiary	118	–	3,014	2,738	255,317	–	261,187
Gain on disposal of associates	–	–	159,514	–	–	–	159,514
Changes for impairment of inventories	69,740	166,331	(19,076)	34,136	–	–	251,131
Reversal of/(provision for) impairment of receivables, net of bad debts recovered	6,837	1,088	(53,227)	(121,154)	(3,295)	–	(169,751)
Dividends of equity investments at fair value through other comprehensive income	–	–	1,000	–	96,775	–	97,775
Investments in associates	83,424	574,385	2,021,964	362,757	6,469,871	–	9,512,401
Investments in joint ventures	1,076,085	–	298,991	79,199	1,931,307	–	3,385,582
Additions during the period:							
Intangible assets	209,365	949,013	(5,062)	1,869	201	–	1,155,386
Right-of-use assets	1,080,285	131,797	8,411	27,365	–	–	1,247,858
Property, plant and equipment	6,486,248	2,381,644	1,454,659	132,841	165,832	–	10,621,224

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Year ended 31 December 2018 (Restated)						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	Total
Total revenue	44,150,937	53,802,172	7,235,273	142,017,821	667,235	(67,632,024)	180,241,414
Inter-segment revenue	(29,392,495)	(12,457,863)	(198,337)	(25,370,303)	(213,026)	67,632,024	–
Sales of self-produced products *(Note (i))*				34,454,943			
Sales of products sourced from external suppliers				82,192,575			
Revenue from external customers	14,758,442	41,344,309	7,036,936	116,647,518	454,209	–	180,241,414
Segment profit/(loss) before income tax	3,496,381	(929,298)	26,020	740,454	(1,267,146)	198,103	2,264,514
Income tax expense							(822,519)
Profit for the year							1,441,995

(Amounts expressed in thousands of RMB
unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Year ended 31 December 2018 (Restated)						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	Total
Other items							
Finance income	100,125	54,458	15,744	136,515	185,392	–	492,234
Finance costs	(399,344)	(1,131,622)	(1,047,285)	(366,807)	(1,937,438)	–	(4,882,496)
Share of profits and losses of joint ventures	37,377	8	(225,377)	9,010	(20,470)	–	(199,452)
Share of profits and losses of associates	(1,141)	17,102	(52,368)	19,375	56,367	–	39,335
Amortisation of land use rights	(39,027)	(41,175)	(9,335)	(18,615)	–	–	(108,152)
Depreciation and amortisation (excluding the amortisation of land use rights)	(2,846,051)	(2,954,801)	(1,962,081)	(101,705)	(82,963)	–	(7,947,601)
Gain/(loss) on disposal of property, plant and equipment and land use right	53,116	15,211	24,780	20,036	(12,045)	–	101,098
Realised (loss)/gain on futures, forward and option contracts, net	(716)	–	2,855	47,601	(9,248)	–	40,492
Other income	57,777	38,220	29,858	6,718	2,794	–	135,367
Impairment of property, plant and equipment	–	–	(7,450)	(39,034)	–	–	(46,484)
Unrealised gain on futures,forward and option contracts, net	–	–	–	100,967	–	–	100,967
Gain/(loss) on disposal of subsidiaries	7,671	–	–	–	(4,154)	–	3,517

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Year ended 31 December 2018 (Restated)						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	Total
Changes for impairment of inventories	(54,463)	(273,796)	(7,884)	(17,802)	–	–	(353,945)
Reversal of/(provision for) impairment of receivables, net of bad debts recovered	19,320	(9,406)	(23,327)	(84,922)	(9,621)	–	(107,956)
Dividends of equity investments at fair value through other comprehensive income	–	–	1,000	–	108,914	–	109,914
Gain/(loss) on disposal of associates	–	–	(1,904)	–	–	–	(1,904)
Gain on previously held equity interest remeasured at a acquisition-date fair value	–	–	(3,177)	–	751,263	–	748,086
Investments in associates	89,734	558,759	2,064,425	131,691	3,518,853	–	6,363,462
Investments in joint ventures	989,840	–	435,867	77,211	1,890,431	–	3,393,349
Additions during the period:							
Intangible assets	99,089	753	2,754	514	194	–	103,304
Land use rights	2,786	–	–	52	–	–	2,838
Property, plant and equipment *(Note (ii))*	2,564,003	4,602,580	1,610,442	101,360	143,839	–	9,022,224

Notes:

(i) The sales of self-produced products include sales of self-produced alumina amounting to RMB13,329 million (2018: RMB16,561 million), sales of self-produced primary aluminium amounting to RMB10,689 million (2018: RMB13,517 million), and sales of self-produced other products amounting to RMB356 million (2018: RMB4,376 million).

(ii) The additions to property, plant and equipment under sale and leaseback contracts (Note 20) are not included.

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Total
As at 31 December 2019						
Segment assets	**90,584,165**	**63,155,573**	**38,886,172**	**17,360,278**	**49,658,116**	**259,644,304**
Reconciliation:						
Elimination of inter-segment receivables						**(58,081,964)**
Other eliminations						**(106,985)**
Corporate and other unallocated assets:						
Deferred tax assets						**1,522,216**
Prepaid income tax						**93,093**
Total assets						**203,070,664**
Segment liabilities	**47,247,335**	**38,588,473**	**26,582,436**	**9,308,667**	**66,771,364**	**188,498,275**
Reconciliation:						
Elimination of inter-segment payables						**(58,081,964)**
Corporate and other unallocated liabilities:						
Deferred tax liabilities						**1,712,739**
Income tax payable						**216,554**
Total liabilities						**132,345,604**

(Amounts expressed in thousands of RMB
unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Total
As at 31 December 2018 (Restated)						
Segment assets	82,677,250	57,712,842	39,458,086	20,217,906	33,577,526	233,643,610
Reconciliation:						
Elimination of inter-segment receivables						(34,228,334)
Other eliminations						(155,283)
Corporate and other unallocated assets:						
Deferred tax assets						1,542,655
Prepaid income tax						162,103
Total assets						200,964,751
Segment liabilities	38,817,030	34,492,538	27,265,031	14,530,230	50,492,049	165,596,878
Reconciliation:						
Elimination of inter-segment payables						(34,228,334)
Corporate and other unallocated liabilities:						
Deferred tax liabilities						1,812,805
Income tax payable						113,783
Total liabilities						133,295,132

(Amounts expressed in thousands of RMB unless otherwise stated)

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (Continued)

The Group mainly operates in Mainland China. Operating segment information by geographical location is as follows:

	2019	2018 (Restated)
Segment revenue from external customers		
– Mainland China	**184,298,146**	171,024,855
– Outside Mainland China	**5,776,015**	9,216,559
	190,074,161	180,241,414

	2019	2018 (Restated)
Non-current assets (excluding financial assets and deferred tax assets)		
– Mainland China	**147,798,239**	137,939,763
– Outside Mainland China	**2,668,533**	646,327
	150,466,772	138,586,090

For the year ended 31 December 2019, revenues of approximately RMB40,567 million (2018: RMB32,852 million) were derived from entities directly or indirectly owned or controlled by the PRC government including Chinalco. These revenues are mainly attributable to the alumina, primary aluminum, energy and trading segments. There were no other individual customers from which the Group has derived revenue of 10% or more of the Group's revenue during the years ended 31 December 2019 and 2018.

(Amounts expressed in thousands of RMB
unless otherwise stated)

5. INTANGIBLE ASSETS

	Goodwill	Mining rights and others	Mineral exploration rights	Computer software, Electrolytic aluminum production quota and others	Total
Year ended 31 December 2019					
Opening net carrying amount	3,510,633	7,682,383	1,113,959	572,390	12,879,365
Additions	–	467,640	–	687,746	1,155,386
Reclassification	–	115,871	(115,871)	–	–
Disposals	–	–	–	(9)	(9)
Amortisation	–	(294,766)	–	(44,172)	(338,938)
Transfer from property, plant and equipment *(Note 6)*	–	–	–	63,370	63,370
Currency translation differences	259	1,783	3,244	–	5,286
Closing net carrying amount	3,510,892	7,972,911	1,001,332	1,279,325	13,764,460
As at 31 December 2019					
Cost	3,510,892	10,016,634	1,001,332	1,640,081	16,168,939
Accumulated amortisation and impairment	–	(2,043,723)	–	(360,756)	(2,404,479)
Net carrying amount	3,510,892	7,972,911	1,001,332	1,279,325	13,764,460

(Amounts expressed in thousands of RMB unless otherwise stated)

5. INTANGIBLE ASSETS (CONTINUED)

	Goodwill	Mining rights and others	Mineral exploration rights	Computer software, Electrolytic aluminum production quota and others	Total
Year ended 31 December 2018					
Opening net carrying amount	2,345,930	7,066,428	1,111,586	113,689	10,637,633
Additions	–	98,995	–	4,309	103,304
Acquisition of a subsidiary	1,163,949	728,066	–	1,285	1,893,300
Reclassification	–	7,072	(7,072)	–	–
Disposals	–	–	–	(168)	(168)
Amortisation	–	(265,108)	–	(30,793)	(295,901)
Transfer from property, plant and equipment *(Note 6)*	–	41,148	–	484,068	525,216
Currency translation differences	754	5,782	9,445	–	15,981
Closing net carrying amount	3,510,633	7,682,383	1,113,959	572,390	12,879,365
As at 31 December 2018					
Cost	3,510,633	9,430,183	1,113,959	888,975	14,943,750
Accumulated amortisation and impairment	–	(1,747,800)	–	(316,585)	(2,064,385)
Net carrying amount	3,510,633	7,682,383	1,113,959	572,390	12,879,365

(Amounts expressed in thousands of RMB unless otherwise stated)

5. INTANGIBLE ASSETS (CONTINUED)

For the year ended 31 December 2019, the amortisation expenses of intangible assets recognised in profit or loss were analysed as follows:

	2019	2018
Cost of sales	**294,766**	265,108
General and administrative expenses	**44,172**	30,793
	338,938	295,901

As at 31 December 2019, the Group has pledged intangible asset with a net carrying value amounting to RMB757 million (31 December 2018: RMB773 million) for bank and other borrowings as set out in Note 24 to the financial statements.

As at 31 December 2019, the Group was in the process of applying for the certificates of mining rights with a carrying value amounting to RMB39 million (31 December 2018 (Restated): RMB21 million). There have been no litigations, claims or assessments against the Group for compensation with respect to the use of these rights to date. As at 31 December 2019, the carrying value of these rights only represented approximately 0.02% of the total asset value of the Group (31 December 2018 (Restated): approximately 0.01%). Management considers that it is probable that the Group can obtain the relevant ownership certificates from the appropriate authorities. The directors of the Company are of the opinion that the Group legally owns and has the rights to use the above mining rights, and that there is no material adverse impact on the overall financial position of the Group.

(Amounts expressed in thousands of RMB
unless otherwise stated)

5. INTANGIBLE ASSETS (CONTINUED)

Impairment testing of goodwill

The lowest level within the Group at which goodwill is monitored for internal management purposes is the operating segment level. Therefore, goodwill is allocated to the Group's cash-generating units ("CGUs") and groups of CGUs according to operating segments. A summary of goodwill allocated to each segment is presented below:

	31 December 2019		31 December 2018	
	Alumina	**Primary aluminum**	Alumina	Primary aluminum
Qinghai Branch	**–**	**217,267**	–	217,267
Guangxi Branch	**189,419**	**–**	189,419	–
Lanzhou Branch	**–**	**1,924,259**	–	1,924,259
PT. Nusapati Prima ("PTNP")	**15,998**	**–**	15,739	–
Shanxi Huaxing	**1,163,949**	**–**	1,163,949	–
	1,369,366	**2,141,526**	1,369,107	2,141,526

The recoverable amount of a CGU is determined based on value-in-use calculations. These calculation of VIU use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the 5-year period are extrapolated using the estimated growth rate of 2% (2018: 2%) not exceeding the long-term average growth rate for the businesses in which the CGU operates. Other key assumptions applied in the impairment testing include future prices of aluminum and alumina, expected production and sales volumes, production costs and operating expenses. Management determined these key assumptions based on past performance and their expectations on market development. Furthermore, the Group adopts a pre-tax rate of 12.62% (2018: 12.62%) that reflects specific risks related to CGUs and groups of CGUs as the discount rate. The assumptions above are used in analysing the recoverable amounts of CGUs and groups of CGUs within operating segments. These estimates and judgments may be affected by unexpected changes in the future market or economic conditions.

The directors of the Company are of the view that, based on their assessment, there was no impairment of goodwill as at 31 December 2019 and 31 December 2018.

(Amounts expressed in thousands of RMB
unless otherwise stated)

6. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery	Transportation facilities	Office and other equipment	Construction in progress	Total
Year ended 31 December 2019						
Opening net carrying amount (Restated)	38,849,351	53,695,930	509,595	158,237	13,036,003	106,249,116
Impact on initial application of IFRS 16 *(Note 2.2)*	(148,673)	(5,851,498)	–	–	(720,439)	(6,720,610)
Opening net book amount at 1 January 2019 (Restated)	38,700,678	47,844,432	509,595	158,237	12,315,564	99,528,506
Currency translation differences	89	103	17	46	–	255
Reclassifications and internal transfers	3,869,147	5,125,998	(29,181)	207,546	(9,173,510)	–
Transfer to intangible assets *(Note 5)*	–	–	–	–	(63,370)	(63,370)
Transfer to right-of-use assets *(Note 19)*	(107,368)	(495)	–	–	–	(107,863)
Transfer to investment properties *(Note 7)*	(179,564)	–	–	–	–	(179,564)
Additions	576,035	635,678	44,122	13,506	9,351,883	10,621,224
Transfer from right-of-use assets *(Note 19)* *	–	1,674,260	–	–	–	1,674,260
Government grants	(7,211)	(69,012)	–	–	–	(76,223)
Disposals	(79,280)	(378,816)	(19,672)	(938)	(70,201)	(548,907)
Disposal of subsidiaries	(85,851)	(73,432)	(3,270)	(239)	–	(162,792)
Depreciation	(1,849,121)	(5,121,646)	(100,547)	(23,402)	–	(7,094,716)
Impairment loss	(105,347)	(153,394)	(14)	(185)	(414)	(259,354)
Closing net carrying amount	40,732,207	49,483,676	401,050	354,571	12,359,952	103,331,456
As at 31 December 2019						
Cost	60,153,059	101,624,509	2,238,818	829,575	2,511,787	177,357,748
Accumulated depreciation and impairment	(19,420,852)	(52,140,833)	(1,837,768)	(475,004)	(151,835)	(74,026,292)
Net carrying amount	40,732,207	49,483,676	401,050	354,571	12,359,952	103,331,456

* This includes the right-of-use assets recognised previously under sale and leaseback contracts of RMB1,674 million that were reclassified from property, plant and equipment, upon initial adoption of IFRS 16. After the expiration of those contracts, they were recognised as property, plant and equipment.

(Amounts expressed in thousands of RMB unless otherwise stated)

6. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(Restated)	Buildings	Machinery	Transportation facilities	Office and other equipment	Construction in progress	Total
Year ended 31 December 2018						
Opening net carrying amount	32,288,223	52,784,696	541,908	129,630	9,987,437	95,731,894
Reclassifications and internal transfers	3,204,611	3,600,371	75,277	5,149	(6,885,408)	–
Government grants	(468)	(113,481)	–	–	–	(113,949)
Transfer to intangible assets *(Note 5)*	–	–	–	–	(525,216)	(525,216)
Transfer to prepaid land lease payments *(Note 19)*	–	–	–	–	(382,242)	(382,242)
Transfer to investment properties *(Note 7)*	(11,039)	–	–	–	–	(11,039)
Transfer from investment properties *(Note 7)*	21,773	–	–	–	–	21,773
Additions	230,243	1,998,717	31,668	48,912	8,016,079	10,325,619
Acquisition of subsidiaries	4,633,728	4,026,062	17,443	5,937	3,149,060	11,832,230
Disposal of subsidiaries	–	(472)	(101)	(53)	(8,893)	(9,519)
Disposals	(251,212)	(2,505,158)	(39,827)	(3,347)	(275,391)	(3,074,935)
Depreciation	(1,266,607)	(6,087,890)	(116,807)	(28,018)	–	(7,499,322)
Impairment losses	–	(7,061)	–	–	(39,423)	(46,484)
Currency translation differences	99	146	34	27	–	306
Closing net carrying amount	38,849,351	53,695,930	509,595	158,237	13,036,003	106,249,116
As at 31 December 2018						
Cost	56,620,994	103,608,492	2,538,835	603,665	13,187,424	176,559,410
Accumulated depreciation and impairment	(17,771,643)	(49,912,562)	(2,029,240)	(445,428)	(151,421)	(70,310,294)
Net carrying amount	38,849,351	53,695,930	509,595	158,237	13,036,003	106,249,116

(Amounts expressed in thousands of RMB
unless otherwise stated)

6. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

For the year ended 31 December 2019, depreciation expenses recognised in profit or loss are analysed as follows:

	2019	2018 (Restated)
Cost of sales	**6,926,580**	7,291,380
General and administrative expenses	**161,547**	201,337
Selling and distribution expenses	**6,589**	6,605
	7,094,716	7,499,322

As at 31 December 2019, the Group was in the process of applying for the ownership certificates of buildings with a net carrying value of RMB7,315 million (31 December 2018: RMB5,639 million). There has been no litigations, claims or assessments against the Group for compensation with respect to the use of these buildings as at the date of approval of these financial statements.

As at 31 December 2019, the carrying value of these buildings only represented approximately 3.60% of the Group's total asset value (31 December 2018: 2.81%). Management considers that it is probable that the Group can obtain the relevant ownership certificates from the appropriate authorities. The directors of the Company are of the opinion that the Group legally owns and has the rights to use the above property, plant and equipment, and that there is no material adverse impact on the overall financial position of the Group.

For the year ended 31 December 2019, interest expenses of RMB292 million (2018: RMB518 million) (Note 28) arising from borrowings attributable to the construction of property, plant and equipment during the year were capitalised at an annual rate ranging from 4.00% to 6.96% (2018: 4.54% to 7.00%) (Note 28), and were included in additions to property, plant and equipment.

As at 31 December 2019, the Group has pledged property, plant and equipment at a net carrying value amounting to RMB4,946 million (31 December 2018: RMB4,168 million) for bank and other borrowings as set out in Note 24 to the financial statements.

6. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

As at 31 December 2019, the carrying value of temporarily idle property, plant and equipment of the Group was RMB952 million (31 December 2018: RMB675 million).

The net carrying amounting of the Group's fixed assets held under finance lease included in the total amounts of the buildings, machinery and construction in progress at 31 December 2018 were RMB10,678 million and RMB112 million, respectively. The accumulated depreciation of the Group's fixed asset held under finance lease amounted to RMB2,011 million.

Impairment testing for property, plant and equipment

When any indicators of impairment are identified, property, plant and equipment are reviewed for impairment based on each CGU. The CGU is an individual plant or entity. The carrying values of these individual plants or entities were compared to the recoverable amounts of the CGUs, which were based predominantly on value-in-use. Value-in-use calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the same cash flow projections of the fifth year. Other key assumptions applied in the impairment testing include the future prices of aluminum and alumina, expected production and sales volumes, production costs and operating expenses. Management determined these key assumptions based on past performance and their expectations on market development. Further, the Group adopts a pre-tax and non-inflation rate of 10.16% (2018: 10.16%) that reflects specific risks related to the CGUs as discount rate. The assumptions above are used in analysing the recoverable amounts of the CGUs within operating segments. These estimates and judgments may be affected by unexpected changes in the future market or economic conditions.

For the CGUs with indicators of impairment identified, the assets were not further impaired during the current year based on the impairment testing (2018: Nil).

In addition to the CGUs for which impairment was tested based on value-in-use, the Group also assessed the recoverable amounts for property, plant and equipment to be disposed or abandoned soon, and impairment losses of RMB259 million were provided during the year ended 31 December 2019 (2018: RMB46 million).

(Amounts expressed in thousands of RMB unless otherwise stated)

7. INVESTMENT PROPERTIES

	Buildings	Land use rights	Total
Year ended 31 December 2019			
Opening net carrying amount	**235,974**	**920,032**	**1,156,006**
Additions	**44,063**	**–**	**44,063**
Transfer from property, plant and equipment *(Note 6)*	**179,564**	**–**	**179,564**
Transfer from right-of-use assets *(Note 19)*	**–**	**239,765**	**239,765**
Disposal	**(36,949)**	**(52,537)**	**(89,486)**
Depreciation	**(8,484)**	**(18,075)**	**(26,559)**
Impairment	**–**	**(87)**	**(87)**
Closing net carrying amount	**414,168**	**1,089,098**	**1,503,266**
As at 31 December 2019			
Cost	**508,705**	**1,159,343**	**1,668,048**
Accumulated depreciation and impairment	**(94,537)**	**(70,245)**	**(164,782)**
Net carrying amount	**414,168**	**1,089,098**	**1,503,266**

(Amounts expressed in thousands of RMB
unless otherwise stated)

7. INVESTMENT PROPERTIES(CONTINUED)

	Buildings	Land use right	Total
Year ended 31 December 2018			
Opening net carrying amount	254,061	1,078,309	1,332,370
Transfer from property, plant and equipment *(Note 6)*	11,039	–	11,039
Transfer to property, plant and equipment *(Note 6)*	(21,773)	–	(21,773)
Disposal	–	(143,401)	(143,401)
Depreciation	(7,353)	(14,876)	(22,229)
Closing net carrying amount	235,974	920,032	1,156,006
As at 31 December 2018			
Cost	251,626	939,015	1,190,641
Accumulated depreciation	(15,652)	(18,983)	(34,635)
Net carrying amount	235,974	920,032	1,156,006

The Group's investment properties consist of land use rights held for rental income and buildings leased to third parties under operating leases.

As at 31 December 2019, the Group was in the process of applying for the ownership certificates of investment properties with a net carrying value of RMB255 million (31 December 2018: RMB68 million). There have been no litigations, claims or assessments against the Group for compensation with respect to the use of these rights to date. As at 31 December 2019, the carrying value of these investment properties only represented approximately 0.13% of the total asset value of the Group (31 December 2018: 0.03%). Management considers that it is probable that the Group can obtain the relevant ownership certificates from the appropriate authorities. The directors of the Company are of the opinion that the Group legally owns and has the rights to use the above investment properties, and that there is no material adverse impact on the overall financial position of the Group.

(Amounts expressed in thousands of RMB
unless otherwise stated)

7. INVESTMENT PROPERTIES(CONTINUED)

As at 31 December 2019, the fair value of the buildings was approximately RMB1,071 million (31 December 2018: RMB781 million) which was estimated based on the market price of comparable buildings in the nearby area. The directors of the Company estimated that the fair value of the land use right is likely to be RMB1,269 million (31 December 2018: RMB1,287 million), which was determined based on the transaction prices for similar lands nearby.

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

(a) Investments in joint ventures

Movements in investments in joint ventures are as follows:

	2019	2018
As at 1 January	**3,393,349**	6,007,624
Capital injections	**50,000**	90,000
A joint venture changed into a subsidiary	**–**	(2,048,780)
Disposal*	**(114,604)**	–
Share of profits and losses for the year	**270,115**	(199,452)
Share of changes in reserves	**8,746**	(2,837)
Cash dividends declared	**(222,024)**	(236,253)
Impairment	**–**	(216,953)
As at 31 December	**3,385,582**	3,393,349

* In March 2019, a subsidiary of the Group Ningxia Energy transferred, through an auction transaction, its 50% equity interest in Ningxia Zhongning Power Co.,Ltd.

As at 31 December 2019, all joint ventures of the Group were unlisted.

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(a) Investments in joint ventures (Continued)

As at 31 December 2019, particulars of the Group's material joint venture is as follows:

Name	Place of establishment and operation	Registered and paid-in capital	Principal activities	Effective equity interest held		
				Ownership interest	Voting power	Profit sharing
Guangxi Huayin Aluminum Co.,Ltd. *("Guangxi Huayin") (廣西華銀鋁業有限公司)	PRC/Mainland China	2,441,987	Manufacturing	33%	33%	33%

Guangxi Huayin, which is considered a material joint venture of the Group, is accounted for using the equity method.

* The English names represent the best effort by management of the Group in translating the Chinese names of the Companies as they do not have any official English names.

(Amounts expressed in thousands of RMB unless otherwise stated)

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(a) Investments in joint ventures (Continued)

The following table illustrates the summarised financial information in respect of Guangxi Huayin:

	2019	2018
Cash and cash equivalents	**261,447**	232,022
Other current assets	**1,222,290**	1,233,669
Current assets	**1,483,737**	1,465,691
Non-current assets	**5,249,101**	5,473,480
Financial liabilities	**1,106,593**	840,000
Other current liabilities	**960,077**	961,283
Current liabilities	**2,066,670**	1,801,283
Non-current liabilities	**414,299**	814,691
Net assets	**4,251,869**	4,323,197
Non-controlling interests	**–**	–

(Amounts expressed in thousands of RMB unless otherwise stated)

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(a) Investments in joint ventures (Continued)

	2019	2018
Reconciliation to the Group's interest in the joint venture:		
Proportion of the Group's ownership	**33%**	33%
Group's share of net assets of the joint venture	**1,403,117**	1,426,655
Carrying amount of the investment	**1,403,117**	1,426,655
Revenue	**5,226,893**	5,173,801
Gross profit	**1,303,254**	979,991
Interest income	**9,781**	6,365
Depreciation and amortisation	**525,109**	509,556
Interest expenses	**63,351**	77,438
Profit before income tax	**621,315**	504,875
Income tax	**79,300**	78,827
Other comprehensive income	**–**	–
Total comprehensive income for the year	**542,015**	426,048
Dividend received	**198,000**	132,000

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(a) Investments in joint ventures (Continued)

The following table illustrates the aggregate financial information of the Group's joint ventures that are not individually material:

	2019	2018
Share of the joint ventures' profits and losses for the year	**91,250**	(340,145)
Share of the joint ventures' total comprehensive income	**91,250**	(340,145)
Aggregate carrying amount of the Group's investments in joint ventures	**1,870,538**	1,858,386

There were no material contingent liabilities relating to the Group's interests in the joint ventures and the joint ventures themselves.

(Amounts expressed in thousands of RMB
unless otherwise stated)

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(b) Investments in associates

Movements in investments in associates are as follows:

	2019	2018
As at 1 January	**6,363,462**	6,935,030
Investment to Yunnan Aluminum *(Note (1), (Note 27))*	**1,491,736**	–
Investment to Heqing Yixin Aluminum Industry Co., Ltd. (鶴慶溢鑫鋁業有限公司) ("Yixin Aluminum") *(Note (2), (Note 27))*	**941,160**	–
Capital injections, other than to Yunnan Aluminum and Yixin Aluminum	**729,368**	315,300
Subsidiaries changed into associates	**16,283**	–
Associates changed into subsidiaries	**–**	(862,214)
Capital reduction	**(20,250)**	(32,720)
Share of profits and losses for the year	**48,767**	39,335
Cash dividends declared	**(50,314)**	(36,157)
Share of changes in reserves	**(7,811)**	4,888
As at 31 December	**9,512,401**	6,363,462

Note (1): Investment to Yunnan Aluminium

On 19 December 2019, the Company and Yunnan Aluminum entered into a Share Subscription Agreements ("Subscription Agreements"), pursuant to which the Company subscribed for 314,050,688 shares of Yunnan Aluminum at a price of RMB4.10 per share with the total subscription amount of RMB1,288 million. Upon completion of the subscription, the Company obtained 10.04% equity interests in Yunnan Aluminum.

The Group considers that it has significant influence over Yunnan Aluminum even though it owns less than 20% of the voting rights, on the grounds that after the investment, the Group is the second largest shareholder of and one out of the eleven directors of the board of directors of Yunnan Aluminum exercises director's rights on the behalf of the Group.

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(b) Investments in associates (Continued)

Note (1): Investment to Yunnan Aluminium (Continued)

As at the date of this announcement, Chinalco is the controlling Shareholder of the Company, and Yunnan Aluminum is a subsidiary of Chinalco. Therefore, Yunnan Aluminum is a connected person of the Company under the Hong Kong Listing Rules. As such, the transaction contemplated under the Shares Subscription Agreement constitutes a connected transaction under Chapter 14A of the Hong Kong Listing Rules. The investment constitutes a related party transaction which was disclosed in Note 35 (a).

The investment to Yunnan Aluminium, which is a listed company, is conducive for resolving business competitions between the Company and Yunnan Aluminum and is in line with the development strategies and in the whole interests of the Company.

The excess of the fair value of identifiable net assets as at the acquisition date over the consideration transferred approximates to RMB204 million, which was mainly arising from the fair value adjustments for certain intangible assets according to a professional valuer's report, was recognised in other gains for the year ended 31 December 2019.

Note (2): Investment to Yixin Aluminum

On 10 December 2019, the Company entered into the Capital Contribution Agreement with shareholders of Yixin Aluminum, including Yunnan Aluminum, Wenshan Aluminum Co., Ltd. ("Wenshan Aluminum"), and three individual shareholders, pursuant to which the Company agreed to make a capital contribution of RMB850 million in cash to Yixin Aluminum. Upon completion of the capital contribution, the Company holds approximately 38.90% equity investments of Yixin Aluminum.

Chinalco is the controlling Shareholder of the Company, and Yunnan Aluminum, Wenshan Aluminum and Yixin Aluminum are subsidiaries of Chinalco. Therefore, Yunnan Aluminum, Wenshan Aluminum and Yixin Aluminum are connected persons of the Company under the Hong Kong Listing Rules. As such, the transaction contemplated under the Capital Contribution Agreement constitutes a connected transaction under Chapter 14A of the Hong Kong Listing Rules. The investment constitutes a related party transaction which was disclosed in Note 35 (a).

The investment to Yixin Aluminum is to facilitate the Company in participating in the green development layout on the integration of water, electricity and aluminum in Yunnan Province and obtaining competitive assets for its principal business.

The excess of the fair value of identifiable net assets as at the acquisition date over the consideration transferred approximated to RMB91 million, which was mainly arising from the fair value adjustments for constructions according to a professional valuer's report, was recognised in other gains for the year ended 31 December 2019.

(Amounts expressed in thousands of RMB
unless otherwise stated)

8. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(b) Investments in associates (Continued)

As at 31 December 2019, all associates, except for Yunnan Aluminium, of the Group were unlisted.

As at December 2019, no associate was individually material to the Group.

The following table illustrates the aggregate financial information of the Group's associates that are not individually material:

	2019	2018
Share of the associates' profits and losses	**48,767**	39,335
Share of the associates' total comprehensive income	**48,767**	39,335
Aggregate carrying amount of the Group's investments in the associates	**9,512,401**	6,363,462

As at 31 December 2019, there were no proportionate interests of the Group in the associates' capital commitments (31 December 2018: Nil).

As at 31 December 2019, the Group had pledged investments in associates amounting to RMB539 million (31 December 2018: investments in associates amounting to RMB536 million) as set out in Note 24 to the financial statements.

There were no material contingent liabilities relating to the Group's interests in the associates and the associates themselves.

(Amounts expressed in thousands of RMB unless otherwise stated)

9. EQUITY INVESTMENTS DESIGNATED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	31 December 2019	31 December 2018
Equity investments designated at fair value through other comprehensive income		
Listed equity investments, at fair value		
Dongxing securities Co., Ltd.(東興證券)	**8,853**	6,441
	8,853	6,441
Unlisted equity investments, at fair value		
Sanmenxia Dachang Mining Co., Ltd. (三門峽達昌礦業有限公司)	**20,905**	20,926
Inner Mongolia Ganqimaodu Port Development Co., Ltd. (內蒙古甘其毛都港務發展股份有限公司)	**30,410**	18,010
Yinchuan Economic and Technological Development Zone Investment Holding Co., Ltd. (銀川經濟技術開發區投資控股有限公司)	**20,000**	19,306
China Color International Alumina Development Co., Ltd. (中色國際氧化鋁開發有限公司)	**6,614**	9,000
Luoyang Jianyuan Mining Co., Ltd. (洛陽建元礦業有限公司)	**4,960**	4,948
Ningxia Ningdian Logistics Transportation Co., Ltd. (寧夏寧電物流運輸有限公司)	**1,640**	1,194
Chinalco Innovative Development Investment Company Limited ("Chinalco Innovative") (中鋁創投)	**365,681**	–
Size Industry Investment Fund *(Note)*	**1,653,251**	1,650,000
Fangchenggang Chisha Pier Co., Ltd. (防城港赤沙碼頭有限公司)	**700**	–
Xingxian Shengxing Highway Investment Management Co., Ltd. (興縣盛興公路投資管理有限公司)	**126,237**	–
	2,230,398	1,723,384
	2,239,251	1,729,825

9. EQUITY INVESTMENTS DESIGNATED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (CONTINUED)

The above equity investments were irrevocably designated at fair value through other comprehensive income as the Group considers these investments to be strategic in nature.

Note:

Included in the unlisted investments is mainly the equity investment in Size Industry Investment Fund. In 2017, the Company entered into a series of agreements with Bank of Communications International Trust Co., Ltd. ("BOCOMMTRUST") (交銀國際信託有限公司), Bocommtrust Asset Management Co., Ltd.* ("Bocommtrust Asset") (交銀國信資產管理有限公司), a subsidiary of BOCOMMTRUST, and Chinalco Jianxin Investment Fund Management (Beijing) Company Limited* ("Chinalco Jianxin") (中鋁建信投資基金管理(北京)有限公司) to establish Beijing Chalco Bocom Size ("Size Industry Investment Fund") (北京中鋁交銀四則產業投資基金管理合夥企業(有限合夥)). According to these agreements, BOCOMMTRUST acted as the prioritised limited partner and the Company as the secondary limited partner of Size Industry Investment Fund, with the maximum amount of capital contribution of RMB6,700 million and RMB3,300 million, respectively. Bocommtrust Asset and Chinalco Jianxin are the general partner and the manager of Size Industry Investment Fund, respectively. The purpose of Size Industry Investment Fund is to invest in the Company's subsidiaries, associates or joint ventures in the form of debt financing.

As at 31 December 2019, Size Industry Investment Fund made four investments in three of the Company's subsidiaries and one of the Company's joint ventures amounting to RMB5,000 million in the form of debt. The Company and BOCOMMTRUST contributed capital of RMB1,650 million and RMB3,350 million to Size Industry Investment Fund, respectively.

Because the variable return of Size Industry Investment Fund depends on the selection of investment targets, the timing and size of the investment fund and the rate of return, which are all determined by BOCOMMTRUST under its full authority, the directors of the Company are of the opinion that the Company did not have control or joint control over, or significant influence over Size Industry Investment Fund. Therefore, the Company's investment in Size Industry Investment Fund was accounted for as an equity investment designated at fair value through other comprehensive income.

* The English names represent the best effort made by management of the Group in translating the Chinese names of the companies as the companies do not have any official English names.

(Amounts expressed in thousands of RMB
unless otherwise stated)

10. DEFERRED TAX

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current income tax assets against current income tax liabilities and when the deferred taxes relate to the same tax authority.

The movements in deferred tax assets and liabilities during the year ended 31 December 2019 without taking into consideration the offsetting of balances within the same tax jurisdiction, are as follows:

Movements in deferred tax assets:

	Provision for impairment	Accrued expenses	Tax losses	Unrealised profit at consolidation	Others	Total
As at 31 December 2017	525,382	264,209	539,899	166,043	168,647	1,664,180
Business combination under common control	57	–	–	–	–	57
As at 1 January 2018 (Restated)	525,439	264,209	539,899	166,043	168,647	1,664,237
Acquisition of subsidiaries	360	–	–	–	7,734	8,094
(Charged)/credited to profit or loss	(139,956)	(21,839)	76,338	3,833	5,989	(75,635)
As at 31 December 2018 (Restated)	385,843	242,370	616,237	169,876	182,370	1,596,696
As at 1 January 2019 (Restated)	**385,843**	**242,370**	**616,237**	**169,876**	**182,370**	**1,596,696**
Credit/(charged) to profit or loss	**59,218**	**(33,214)**	**(40,047)**	**(521)**	**(2,956)**	**(17,520)**
As at 31 December 2019	**445,061**	**209,156**	**576,190**	**169,355**	**179,414**	**1,579,176**

(Amounts expressed in thousands of RMB
unless otherwise stated)

10. DEFERRED TAX (CONTINUED)

Movements in deferred tax liabilities:

	Interest capitalisation	Fair value changes of financial assets	Depreciation and amortisation	Fair value adjustments arising from acquisition of subsidiaries	Total
As at 1 January 2018	52,934	5,972	7,659	988,848	1,055,413
Exchange realignment	–	–	–	1,353	1,353
Credited to other comprehensive income	–	(3,769)	–	–	(3,769)
Acquisition of subsidiaries	–	–	–	822,229	822,229
(Credited)/charged to profit or loss	(9,102)	3,403	24,830	(27,511)	(8,380)
As at 31 December 2018	43,832	5,606	32,489	1,784,919	1,866,846
As at 1 January 2019	**43,832**	**5,606**	**32,489**	**1,784,919**	**1,866,846**
Exchange realignment	**–**	**–**	**–**	**416**	**416**
Charged to other comprehensive income	**–**	**14,642**	**–**	**–**	**14,642**
Credited to profit or loss	**(5,825)**	**(12,517)**	**(8,616)**	**(85,247)**	**(112,205)**
As at 31 December 2019	**38,007**	**7,731**	**23,873**	**1,700,088**	**1,769,699**

The temporary differences associated with investments in the Group's associates and joint ventures, for which a deferred tax liability has not been recognised in the periods presented, aggregate to RMB827 million (2018: RMB438 million), considering dividends from investments in associates and joint ventures are exempted from the PRC income tax and the Group has no plan to dispose any of these investees in the foreseeable future.

(Amounts expressed in thousands of RMB unless otherwise stated)

10. DEFERRED TAX (CONTINUED)

For presentation purposes, certain deferred tax assets and liabilities have been offset in the consolidated statement of financial position. The following is an analysis of the deferred tax balances of the Group for financial reporting purposes:

	31 December 2019	31 December 2018 (Restated)
Net deferred tax assets	**1,522,216**	1,542,655
Net deferred tax liabilities	**1,712,739**	1,812,805

As at 31 December 2019, the Group has not recognised deferred tax assets of RMB1,467 million (31 December 2018: RMB2,634 million) in respect of accumulated tax losses amounting to RMB6,210 million (31 December 2018: RMB11,387 million) arising in Mainland China that can be carried forward for offsetting against future taxable income, and deferred tax assets of RMB2,287 million (31 December 2018: RMB1,660 million) in respect of deductible temporary differences amounting to RMB9,160 million (31 December 2018: RMB7,992 million) as it was considered not probable that those assets would be realised. The above tax losses will expire in one to five years if not utilised.

(Amounts expressed in thousands of RMB
unless otherwise stated)

10. DEFERRED TAX (CONTINUED)

As at 31 December 2019, the expiry profile of these unprovided tax losses was analysed as follows:

	31 December 2019	31 December 2018
Expiring in		
2019	**-**	6,753,096
2020	**690,646**	711,878
2021	**958,188**	975,081
2022	**1,211,002**	1,211,002
2023	**997,376**	1,736,412
2024	**2,353,070**	–
	6,210,282	11,387,469

(Amounts expressed in thousands of RMB
unless otherwise stated)

11. OTHER NON-CURRENT ASSETS

	31 December 2019	1 January 2019	31 December 2018 (Restated)
Financial assets			
– Other long-term receivables	**128,673**	204,718	204,718
Prepayment for mining rights	**813,822**	808,736	808,736
Long-term prepaid expenses	**648,983**	647,449	667,772
Deferred losses for sale and leaseback transactions*	**766,548**	1,323,221	1,323,221
Others	**849,817**	1,438,198	1,438,198
	3,079,170	4,217,604	4,237,927
	3,207,843	4,422,322	4,442,645

* As disclosed in Note 20, the Group entered into several sale and leaseback agreements which constitute finance leases in previous years. The deferred losses resulted from the sale are classified as other non-current assets and were amortised over the useful lives of the assets leased back.

As at 31 December 2019 and 31 December 2018, all amounts were denominated in RMB.

As at 31 December 2019 and 31 December 2018, all amounts in other non-current assets were non-interest-bearing.

(Amounts expressed in thousands of RMB
unless otherwise stated)

12. INVENTORIES

	31 December 2019	31 December 2018
Raw materials	**6,825,650**	8,362,697
Work-in-progress	**7,847,599**	8,684,506
Finished goods	**4,501,633**	3,280,641
Spare parts	**842,734**	879,794
Packaging materials and others	**57,870**	63,227
	20,075,486	21,270,865
Less: provision for impairment of inventories	**(560,066)**	(811,197)
	19,515,420	20,459,668

Movements in the provision for impairment of inventories are as follows:

	2019	2018
As at 1 January	**811,197**	457,252
Provision for impairment of inventories	**1,503,406**	2,413,098
Disposal of subsidiary	**(772)**	–
Reversal arising from increase in net realisable value	**(340,134)**	(165,510)
Written off upon sales of inventories	**(1,413,631)**	(1,893,643)
As at 31 December	**560,066**	811,197

As at 31 December 2019 and 31 December 2018, the Group had no pledged inventories for bank and other borrowings.

(Amounts expressed in thousands of RMB
unless otherwise stated)

13. TRADE AND NOTES RECEIVABLES

	31 December 2019	31 December 2018 (Restated)
Trade receivables	**5,273,969**	5,868,796
Less: impairment	**(714,857)**	(659, 261)
	4,559,112	5,209,535
Notes receivable	**2,834,011**	2,894,482
	7,393,123	8,104,017

As at 31 December 2019, except for trade and notes receivables of the Group amounting to RMB1,111 million which were denominated in USD (31 December 2018: RMB1,403 million which were denominated in USD), all trade and notes receivables were denominated in RMB.

Included in the Group's trade and notes receivables are amounts due from the Group's joint ventures and associates of RMB788 million (31 December 2018: RMB820 million) and RMB0.03 million (31 December 2018: RMB7 million), which are repayable on credit terms similar to those offered to the major customers of the Group.

As at 31 December 2019, the Group had pledged notes receivable amounting to RMB667 million (31 December 2018: notes receivable amounting to RMB934 million) as set out in Note 24 to the financial statements.

Trade receivables and notes receivable are non-interest-bearing and are generally on terms of 3 to 12 months. Certain of the Group's sales were on advance payments or documents against payment. In some cases, these terms are extended for qualifying long term customers that have met specific credit requirements. As at 31 December 2019, the ageing analysis of trade receivables was as follows:

(Amounts expressed in thousands of RMB
unless otherwise stated)

13. TRADE AND NOTES RECEIVABLES (CONTINUED)

	31 December 2019	31 December 2018 (Restated)
Within 1 year	**2,907,407**	3,320,735
Between 1 and 2 years	**742,477**	906,302
Between 2 and 3 years	**377,836**	158,162
Over 3 years	**1,246,249**	1,483,597
	5,273,969	5,868,796
Less: loss allowance for impairment	**(714,857)**	(659, 261)
	4,559,112	5,209,535

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns (i.e., by geographical region, product type, customer type and rating, and coverage by letters of credit or other forms of credit insurance). The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

(Amounts expressed in thousands of RMB
unless otherwise stated)

13. TRADE AND NOTES RECEIVABLES (CONTINUED)

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

	As at 31 December 2019		
	Gross carrying amount	Expected credit losses	Expected credit loss rate(%)
Alumina and primary aluminum			
Within 1 year	207,602	1,910	0.92
Between 1 and 2 years	47,883	5,305	11.08
Between 2 and 3 years	20,712	18,643	90.01
Over 3 years	205,395	194,858	94.87
	481,592	220,716	/
Trading			
Within 1 year	113,596	159	0.14
Between 1 and 2 years	–	–	1.69
Between 2 and 3 years	1,001	41	4.05
Over 3 years	79,793	15,560	19.50
	194,390	15,760	/
Energy			
Within 1 year	348,399	13,343	3.83
Between 1 and 2 years	11,722	2,496	21.29
Between 2 and 3 years	9,073	2,170	23.92
Over 3 years	7,269	3,555	48.91
	376,463	21,564	/

(Amounts expressed in thousands of RMB
unless otherwise stated)

13. TRADE AND NOTES RECEIVABLES (CONTINUED)

	As at 31 December 2019		
	Gross carrying amount	Expected credit losses	Expected credit loss rate(%)
Corporate and other operating segments			
Within 1 year	51,774	3,117	6.02
Between 1 and 2 years	18,129	12,831	70.78
Between 2 and 3 years	5,399	5,127	94.96
Over 3 years	6,176	6,019	97.45
	81,478	27,094	/
	1,133,923	285,134	
Individually assessed trade receivables	4,140,046	429,723	
	5,273,969	714,857	

(Amounts expressed in thousands of RMB
unless otherwise stated)

13. TRADE AND NOTES RECEIVABLES (CONTINUED)

	As at 31 December 2018		
	Gross carrying amount	Expected credit losses	Expected credit loss rate(%)
Alumina and primary aluminum			
Within 1 year	401,691	3,696	0.92
Between 1 and 2 years	55,766	6,179	11.08
Between 2 and 3 years	16,546	14,893	90.01
Over 3 years	379,213	359,759	94.87
	853,216	384,527	/
Trading			
Within 1 year	473,153	662	0.14
Between 1 and 2 years	4,146	70	1.68
Between 2 and 3 years	74	3	3.80
Over 3 years	19,422	3,787	19.50
	496,795	4,522	/
Energy			
Within 1 year	88,462	3,388	3.83
Between 1 and 2 years	3,217	685	21.28
Between 2 and 3 years	15,417	3,688	23.92
Over 3 years	12,710	6,216	48.91
	119,806	13,977	/

(Amounts expressed in thousands of RMB unless otherwise stated)

13. TRADE AND NOTES RECEIVABLES (CONTINUED)

	As at 31 December 2018		
	Gross carrying amount	Expected credit losses	Expected credit loss rate(%)
Corporate and other operating segments			
Within 1 year	108,627	6,539	6.02
Between 1 and 2 years	10,974	7,767	70.78
Between 2 and 3 years	4,026	3,823	94.96
Over 3 years	25,800	25,142	97.45
	149,427	43,271	/
	1,619,244	446,297	
Individually assessed trade receivables	4,249,552	212,964	
	5,868,796	659,261	

Movements in the loss allowance for impairment of trade receivables are as follows:

	2019	2018 (Restated)
As at 1 January	**659,261**	546,102
Effect of adoption of IFRS 9	**–**	112,407
At beginning of year	**659,261**	658,509
Impairment loss	**236,238**	64,544
Write off	**(97,554)**	(33,469)
Reversal	**(83,095)**	(20,466)
Others	**7**	(9,857)
As at 31 December	**714,857**	659,261

13. TRADE AND NOTES RECEIVABLES (CONTINUED)

As at 31 December 2019, the Group derecognised notes receivable not yet due with a carrying amount in aggregate of RMB34,506 million (31 December 2018: RMB29,273 million). In addition, as at 31 December 2019, the Group has not derecognised notes receivable that have been discounted or enclosed but not yet due with a carrying amount of RMB357 million (31 December 2018: RMB444 million).

The derecognised notes receivable had a maturity of one to six months at the end of the reporting period. In accordance with the Law of Negotiable Instruments in the PRC, the holders of the derecognised notes receivable have a right of recourse against the Group if the PRC banks default (the "Continuing Involvement"). In the opinion of the directors, the Group has transferred substantially all risks and rewards relating to the derecognised notes receivable. Accordingly, it has derecognised the full carrying amounts of the derecognised notes receivable and the associated trade payables. The maximum exposure to loss from the Group's Continuing Involvement in the derecognised notes receivable and the undiscounted cash flows to repurchase these derecognised notes receivable is equal to their carrying amounts. In the opinion of the directors, the fair values of the Group's Continuing Involvement in the derecognised notes receivable are not significant.

During the year ended 31 December 2019, the Group has not recognised any gain or loss on the date of transfer of the derecognised notes receivable. No gains or losses were recognised from the Continuing Involvement, both during the year or cumulatively. The endorsement has been made evenly throughout the year.

(Amounts expressed in thousands of RMB unless otherwise stated)

14. OTHER CURRENT ASSETS

	31 December 2019	31 December 2018 (Restated)
Financial assets		
– Deposits paid to suppliers	501,918	317,946
– Dividends receivable	82,796	47,167
– Receivables from disposal of businesses and assets	90,399	134,789
– Entrusted loans and loans receivable from third parties	1,544,070	1,645,205
– Entrusted loans and loans receivable from related parties	1,309,095	1,297,892
– Receivables from disposal of properties	1,948,434	1,881,513
– Interest receivables	40,936	40,936
– Recoverable reimbursement for freight charges	223,884	415,232
– Receivable of government grants	517,365	129,977
– Other financial assets	1,185,466	787,396
	7,444,363	6,698,053
Less: impairment allowance	(1,720,439)	(1,764,068)
	5,723,924	4,933,985
Advances to employees	17,207	23,744
Deductible input value added tax receivables	2,424,004	2,189,470
Prepaid income tax	93,093	162,103
Prepayments to related parties for purchases	229,324	586,312
Prepayments to suppliers for purchases and others	634,548	964,158
Others	117,678	169,881
	3,515,854	4,095,668
Less: impairment allowance	(2,715)	(4,139)
	3,513,139	4,091,529
Total other current assets	9,237,063	9,025,514

(Amounts expressed in thousands of RMB
unless otherwise stated)

14. OTHER CURRENT ASSETS (CONTINUED)

As at 31 December 2019, except for amounts included in other receivables amounting to RMB37 million, which were denominated in USD (31 December 2018: other receivables amounting to RMB48 million denominated in USD), remaining amounts in other current assets were denominated in RMB0.12 million (31 December 2018: remaining denominated in RMB).

As at 31 December 2019, except for entrusted loans and loans receivable (31 December 2018: except for entrusted loans and loans receivable) which were interest-bearing assets, all amounts in other current assets were non-interest-bearing (31 December 2018: all non-interest-bearing).

As at 31 December 2019, the ageing analysis of financial assets included in other current assets was as follows:

	31 December 2019	31 December 2018 (Restated)
Within 1 year	**1,628,723**	1,456,520
Between 1 and 2 years	**752,731**	283,844
Between 2 and 3 years	**151,974**	844,262
Over 3 years	**4,910,935**	4,113,427
	7,444,363	6,698,053
Less: provision for impairment	**(1,720,439)**	(1,764,068)
	5,723,924	4,933,985

(Amounts expressed in thousands of RMB unless otherwise stated)

14. OTHER CURRENT ASSETS (CONTINUED)

Movements in the provision for impairment of financial assets in other current assets are as follows:

	2019	2018 (Restated)
As at 1 January	**1,768,207**	1,677,277
Effect of adoption of IFRS 9	**–**	38,502
At beginning of year	**1,768,207**	1,715,779
Impairment loss	**42,898**	65,494
Write off	**(62,319)**	(6,117)
Reversal	**(26,290)**	(1,731)
Others	**658**	(5,218)
As at 31 December	**1,723,154**	1,768,207

Financial assets included in other current assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs.

As at 31 December 2019	**Gross carrying amount**	**Expected credit losses**
Stage 1 – 12 months expected credit loss	**1,632,766**	**–**
Stage 2 – life time expected credit loss	**4,052,681**	**82,061**
Stage 3 – life time expected credit loss with credit-impaired	**1,758,916**	**1,638,378**
	7,444,363	**1,720,439**

(Amounts expressed in thousands of RMB unless otherwise stated)

14. OTHER CURRENT ASSETS (CONTINUED)

As at 31 December 2018	Gross carrying amount	Expected credit losses
Stage 1 – 12 months expected credit loss	1,098,455	–
Stage 2 – life time expected credit loss	3,744,612	88,974
Stage 3 – life time expected credit loss with credit-impaired	1,796,526	1,675,094
	6,639,593	1,764,068

15. CASH AND CASH EQUIVALENTS AND RESTRICTED CASH

	31 December 2019	31 December 2018 (Restated)
Restricted cash	**1,305,781**	2,165,288
Cash and cash equivalents	**7,759,190**	19,130,835
	9,064,971	21,296,123

Restricted cash mainly represented deposits held for use in issued notes payable and letters of credit.

(Amounts expressed in thousands of RMB unless otherwise stated)

15. CASH AND CASH EQUIVALENTS AND RESTRICTED CASH (CONTINUED)

As at 31 December 2019, bank balances and cash on hand of the Group were denominated in the following currencies:

	31 December 2019	31 December 2018 (Restated)
RMB	**7,858,867**	18,026,265
USD	**1,195,720**	3,256,625
HKD	**4,423**	8,321
EUR	**1,943**	371
AUD	**–**	2,552
IDR	**4,018**	1,989
	9,064,971	21,296,123

Cash at banks earns interest at floating rates based on daily bank deposit rates. The bank balances, time deposits and restricted cash are deposited with creditworthy banks with no recent history of default.

16. SHARE CAPITAL

As at 31 December 2018 and 2019, all issued shares were registered and fully paid. Both A shares and H shares rank pari passu with each other.

On 31 January 2018, the Company and eight investors, including Huarong Ruitong Equity Investment Management Co., Ltd. (華融瑞通股權投資管理有限公司), China Life Insurance Co., Ltd. (中國人壽保險股份有限公司), Shenzhen Zhao Ping Aluminum Investment Center (limited partnership) (深圳市招平中鋁投資有限(有限合夥)), China Pacific Life Insurance Co., Ltd. (中國太平洋人壽保險股份有限公司), China Cinda Asset Management Co., Ltd. (中國信達資產管理股份有限公司), BOC Financial Asset Investment Co, Ltd. (中銀金融資產投資有限公司), ICBC Financial Asset Investment Co., Ltd. (工銀金融資產投資有限公司) and ABC Financial Asset Investment Co., Ltd.(農銀金融資產投資有限公司) (collectively called "Transferors") entered into the equity acquisition agreements, pursuant to which, the Company agreed to acquire and the Transferors agreed to sell their non-controlling equity interests in Chalco Shandong Co., Ltd., Chalco Zhongzhou Aluminum Co., Ltd., Baotou Aluminum Co., Ltd. and Chalco Mining Co., Ltd. (collectively called the "Target Companies"), at a consideration of approximately 2.1 billion ordinary shares of the Company, which was determined at the fair value of the non-controlling interests in the Target Companies of approximately RMB12.7 billion. Upon signing the equity acquisition agreements, together with the investment agreements and debt to equity swap agreements signed in 2017, the Transferors effectively surrendered their non-controlling interests in the Target Companies, which included the rights to profit or loss, voting rights and other shareholder rights of the Target Companies to the Group. Consequently the carrying values of the Transferors' non-controlling interests in the Target Companies of RMB10.7 billion were derecognised, and were transferred to the capital reserve of the Group in 2018.

On 25 February 2019, the Company completed the issuance of ordinary shares to these Transferors, and the total number of shares issued was 2,118,874,715.

The number of the Company's authorised ordinary shares was 17,022,672,951 at par value of RMB1.00 per share as at 31 December 2019. There were 14,903,798,236 and 17,022,672,951 ordinary shares issued and outstanding as at 31 December 2018 and 2019, respectively.

17. RESERVES

The amounts of the Group's reserves and the movements therein for the current and prior years are presented in the consolidated statement of changes in equity of the financial statements.

(Amounts expressed in thousands of RMB
unless otherwise stated)

18. INTEREST-BEARING LOANS AND BORROWINGS

	31 December 2019	1 January 2019	31 December 2018 (Restated)
Long-term loans and borrowings			
Finance lease payables *(Note 20)*	**–**	–	4,081,270
Lease liabilities *(Note 19)*	**8,369,262**	11,010,323	–
Bank and other loans *(Note (a))*			
– Secured *(Note (f))*	**13,254,721**	12,608,727	12,608,727
– Guaranteed *(Note (e))*	**3,948,400**	3,040,400	3,040,400
– Unsecured	**21,632,766**	30,491,613	30,491,613
	38,835,887	46,140,740	46,140,740
Medium-term notes and bonds and private placement notes *(Note (b))*			
– Unsecured	**16,736,755**	10,094,861	10,094,861
	16,736,755	10,094,861	10,094,861
Total long-term loans and borrowings	**63,941,904**	67,245,924	60,316,871
Current portion of lease liabilities *(Note 19)*	**(1,358,654)**	(2,509,125)	–
Current portion of finance lease payables *(Note 20)*	**–**	–	(2,328,358)
Current portion of medium-term bonds and long-term bonds	**–**	(396,727)	(396,727)
Current portion of long-term bank and other loans	**(3,339,687)**	(3,384,400)	(3,384,400)
Non-current portion of long-term loans and borrowings	**59,243,563**	60,955,672	54,207,386

(Amounts expressed in thousands of RMB
unless otherwise stated)

18. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

	31 December 2019	31 December 2018 (Restated)
Short-term loans and borrowings		
Bank and other loans *(Note (c))*		
– Secured *(Note (f))*	**465,000**	1,220,680
– Guaranteed *(Note (e))*	**–**	240,000
– Unsecured*	**20,773,166**	37,887,420
	21,238,166	39,348,100
Short-term bonds, unsecured *(Note (d))*	**9,331,488**	500,000
Gold leasing arrangements *(Note (g))*	**7,018,609**	1,607,905
Current portion of lease liabilities/finance lease payables *(Note 19)*	**1,358,654**	2,328,358
Current portion of medium-term notes	**–**	396,727
Current portion of long-term bank and other loans	**3,339,687**	3,384,400
Total short-term borrowings and current portion of long-term loans and borrowings	**42,286,604**	47,565,490

As at 31 December 2019, except for loans and borrowings of the Group amounting to RMB17 million (31 December 2018: RMB19 million) and RMB4,006 million (31 December 2018: RMB3,984 million) which were denominated in JPY and USD, respectively, all loans and borrowings were denominated in RMB.

18. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

As at 31 December 2019, included in the Group's interest-bearing loans and borrowings are amounts due to subsidiaries of Chinalco RMB4,181 million (31 December 2018: RMB4,373 million), respectively, as set out in Note 35(b). There were no interest-bearing loans and borrowings obtained from joint ventures and associates (31 December 2018: Nil).

* As at 31 December 2019, Shandong Huayu Alloy Materials Co., Ltd. ("Shandong Huayu"), a subsidiary of the Group, has overdued short-term loans of RMB649 million. Since overdued on its bank debts, Shandong Huayu actively communicated with relevant bank creditors, participated in relevant litigation process in accordance with law, and coordinated the repayments of its debts with its own assets, and sought the understanding and support of relevant bank creditors. As of the date of approval of the report, Shandong Huayu's default on debts did not lead to a renegotiation of debt terms.

(Amounts expressed in thousands of RMB unless otherwise stated)

18. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

Note:

(a) Long-term bank and other loans

(i) The maturity of long-term bank and other loans is set out below:

	Loans from banks and other financial institutions		Other loans		Total of long-term bank and other loans	
	31 December 2019	31 December 2018 (restated)	**31 December 2019**	31 December 2018	**31 December 2019**	31 December 2018 (restated)
Within 1 year	**3,337,202**	3,382,325	**2,485**	2,075	**3,339,687**	3,384,400
Between 1 and 2 years	**7,523,290**	7,375,557	**2,485**	2,399	**7,525,775**	7,377,956
Between 2 and 5 years	**9,151,573**	16,586,390	**7,455**	7,197	**9,159,028**	16,593,587
Over 5 years	**18,806,428**	18,777,275	**4,969**	7,522	**18,811,397**	18,784,797
	38,818,493	46,121,547	**17,394**	19,193	**38,835,887**	46,140,740

(ii) Other loans were provided by local bureaus of the Ministry of Finance to the Group. The weighted average annual interest rate of long-term bank and other loans for the year ended 31 December 2019 was 5.20% (2018: 4.78%).

(b) Medium-term notes and bonds and long-term bonds and private placement notes

Outstanding medium-term bonds and private placement notes of the Group as at 31 December 2019 are summarised as follows:

	Face value (RMB)/maturity	**Effective interest rate**	**31 December 2019**	31 December 2018
2018 Medium-term notes	2,000,000/2021	5.84%	**1,992,339**	1,986,418
2019 Medium-term bonds	2,000,000/2024	4.31%	**1,982,228**	–
2016 private placement notes	3,215,000/2019	5.12%	**–**	396,727
2018 Medium-term bonds	1,100,000/2021	4.66%	**1,098,218**	1,097,003
2018 Medium-term bonds	900,000/2023	5.06%	**898,315**	897,820
2018 Medium-term bonds	1,400,000/2021	4.30%	**1,397,319**	1,395,970
2018 Medium-term bonds	1,600,000/2023	4.57%	**1,596,192**	1,595,311
2019 Medium-term bonds	2,000,000/2022	3.84%	**1,998,604**	–
2019 Medium-term bonds	1,000,000/2022	3.50%	**1,997,097**	–
2019 Medium-term bonds	900,000/2023	4.99%	**999,462**	–
2018 Hong Kong Medium-term bonds	2,785,840/2021	5.25%	**2,776,981**	2,725,612
			16,736,755	10,094,861

Medium-term notes and bonds and private placement notes were issued for capital expenditure and operating cash flows purposes, as well as for the purpose of re-financing of bank loans.

(Amounts expressed in thousands of RMB
unless otherwise stated)

18. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

Note: *(Continued)*

(c) Short-term bank and other loans

Other loans were entrusted loans provided by state-owned companies to the Group.

The weighted average annual interest rate of short-term bank and other loans for the year ended 31 December 2019 was 4.29% (2018: 4.52%).

(d) Short-term bonds

Outstanding short-term bonds as at 31 December 2019 are summarised as follows:

	Face value/ maturity	**Effective interest rate**	**31 December 2019**	31 December 2018
2018 Ningxia short-term bonds	500,000/2019	5.00%	**–**	500,000
2019 Ningxia short-term bonds	300,000/2020	3.97%	**300,000**	–
2019 short-term bonds	1,000,000/2020	2.45%	**1,008,161**	–
2019 short-term bonds	2,000,000/2020	2.63%	**2,013,127**	–
2019 short-term bonds	3,000,000/2020	2.00%	**3,008,384**	–
2019 short-term bonds	3,000,000/2020	2.30%	**3,001,816**	–
			9,331,488	500,000

All the above short-term bonds were issued for working capital needs.

(Amounts expressed in thousands of RMB unless otherwise stated)

18. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

Note: *(Continued)*

(e) Guaranteed interest-bearing loans and borrowings

Details of the interest-bearing loans and borrowings in which the Group received guarantees are set out as follows:

Guarantors	31 December 2019	31 December 2018 (restated)
Long-term loans		
Yinyi Fengdian, Neimenggu, Alashan *(Note (iv))*	**150,000**	–
Ningxia Energy *(Note (i))*	**1,274,400**	892,400
Yinxing Energy *(Note (i))*	**46,000**	70,000
Baotou Aluminum Limited Company(包頭鋁業有限公司) and Baotou Communications Investment Group Limited Company(包頭交通投資集團有限公司) *(Note (ii))*	**1,250,000**	1,600,000
The Company and Hangzhou Jinjiang Group Limited Company ("Hangzhou Jinjiang", 杭州錦江集團有限公司) *(Note (iii))*	**10,000**	246,000
Hangzhou Jinjiang *(Note (v))*	**123,500**	–
Qingzhen Industrial Investment Co.,Ltd. (清鎮市工業投資有限公司) *(Note (v))*	**47,250**	116,000
Guizhou Industrial Investment Group Co.,Ltd. (貴州產業投資(集團)有限責任公司) *(Note (v))*	**47,250**	116,000
Size Industry Investment Fund(北京中鋁交銀四則產業投資基金管理合夥企業(有限合夥)) *(Note (v))*	**1,000,000**	–
	3,948,400	3,040,400
Short-term loans		
China Great Wall Aluminum Co., Ltd.*("China Great Wall Aluminum") (中國長城鋁業有限公司) *(Note (vi))*	**–**	40,000
Hangzhou Jinjiang, Qingzhen Investment and Guizhou Investment *(Note (v))*	**–**	200,000
–	**–**	240,000

Notes:

(i) The guarantor is a subsidiary of the Company.

(ii) The guarantors are a subsidiary of the Company and a third party respectively.

(iii) The guarantors are the Company and a third party respectively.

(iv) The guarantors are subsidiaries of the Company.

(v) The guarantor is a third party.

(vi) The guarantor is a subsidiary of Chinalco.

* The English names represent the best effort by management of the Group in translating the Chinese names of the Companies as they do not have any official English names.

18. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

Notes: (Continued)

(f) Secured interest-bearing loans and borrowings

The assets pledged for bank and other borrowings were set out in Note 24 to the financial statements.

(g) Gold leasing arrangements

In 2018 and 2019, the Company entered into several gold leasing master framework agreements, individual gold leasing agreements and general hedging agreements with Bank of Communications and Agriculture Bank of China (collectively, "the Banks"). According to the gold leasing master framework agreements and gold leasing agreements, the Company leased standard gold with fineness of Au 99.99 for 6 to 12 months from the Banks, with annual interest rates ranging from 3.70% to 4.50%. Concurrently, the Company entrusted the Banks to sell all leased gold and received cash of RMB6,922 million from the sale, and repaid gold leasing principal amounting to RMB1,608 million. Upon the expiry of the gold leasing agreements, the Company shall purchase the standard gold (with same quality and value according to the general hedging agreements entered into simultaneously with the leasing agreements) to return to the Banks.

The directors of the Company are of the view that the Company is free from the assumption of risk of gold price fluctuations due to the fixed repurchase price under the general hedging agreements, and therefore, this arrangement should be accounted for as short-term loans with fixed interest rates (ranging from 3.70% to 4.50%) (2018: ranging from 4.10% to 4.50%), net of the Banks' charges.

19. LEASE

The Group as a lessee

The Group has lease contracts for various items of plant and machinery, motor vehicles and other equipment used in its operations. Lump sum payments were made upfront to acquire the leased land from the owners with lease periods of 20 to 30 years, and no ongoing payments will be made under the terms of these land leases. Leases of plant and machinery generally have lease terms between 3 and 5 years, while motor vehicles generally have lease terms between 2 and 5 years. Other equipment generally has lease terms of 12 months or less and/or is individually of low value. Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group. There are several lease contracts that include extension and termination options and variable lease payments, which are further discussed below.

(Amounts expressed in thousands of RMB
unless otherwise stated)

19. LEASE (CONTINUED)

The Group as a lessee (Continued)

(a) Land use rights (before 1 January 2019)

	31 December 2018 (Restated)
Operating leases:	
In the Mainland China, held on:	
Leases less than 10 years	768,153
Leases between 10 and 50 years	2,753,882
Leases over 50 years	784,830
	4,306,865

	2018 (Restated)
As at 1 January 3,604,201	3,604,201
Additions	2,838
Acquisition of subsidiaries	460,638
Transfer from property, plant and equipment *(Note 6)*	382,242
Government grants	(34,174)
Disposal of subsidiaries	(728)
Amortisation	(108,152)
As at 31 December	4,306,865

As at 31 December 2018, the Group has pledged land use rights at a net carrying value amounting to RMB328 million for bank and other borrowings as set out in Note 24 to the financial statements.

(Amounts expressed in thousands of RMB unless otherwise stated)

19. LEASE (CONTINUED)

The Group as a lessee (Continued)

(b) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements during the year are as follows:

	Buildings	Machinery	Land use rights	Total
As at 1 January 2019	396,499	6,129,771	11,450,581	17,976,851
Additions	21,203	11,606	1,215,049	1,247,858
Transfer to investment properties *(Note 7)*	–	–	(239,765)	(239,765)
Transfer to property, plant and equipment *(Note 6)*	–	(1,674,260)	–	(1,674,260)
Government grants	–	(107,441)	–	(107,441)
Contract modification	(45,507)		(137,358)	(182,865)
Disposal of subsidiaries	–	–	(52,668)	(52,668)
Depreciation	(84,940)	(601,891)	(388,994)	(1,075,825)
Impairment losses	–	–	(1,448)	(1,448)
As at 31 December 2019	287,255	3,757,785	11,845,397	15,890,437

As at 31 December 2019, the Group was in the process of applying for the certificates of land use rights with a carrying amount of RMB74 million (31 December 2018: RMB687 million). There has been no litigations, claims or assessments against the Group for compensation with respect to the use of land parcels to date. As at 31 December 2019, the carrying value of these land parcels only represented approximately 0.04% of the total asset value of the Group (31 December 2018: 0.34%). Management considers that it is probable that the Group can obtain the relevant ownership certificates from the appropriate authorities. The directors of the Company are of the opinion that the Group legally owns and has the right to use the above land, and that there is no material adverse impact on the overall financial position of the Group.

(Amounts expressed in thousands of RMB
unless otherwise stated)

19. LEASE (CONTINUED)

The Group as a lessee (Continued)

(b) Right-of-use assets (Continued)

As at 31 December 2019, the Group has pledged land use rights at a net carrying value amounting to RMB373 million for bank and other borrowings as set out in Note 24 to the financial statements.

(c) Lease liabilities

The carrying amount of lease liabilities (included under interest-bearing bank and other borrowings) and the movements during the year are as follows:

	2019 Lease liabilities
Carrying amount at 1 January	**11,010,323**
New leases	**82,370**
Contract modification	**(178,575)**
Accretion of interest recognised during the year	**487,249**
Payments	**(3,032,106)**
Carrying amount at 31 December	**8,369,261**
Analysed into:	
Current portion	**1,358,653**
Non-current portion	**7,010,608**

19. LEASE (CONTINUED)

The Group as a lessee (Continued)

(d) The amounts recognised in profit or loss in relation to leases are as follows:

	2019
Interest on lease liabilities	487,249
Depreciation charge of right-of-use assets	1,075,825
Expense relating to short-term leases and other leases with remaining lease terms ended on or before 31 December 2019	63,626
Expense relating to leases of low-value assets	1,800
Total amount recognised in profit or loss	1,628,500

(e) Extension and termination options

The Group has several lease contracts that include extension and termination options. These options are negotiated by management to provide flexibility in managing the leased-asset portfolio and align with the Group's business needs. Management exercises significant judgement in determining whether these extension and termination options are reasonably certain to be exercised. Set out below are the undiscounted potential future rental payments relating to periods following the exercise date of extension and termination options that are not included in the lease terms:

	Payable within five years	Payable after five year
Extension options expected not to be exercised	–	–
Termination options expected to be exercised	–	–

19. LEASE (CONTINUED)

The Group as a lessee (Continued)

(f) The total cash outflow for leases and future cash outflows relating to leases that have not yet commenced are disclosed in Notes 34(c) and 42, respectively, to the financial statements.

The Group as a lessor

Rental income recognised by the Group during the year was RMB318 million (2018: RMB240 million), details of which are included in Note 4 to the financial statements. In the opinions of the directors, the undiscounted lease payments receivable by the Group in future periods under non-cancellable operating leases are not material.

(Amounts expressed in thousands of RMB unless otherwise stated)

20. FINANCE LEASE PAYABLES

These leases were classified as finance leases prior to IFRS 16 becoming effective on 1 January 2019.

At 31 December 2018, the total future minimum lease payments under finance leases and their present values were as follows:

	Minimum lease payments	**Present value of minimum lease payments**
	31 December 2018	31 December 2018
Amounts payable:		
Within one year	2,518,653	2,328,358
In the second year	1,161,490	1,075,050
In the third to fifth years, inclusive	707,716	664,889
After five years	13,238	12,973
Total minimum finance lease payments	4,401,097	4,081,270
Future finance charges	(319,827)	
Total net finance lease payables *(Note 18)*	4,081,270	
Portion classified as current liabilities *(Note 18)*	(2,328,358)	
Non-current portion	1,752,912	

(Amounts expressed in thousands of RMB
unless otherwise stated)

20. FINANCE LEASE PAYABLES (CONTINUED)

During the year ended 31 December 2018, the Group entered into various sale and leaseback agreements with Pingan International Financial Leasing Co., Ltd. ("平安國際融資租賃有限公司"), Tianjin Far East Hongxin Finance Leasing Co., Ltd. ("遠東宏信(天津)融資租賃有限公司")，China Aviation International Leasing Co., Ltd. ("中航國際租賃有限公司"), Zhaoyin Leasing Co., Ltd. ("招銀租賃有限公司") and Chalco Financial Leasing Co., Ltd. ("中鋁融資租賃有限公司"), which is a related party of the Group, respectively, under which the Group sold machineries and construction in progress and leased them back. The lease terms range from one to five years and the lease rentals are payable by instalments with bearing interest at prevailing lending rates.

* The English names represent the best effort made by management of the Group in translating the Chinese names of the Companies as they do not have any official English names.

21. OTHER NON-CURRENT LIABILITIES

	31 December 2019	31 December 2018
Financial liabilities		
– Long-term payables for mining rights	**1,108,075**	788,133
– Other financial liabilities	**45,412**	52,926
	1,153,487	841,059
Obligations in relation to early retirement schemes *(Note (i))*	**426,737**	777,305
Deferred government grants *(Note (ii))*	**245,916**	314,045
Deferred gain relating to sales and leaseback agreements	**125,707**	240,661
Contract liabilities	**125,758**	132,844
Provision for rehabilitation	**131,248**	121,033
Others	**10,721**	11,217
	1,066,087	1,597,105
	2,219,574	2,438,164

(Amounts expressed in thousands of RMB
unless otherwise stated)

21. OTHER NON-CURRENT LIABILITIES (CONTINUED)

Note:

(i) Obligations in relation to early retirement schemes

From 2014, certain subsidiaries and branches implemented certain early retirement benefit schemes which allow qualified employees to early retire on a voluntary basis. The Group undertakes the obligations to pay the early retirement employees' living expenses for no more than five years in the future on a monthly basis according to the early retirement benefit schemes, together with social insurance and housing fund pursuant to the regulation of the local Social Security Office. Living expenses, social insurance and the housing fund are together referred to as "the Payments". The Payments are forecasted to increase by 3% per annum with reference to the inflation rate and adjusted based on the average death rate in China. The Payments are discounted by the treasury bond rate of 31 December 2019. As at 31 December 2019, the current portion of the Payments within one year was reclassified to "Other payables and accrued liabilities".

As at 31 December 2019, obligations in relation to retirement benefits under the Group's early retirement schemes are as follows:

	2019	2018
As at 1 January	**1,293,841**	1,438,440
Provision made during the year *(Note 29)*	**210,428**	447,660
Interest costs	**18,260**	62,801
Payment during the year	**(680,888)**	(655,060)
As at 31 December	**841,641**	1,293,841
Non-current	**426,737**	777,305
Current *(Note 22)*	**414,904**	516,536
	841,641	1,293,841

(ii) For asset related government grant, had the asset already exist upon receiving the government grant, the Group directly deducts the grant amount against the book value of assets related to government grant instead of record the government grants as deferred income. For government grant related to income and expenses or losses already incurred by the Group, the government grant amounts are directly deducted the related costs, expenses or non-operating losses. Other types of government grant in the Group are still included in deferred government grant and other income.

(Amounts expressed in thousands of RMB
unless otherwise stated)

22. OTHER PAYABLES AND ACCRUED LIABILITIES

	31 December 2019	31 December 2018 (Restated)
Financial liabilities		
– Payable for capital expenditures	**6,832,365**	5,694,632
– Interest payable	**494,341**	396,286
– Payables withheld as guarantees and deposits	**1,339,722**	1,102,358
– Dividends payable by subsidiaries to non-controlling shareholders	**518,360**	543,207
– Consideration payable for investment projects	**141,740**	280,856
– Current portion of payables for mining rights	**372,824**	210,325
– Others	**1,083,646**	1,058,798
	10,782,998	9,286,462
Output value-added tax on pending	**210,283**	252,691
Taxes other than income taxes payable*	**732,264**	831,151
Accrued payroll and bonus	**21,902**	220,851
Staff welfare payables	**258,448**	391,824
Current portion of obligations in relation to early retirement schemes *(Note 21)*	**414,904**	516,536
Contribution payable for pension insurance	**20,386**	30,145
Others	**999**	37,492
	1,659,186	2,280,690
	12,442,184	11,567,152

* Taxes other than income taxes payable mainly comprise accruals for value-added tax, resource tax, city construction tax and education surcharge.

As at 31 December 2019, except for other payables and accrued liabilities of the Group amounting to RMB825 million and RMB0.25 million which were denominated in USD and HKD, respectively (31 December 2018: RMB240 million and RMB0.27 million which were denominated in USD and HKD, respectively), all payables and accrued liabilities were denominated in RMB.

(Amounts expressed in thousands of RMB unless otherwise stated)

23. TRADE AND NOTES PAYABLES

	31 December 2019	31 December 2018 (Restated)
Trade payables	**7,858,214**	8,570,102
Notes payable	**4,726,541**	5,439,162
	12,584,755	14,009,264

As at 31 December 2019, except for trade and notes payables of the Group amounting to RMB52 million which were denominated in USD (31 December 2018: RMB213 million in USD), all trade and notes payables were denominated in RMB (31 December 2018: all denominated in RMB).

The ageing analysis of trade and notes payables is as follows:

	31 December 2019	31 December 2018 (Restated)
Within 1 year	**12,145,985**	13,598,039
Between 1 and 2 years	**229,221**	140,665
Between 2 and 3 years	**30,713**	47,654
Over 3 years	**178,836**	222,906
	12,584,755	14,009,264

The trade and notes payables are non-interest-bearing and are normally settled within one year.

(Amounts expressed in thousands of RMB
unless otherwise stated)

24. PLEDGE OF ASSETS

The Group has pledged various assets as collateral against certain secured borrowings as set out in Note 18. As at 31 December 2019, a summary of these pledged assets was as follows:

	31 December 2019	31 December 2018
Property, plant and equipment *(Note 6)*	**4,946,338**	4,168,239
Land use rights *(Note 19)*	**–**	328,116
Right-of-use assets *(Note 19)*	**373,048**	–
Intangible assets *(Note 5)*	**757,269**	772,597
Notes receivable *(Note 13)*	**667,190**	933,551
Investments in associates*(Note 8)*	**538,787**	535,610
	7,282,632	6,738,113

As at 31 December 2019, in addition to the loans and borrowings which were secured by the above assets, the current portion of long-term loans and borrowings amounting to RMB1,209 million (31 December 2018: RMB1,354 million), and the non-current portion of long-term loans and borrowings amounting to RMB10,265 million (31 December 2018: RMB10,155 million) were secured by the contractual right to charge users for electricity generated in the future.

(Amounts expressed in thousands of RMB
unless otherwise stated)

25. PROFIT BEFORE INCOME TAX

An analysis of profit before income tax is as follows:

	2019	2018 (Restated)
Purchase of inventories in relation to trading activities	**104,928,962**	85,443,397
Raw materials and consumables used, and changes in work-in-progress and finished goods	**35,573,467**	43,197,855
Power and utilities	**16,755,424**	17,650,214
Depreciation of right-of-use assets	**1,075,825**	–
Depreciation and amortisation (Other than depreciation of right-of-use assets)	**7,714,418**	8,055,753
Employee benefit expenses *(Note 29)*	**7,773,170**	7,433,027
Repairs and maintenance	**1,867,160**	1,750,194
Transportation expenses	**950,716**	1,893,659
Logistic cost	**2,469,531**	2,794,733
Taxes other than income tax expense *(Note (i))*	**904,088**	936,546
Rental expenses for land use rights and buildings	**–**	649,640
Packaging expenses	**277,785**	261,626
Research and development expenses	**940,828**	626,873
Auditors' remuneration *(Note (ii))*	**33,337**	30,852

Note:

(i) Taxes other than income tax expense mainly comprise surcharges, land use tax, property tax and stamp duty.

(ii) During the year ended 31 December 2019, auditors' remuneration included audit and non-audit services provided by Ernst & Young, Hong Kong and Ernst & Young Hua Ming LLP, amounting to RMB27.8 million (2018: RMB26.7 million), and remuneration for services provided by other auditors.

26. OTHER INCOME

For the year ended 31 December 2019, government grants amounting to RMB79 million (2018: RMB135 million) were recognised as income for the year to facilitate the Group's development. There are no unfulfilled conditions or contingencies attached to the grants.

(Amounts expressed in thousands of RMB unless otherwise stated)

27. OTHER GAINS, NET

	2019	2018
Gain on disposal of subsidiaries *(Note 39)*	**261,187**	3,517
Gain on disposal and dividends of equity investments designated at fair value through other comprehensive income*(Note (1))*	**97,775**	109,914
Realised gains on futures, forward and option contracts, net *(Note (2))*	**60,671**	40,492
Unrealised (losses)/gains on futures, forward and option contracts, net *(Note (2))*	**(9,851)**	100,967
Gain on disposal of property, plant and equipment and land use rights, net *(Note (3))*	**259,684**	272,098
Gain on previously held equity interests remeasured at acquisition–date fair value	**–**	748,086
Gain on share of associates *net assets (Note 8(b)), (Note (4))*	**295,288**	–
Gain/(loss) on disposal of investment in a joint venture/ an associate *(Note (5))*	**159,514**	(1,904)
Gain on disposal of business *(Note (6))*	**262,677**	–
Others	**(139,676)**	(351,266)
	1,247,269	921,904

Notes :

(1) In 2019, the dividends of other equity instrument investments were mainly RMB98 million from Size Industry Investment Fund (2018: RMB109 million).

(2) The Group does not apply hedge accounting for these futures, forward and option contracts.

27. OTHER GAINS, NET (CONTINUED)

Notes: (Continued)

(3) During the year, the transactions contributed to the gain on disposal of electrolytic aluminum capacity quota and property, plant and equipment mainly include the following:

(a) Pursuant to the agreement entered into between Shanxi Huasheng Co., Ltd. ("Shanxi Huasheng") and Yixin Aluminum on 28 May 2019, the electrolytic aluminum capacity quota of 170,000 tonnes was transferred from Shanxi Huasheng to Yixin Aluminum. A gain of RMB800 million from disposal of the aluminum capacity quota was recorded by the Group in the current period. The transfer constitutes a related party transaction which was disclosed in Note 35 (a).

(b) The fixed assets related to the electrolytic aluminum production line of Guizhou Branch have been disposed of, and the Company recognised the disposal loss of RMB541 million from the difference between the transfer price and carrying amount of the assets.

(4) As disclosed in Note 8 (b), the Group recognised a gain of RMB204 million and a gain of RMB91 million on share of associates' net assets Yunnan Aluminum and Yixin Aluminum, respectively.

(5) In March 2019, Ningxia Energy transferred, through an auction transaction, its 50% equity interest in Ningxia Zhongning Power Co., Ltd. to Ningxia Tianyuan Manganese Industry Group Co., Ltd. A gain of RMB159 million from disposal of investment in a joint venture was recorded by the Group in the current year.

(6) The Company used gallium metal business to increase its investment to an associate Chinalco Rare Earth & Metals Co., Ltd. ("China Rare Earth"), and recognised a gain of RMB263 million.

(Amounts expressed in thousands of RMB
unless otherwise stated)

28. FINANCE INCOME/FINANCE COSTS

An analysis of finance income/finance costs is as follows:

	2019	2018 (Restated)
Finance income-interest income	**(261,151)**	(492,234)
Interest expense	**4,665,329**	5,202,639
Less: Interest expense capitalised in property, plant and equipment *(Note 6)*	**(289,499)**	(517,589)
Interest expense, net of capitalised interest	**4,375,830**	4,685,050
Interest on lease liability	**487,249**	–
Amortisation of unrecognised finance expenses	**60,415**	205,335
Exchange gains, net	**(2,315)**	(7,889)
Finance costs	**4,921,179**	4,882,496
Capitalisation rate during the year *(Note 6)*	**4.00% to 6.96%**	4.54% to 7.00%

(Amounts expressed in thousands of RMB
unless otherwise stated)

29. EMPLOYEE BENEFIT EXPENSES

An analysis of employee benefit expenses is as follows:

	2019	2018 (Restated)
Salaries and bonuses	**4,939,758**	4,636,972
Housing fund	**488,574**	414,440
Staff welfare and other expenses*	**2,035,931**	1,896,365
Employment expense in relation to early retirement schemes *(Note 21)*	**210,428**	447,660
Employment expenses in relation to termination benefits	**98,479**	37,590
	7,773,170	7,433,027

* Staff welfare and other expenses include staff welfare, staff union expenses, staff education expenses, unemployment insurance expenses and pension insurance expenses, etc.

Employee benefit expenses include remuneration payables to directors, supervisors and senior management as set out in Note 30.

(Amounts expressed in thousands of RMB unless otherwise stated)

30. DIRECTORS' AND SUPERVISORS' REMUNERATION

(a) Directors' and supervisors' remuneration

Directors' and supervisors' remuneration for the year, disclosed pursuant to the Listing Rules, section 383(1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies Regulation (Disclosure of Information about Benefits of Directors), is as follows:

	2019	2018
Fees	**780**	756
Basic salaries, housing fund, other allowances and benefits in kind	**4,665**	1,849
Pension costs	**513**	234
	5,958	2,839

The remuneration of each director and supervisor of the Company for the year ended 31 December 2019 is set out below:

Names of directors and supervisors	**Fees**	**Salaries**	**Discretionary bonuses**	**Pension costs**	**total**
Executive Directors:					
Yu Dehui *(Note (i))*	**–**	**–**	**–**	**–**	**–**
Lu Dongliang *(Note (i))*	**–**	**–**	**–**	**–**	**–**
He Zhihui	**–**	**885**	**–**	**73**	**958**
Zhu Runzhou	**–**	**833**	**–**	**88**	**921**
Jiang Yinggang	**–**	**889**	**–**	**88**	**977**
	–	**2,607**	**–**	**249**	**2,856**

(Amounts expressed in thousands of RMB unless otherwise stated)

30. DIRECTORS' AND SUPERVISORS' REMUNERATION (CONTINUED)

(a) Directors' and supervisors' remuneration (Continued)

Names of directors and supervisors	Fees	Salaries	Discretionary bonuses	Pension costs	total
Non-executive Directors:					
Ao Hong	–	–	–	–	–
Wang Jun *(Note (ii))*	150	–	–	–	150
Chen Lijie	210	–	–	–	210
Lie-A-Cheong Tai-Chong, David	210	–	–	–	210
Hu Shihai	210	–	–	–	210
	780	–	–	–	780
Supervisors:					
Ye Guohua *(Note (iii))*	–	–	–	–	–
Ou Xiaohui *(Note (iii))*	–	–	–	–	–
Shan Shulan *(Note (iii))*	–	–	–	–	–
Guan Xiaoguang *(Note (iii))*	–	710	–	88	798
Yue Xuguang *(Note (iii))*	–	770	–	88	858
Wu Zuoming	–	578	–	88	666
	–	2,058	–	264	2,322
Total	780	4,665	–	513	5,958

(Amounts expressed in thousands of RMB
unless otherwise stated)

30. DIRECTORS' AND SUPERVISORS' REMUNERATION (CONTINUED)

(a) Directors' and supervisors' remuneration (Continued)

The remuneration of each director and supervisor of the Company for the year ended 31 December 2018 is set out below:

Names of directors and supervisors	Fees	Salaries	Discretionary bonuses	Pension costs	total
Executive Directors:					
Yu Dehui *(Note (i))*	–	–	–	–	–
Lu Dongliang *(Note (i))*	–	–	–	–	–
Jiang Yinggang	–	762	–	90	852
Zhu Runzhou	–	438	–	54	492
	–	1,200	–	144	1,344
Non-executive Directors:					
Ao Hong	–	–	–	–	–
Liu Caiming	–	–	–	–	–
Wang Jun	150	–	–	–	150
Chen Lijie	202	–	–	–	202
Lie-A-Cheong Tai-Chong, David	202	–	–	–	202
Hu Shihai	202	–	–	–	202
	756	–	–	–	756
Supervisors:					
Liu Xiangmin	–	–	–	–	–
Wang Jun	–	–	–	–	–
Wu Zuoming	–	649	–	90	739
Total	756	1,849	–	234	2,839

30. DIRECTORS' AND SUPERVISORS' REMUNERATION (CONTINUED)

(a) Directors' and supervisors' remuneration (Continued)

Notes:

(i) On 21 February 2019, Mr. Yu Dehui resigned as the chairman and an executive Director of the Company, and Mr. Lu Dongliang was elected as the chairman of the sixth session of the Board of the Company at the 39th meeting of the sixth session of the Board.

(ii) On 20 February 2019, the appointment of Mr. Wang Jun as the chief financial officer and the Secretary to the Board (Company Secretary) of the Company was approved at the 38th meeting of the sixth session of the Board of the Company.

(iii) On 25 June 2019, Mr. Ye Guohua was elected as the chairman of the seventh session of the Supervisory Committee of the Company at the first meeting of the seventh session of the Supervisory Committee of the Company.

On 25 June 2019, Ms. Shan Shulan were elected as the shareholder representative Supervisors of the seventh session of the Supervisory Committee of the Company at the 2018 annual general meeting of the Company.

On 25 June 2019, Mr. Guan Xiaoguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company.

On 10 December 2019, Mr. Ou Xiaowu, nominated by Chinalco, the controlling shareholder of the Company on 24 October 2019, was elected as a shareholder representative Supervisor of the seventh session of the Supervisory Committee of the Company at the 2019 third extraordinary general meeting of the Company.

On 10 December 2019, Mr. Yue Xuguang was elected as an employee representative Supervisor of the seventh session of the Supervisory Committee of the Company at the employees' representatives meeting of the Company.

(Amounts expressed in thousands of RMB unless otherwise stated)

30. DIRECTORS' AND SUPERVISORS' REMUNERATION (CONTINUED)

(a) Directors' and supervisors' remuneration (Continued)

The remuneration of the directors and supervisors of the Company fell within the following band:

	Number of individuals	
	2019	2018
Nil to RMB1,000,000	**14**	12

During the year, no options were granted to the directors or the supervisors of the Company (2018: Nil).

During the year, no emoluments were paid to the directors or the supervisors of the Company (among which included the five highest paid employees) as an inducement to join or upon joining the Company or as compensation for loss of office (2018: Nil).

No directors or supervisors of the Company waived any remuneration during the years 2019 and 2018.

(Amounts expressed in thousands of RMB
unless otherwise stated)

30. DIRECTORS' AND SUPERVISORS' REMUNERATION (CONTINUED)

(b) Five highest paid individuals

During the year ended 31 December 2019, the five highest paid employees of the Group include three directors (2018: two director and one supervisor) whose remuneration is reflected in the analysis presented above. The remuneration payable to the remaining two individuals during 2019 (2018: two) is as follows:

	2019	2018
Basic salaries, housing fund, other allowances and benefits in kind	**1,670**	1,305
Discretionary bonuses	**–**	–
Pension costs	**137**	165
	1,807	1,470

The number of the remaining three highest paid individuals during 2019 (2018: two) whose remuneration fell within the following band is as follows:

	Number of employees	
	2019	2018
Nil to RMB1,000,000	**2**	2

(Amounts expressed in thousands of RMB
unless otherwise stated)

31. INCOME TAX EXPENSE

	2019	2018 (Restated)
Current income tax expense	**720,405**	755,264
Deferred tax (benefit)/expense	**(94,685)**	67,255
	625,720	822,519

In general, the Group's PRC entities are subject to PRC corporate income tax at the standard rate of 25% (2018: 25%) on their respective estimated assessable profits for the year. Certain branches and subsidiaries of the Company located in the western regions of the PRC are granted tax concessions including a preferential tax rate of 15% (2018: 15%).

(Amounts expressed in thousands of RMB unless otherwise stated)

31. INCOME TAX EXPENSE (CONTINUED)

A reconciliation of the tax expense applicable to profit before tax at the statutory rates for the countries in which the Company and the majority of its subsidiaries are domiciled to the tax expense at the effective tax rates, and a reconciliation of the applicable rates to the effective tax rates, are as follows:

	2019	2018 (Restated)
Profit before income tax	**2,113,801**	2,264,514
Tax expense calculated at the statutory tax rate of 25% (2018: 25%)	**528,450**	566,129
Tax effects of:		
Preferential income tax rates applicable to certain branches and subsidiaries	**(464,880)**	(268,665)
Impact of change in income tax rate	**4,594**	23,425
Tax losses with no deferred tax assets recognised	**588,267**	434,103
Deductible temporary differences with no deferred tax assets recognised	**41,695**	384,072
Utilisation of previously unrecognised tax losses and deductible temporary differences	**(17,952)**	(52,962)
Tax incentive in relation to deduction of certain expenses	**(50,921)**	(62,172)
Non-taxable income	**(173,686)**	(254,337)
Expenses not deductible for tax purposes	**56,448**	54,959
Write-off of unrecoverable deferred tax assets previously recognised	**187,433**	183,195
Profits and losses attributable to joint ventures and associates	**(79,720)**	40,029
Recognition of deferred tax assets related to deductible temporary differences and tax losses previously not recognised	**(3,868)**	(233,940)
Adjustments in respect of current tax of previous periods	**9,860**	8,683
Income tax expense	**625,720**	822,519
Effective tax rate	**30%**	36%

Share of income tax expense of associates and joint ventures of RMB79 million (2018: RMB106 million) and RMB54 million (2018: RMB48 million) is included in "Share of profits and losses of associates" and "Share of profits and losses of joint ventures", respectively.

32. EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

	2019	2018 (Restated)
Profit attributable to ordinary equity holders of the parent *(in thousands of RMB)*	**850,999**	707,460
Other equity instruments' distribution reserved *(in thousands of RMB)*	**(219,249)**	(129,282)
	631,750	578,178
Weighted average number of ordinary shares in issue	**14,903,798,236**	14,903,798,236
Effect of equity exchange arrangement	**–**	1,938,915,502
Issuance of share capital*(Note 16)	**2,118,874,715**	–
	17,022,672,951	16,842,713,738
Basic and diluted earnings per share *(RMB)*	**0.037**	0.034

* The Group had no potentially dilutive ordinary shares in issue during the years ended 31 December 2019 and 2018.

33. DIVIDENDS

According to the articles of association of the Company, the Company considers the maximum limit of profit appropriation to its shareholders is the lowest of:

(i) the sum of the net profit and the opening retained earnings for the current period in accordance with IFRSs;

(ii) the sum of the net profit and the opening retained earnings for the current period in accordance with the PRC Accounting Standards for Business Enterprises; and

(iii) the amount limited by the Company Law of the PRC.

According to the resolution of the board of directors dated 26 March 2020, the directors did not propose any final dividend for the year ended 31 December 2019, which is to be approved by the shareholders.

(Amounts expressed in thousands of RMB unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of profit before taxation to cash generated from operations

	Notes	2019	2018
Cash flows generated from operating activities			
Profit before income tax		**2,113,801**	2,264,514
Adjustments for:			
Share of profits and losses of joint ventures	8 (a)	**(270,115)**	199,452
Share of profits and losses of associates	8 (b)	**(48,767)**	(39,335)
Depreciation of property, plant and equipment	6	**7,094,716**	7,499,322
Depreciation of investment properties	7	**26,559**	22,229
Depreciation of right-of-use assets	19	**1,075,825**	–
Amortisation of land use rights	19	**–**	108,152
Gain on disposal of other property, plant and equipment, land use rights, net		**(242,960)**	(101,098)
Impairment losses on property, plant and equipment		**259,354**	46,484
Impairment loss of right-of-use assets	19	**1,448**	–
Amortisation of intangible assets	5	**338,938**	295,901
Amortisation of prepaid expenses included in other non-current assets		**254,205**	130,148
Realised and unrealised gains on futures, option and forward contracts	27	**(50,820)**	(141,459)
Gain on previously held equity interest remeasured at acquisition-date fair value	27	**–**	(748,086)
Gain on disposal of subsidiaries	27	**(261,187)**	(3,517)

(Amounts expressed in thousands of RMB unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(a) Reconciliation of profit before taxation to cash generated from operations (Continued)

	Notes	**2019**	2018
Cash flows generated from operating activities (Continued)			
(Gain)/loss on disposal of investments in associates	27	**(159,514)**	1,904
Gain on disposal of business	27	**(262,677)**	–
Gain on share of associates' net assets	27	**(295,288)**	–
Gain on disposal of and dividends from equity investments designated at fair value through other comprehensive income	27	**(97,775)**	(109,914)
Receipt of government subsidies		**(112,141)**	(158,109)
Finance cost	28	**4,921,179**	4,882,496
Change in special reserve		**(23,085)**	6,605
Others		**11,555**	75,381
		14,250,141	14,231,070

(Amounts expressed in thousands of RMB
unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(a) Reconciliation of profit before taxation to cash generated from operations (Continued)

	2019	2018
Cash flows generated from operating activities (Continued)		
Changes in working capital:		
Decrease in inventories	**929,027**	1,194,454
Increase in trade and notes receivables	**(1,050,860)**	(2,473,006)
(Increase)/decrease in other current assets	**(360,639)**	916,681
Decrease in restricted cash	**859,507**	530,284
Increase in other non-current assets	**547,287**	425,739
Decrease in trade and notes payables	**(1,385,081)**	(5,559)
Decrease in other payables and accrued liabilities	**(560,914)**	(945,270)
(Decrease)/increase in other non-current liabilities	**(206,355)**	105,386
Cash generated from operations	**13,022,114**	13,979,779
PRC corporate income taxes paid	**(548,625)**	(947,703)
Net cash generated from operating activities	**12,473,489**	13,032,076
Non-cash transactions of investing activities and financing activities		
Equity exchange arrangement	**–**	10,735,214
Investment in a joint venture used gallium business	**352,848**	–
Endorsement of notes receivables accepted from sale of goods or services for purchase of property, plant and equipment	**1,504,162**	2,384,046
Acquisition of equity investments designated at fair value through other comprehensive income by exchanging equity in a subsidiary	**350,911**	–
Non-controlling shareholders forfeited sharing of profit or equity interests	**149,322**	–
Acquisition of business	**–**	70,087
Finance lease	**–**	113,601

(Amounts expressed in thousands of RMB unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Reconciliation of liabilities arising from financing activities

The table below details changes in the Group's liabilities from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are liabilities for which cash flows was, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Financial liabilities at fair value through profit or loss	Trade and notes payables	Financial liabilities included in other current payables and accrued expenses	Financial Liabilities included in other non-current liabilities	Interest bearing loans and borrowings	Total
As at 1 January 2019 (Restated)	1,766	14,009,264	9,286,462	841,059	101,772,876	125,911,427
Net cash generated from operating activities	–	(1,385,080)	470,478	–	–	(914,602)
Net cash flows from/(used in) investing activities	(961)	(41,607)	622,995	474,548	7,157,695	8,212,670
Proceeds from gold leasing arrangement	–	–	–	–	6,921,860	6,921,860
Proceeds from issuance of short-term bonds and medium-term notes, net of issuance costs	–	–	–	–	37,965,385	37,965,385
Repayments of senior perpetual securities	–	–	–	–	(352,648)	(352,648)
Repayments of medium-term notes and short-term bonds	–	–	–	–	(22,400,000)	(22,400,000)

(Amounts expressed in thousands of RMB unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Reconciliation of liabilities arising from financing activities (Continued)

	Financial liabilities at fair value through profit or loss	Trade and notes payables	Financial liabilities included in other current payables and accrued expenses	Financial Liabilities included in other non-current liabilities	Interest bearing loans and borrowings	Total
Repayments of gold leasing arrangement	–	–	–	–	(1,607,905)	(1,607,905)
Drawdown of short-term and long-term bank and other loans	–	–	–	–	40,669,197	40,669,197
Repayments of short-term and long-term bank and other loans	–	–	–	–	(66,105,388)	(66,105,388)
Principal portion of lease payment	–	–	–	–	(3,032,106)	(3,032,106)
Dividends paid by subsidiaries to non-controlling shareholders	–	–	(23,715)	–	–	(23,715)
Amortisation of unrecognised finance expenses and interest expense	–	–	–	–	487,249	487,249
Interest paid	–	–	235,310	–	22,631	257,941
Reclassification	–	–	162,120	(162,120)	–	–
Net cash (used in)/generated from financing activities	–	–	373,715	(162,120)	(7,431,725)	(7,220,130)
Net foreign exchange differences	–	2,178	10,408	–	31,321	43,907
As at 31 December 2019	805	12,584,755	10,764,058	1,153,487	101,530,167	126,033,272

(Amounts expressed in thousands of RMB
unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Reconciliation of liabilities arising from financing activities (Continued)

	Financial liabilities at fair value through profit or loss	Trade and notes payables	Financial liabilities included in other current payables and accrued expenses	Financial Liabilities included in other non-current liabilities	Interest bearing loans and borrowings	Total
As at 1 January 2018 (Restated)	89,426	12,360,441	11,363,236	769,061	103,270,773	127,852,937
Net cash generated from operating activities	–	(3,996)	(624,504)	–	–	(628,500)
Net cash flows from/(used in) investing activities	(87,660)	1,646,299	(193,345)	–	7,263,251	8,628,545
Payment of upfront interest of gold leasing arrangement	–	–	–	–	2,323,105	2,323,105
Proceeds from issuance of short-term bonds and medium-term notes, net of issuance costs	–	–	–	–	13,185,034	13,185,034
Repayments of medium-term notes and short-term bonds	–	–	–	–	(21,815,000)	(21,815,000)
Repayments of gold leasing arrangement	–	–	–	–	(7,519,283)	(7,519,283)
Drawdown of short-term and long-term bank and other loans	–	–	–	–	76,899,591	76,899,591
Repayments of short-term and long-term bank and other loans	–	–	(1,000,000)	–	(69,560,667)	(70,560,667)

(Amounts expressed in thousands of RMB unless otherwise stated)

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(b) Reconciliation of liabilities arising from financing activities (Continued)

	Financial liabilities at fair value through profit or loss	Trade and notes payables	Financial liabilities included in other current payables and accrued expenses	Financial Liabilities included in other non-current liabilities	Interest bearing loans and borrowings	Total
Proceeds from finance lease, net of deposit and transaction costs	–	–	–	–	1,204,843	1,204,843
Capital elements of finance lease rental payment	–	–	–	–	(3,915,404)	(3,915,404)
Dividends paid by subsidiaries to non-controlling shareholders	–	–	277,771	–	–	277,771
Amortisation of unrecognised finance expenses and interest expense	–	–	–	6,090	521,295	527,385
Interest paid	–	–	(460,147)	(24,736)	(85,578)	(570,461)
Reclassification	–	–	(90,644)	90,644	–	–
Net cash (used in)/generated from financing activities	–	–	(1,273,020)	71,998	(8,762,064)	(9,963,086)
Net foreign exchange differences	–	6,520	14,095	–	916	21,531
As at 31 December 2018 (Restated)	1,766	14,009,264	9,286,462	841,059	101,772,876	125,911,427

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(c) Total cash outflow for leases

The total cash outflow for leases included in the statement of cash flows is as follows:

	2019
Within operating activities	65,426
Within financing activities	3,032,106
	3,097,532

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS

The Company is controlled by Chinalco, the parent company and a state-owned enterprise established in Mainland China. Chinalco itself is controlled by the PRC government, which also owns a significant portion of the productive assets in Mainland China. In accordance with IAS 24 *Related Party Disclosures*, government-related entities and their subsidiaries, directly or indirectly controlled, jointly controlled or significantly influenced by the PRC government are defined as related parties of the Group. On that basis, related parties include Chinalco and its subsidiaries (other than the Group), other government-related entities and their subsidiaries ("other state-owned enterprises"), other entities and corporations over which the Company is able to control or exercise significant influence and key management personnel of the Company and Chinalco as well as their close family members.

For the purposes of the related party transaction disclosures, the directors of the Company consider that meaningful information in respect of related party transactions has been adequately disclosed.

In addition to the related party information and transactions disclosed elsewhere in the consolidated financial statements, the following is a summary of significant related party transactions in the ordinary course of business between the Group and its related parties during the year.

(Amounts expressed in thousands of RMB unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions

	Notes	2019	2018
Sales of goods and services rendered:			
Sales of materials and finished goods to:	(i)		
Chinalco and its subsidiaries	(ix)	**13,612,817**	11,248,625
Associates of Chinalco		**514,414**	897,642
Joint ventures		**5,676,548**	4,462,670
Associates		**3,812,565**	2,626,780
		23,616,344	19,235,717
Provision of engineering, construction and supervisory services to:	(iii)		
Chinalco and its subsidiaries	(ix)	**–**	5,981
Associates		**–**	1,725
		–	7,706
Provision of utility services to:	(ii)		
Chinalco and its subsidiaries	(ix)	**687,290**	620,552
Associates of Chinalco		**4,062**	15,719
Joint ventures		**263,436**	186,672
Associates		**35,650**	24,309
		990,438	847,252

(Amounts expressed in thousands of RMB unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

	Notes	2019	2018
Sales of goods and services rendered: (Continued)			
Rental revenue of land use rights and buildings from:	(vi)		
Chinalco and its subsidiaries	(ix)	**52,571**	31,551
Associates of Chinalco		**65**	–
Joint ventures		**1,967**	1,545
Associates		**775**	1,511
		55,378	34,607
Purchases of goods and services:			
Purchases of engineering, construction and supervisory services from:	(iii)		
Chinalco and its subsidiaries	(ix)	**2,949,866**	2,088,338
Joint ventures		**69,332**	2,100
Associates		**218,616**	405,993
		3,237,814	2,496,431
Purchases of key and auxiliary materials, equipment and finished goods from:	(iv)		
Chinalco and its subsidiaries	(ix)	**8,161,223**	3,513,420
Associates of Chinalco		**18**	18,917
Joint ventures		**2,647,234**	8,182,251
Associates		**1,893,449**	2,108,072
		12,701,924	13,822,660

(Amounts expressed in thousands of RMB unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

	Notes	2019	2018
Purchases of goods and services: (Continued)			
Provision of social services and logistics services by:	(v)		
Chinalco and its subsidiaries	(ix)	**309,180**	312,062
Provision of utility services by:	(ii)		
Chinalco and its subsidiaries	(ix)	**763,812**	992,827
Associates of Chinalco		**100,835**	96,510
Joint ventures		**280,523**	26,269
Associates		**8,326**	77,432
		1,153,496	1,193,038
Provision of other services by:	(vii)		
A joint venture		**272,220**	226,280
Rental expenses/lease liabilities payments for buildings and land use rights charged by:	(vi)		
Chinalco and its subsidiaries	(ix)	**499,191**	501,866

(Amounts expressed in thousands of RMB unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

	Notes	2019	2018
Other significant related party transactions:			
Borrowing from subsidiaries of Chinalco	(viii), (ix)	**3,890,000**	6,525,000
Interest expense on borrowings, discounted notes and factoring arrangement from subsidiaries of Chinalco		**141,991**	143,415
Consideration to acquire the shares in the subsidiaries of Chinalco	(xiv)		
Investment in Yunnan Aluminum		**1,287,608**	–
Investment in Yixin Aluminum		**850,000**	–
		2,137,608	–
Disposal of electronic aluminium capacity quota to a subsidiary of Chinalco		**800,000**	–

(Amounts expressed in thousands of RMB unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

	Notes	2019	2018
Disposal of assets under a sale and leaseback contract to a subsidiary of Chinalco	(xi)	**500,000**	224,000
Finance lease under a sale and leaseback contract from a subsidiary of Chinalco	(xi), (ix)	**558,924**	224,000
Trade receivable factoring arrangement from a subsidiary of Chinalco	(ix)	**136,656**	470,101
Discounted notes receivable to a subsidiary of Chinalco	(viii)	**679,517**	756,000
Provision of financial guarantees to:			
A joint venture	(x)	**12,450**	12,450

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

All transactions with related parties were conducted at prices and on terms mutually agreed by the parties involved, which are determined as follows:

(i) Sales of materials and finished goods comprised sales of alumina, primary aluminum, copper and scrap materials. Transactions entered into are covered by general agreements on a mutual provision of production supplies and ancillary services. The pricing policy is summarised below:

1. The price prescribed by the PRC government ("state-prescribed price") is adopted;

2. If there is no state-prescribed price, state-guidance price is adopted;

3. If there is neither state-prescribed price nor state-guidance price, then the market price (being price charged to and from independent third parties) is adopted; and

4. If none of the above is available, then the adoption of a contractual price (being reasonable costs incurred in providing the relevant services plus not more than 5% of such costs is adopted).

(ii) Utility services, including electricity, gas, heat and water, are provided at the state-prescribed price.

(iii) Engineering, project construction and supervisory services were provided for construction projects. The state-guidance price or prevailing market price (including the tender price where by way of tender) is adopted for pricing purposes.

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

All transactions with related parties were conducted at prices and on terms mutually agreed by the parties involved, which are determined as follows: (Continued)

(iv) The pricing policy for purchases of key and auxiliary materials (including bauxite, limestone, carbon, cement and coal) is the same as that set out in (i) above.

(v) Social services and logistics services provided by Chinalco Group cover public security, fire services, education and training, school and hospital services, cultural and physical education, newspaper and magazines, broadcasting and printing as well as property management, environmental and hygiene, greenery, nurseries and kindergartens, sanatoriums, canteens and offices, public transport and retirement management and other services. Provisions of these services are covered by the Comprehensive Social and Logistics Services Agreement. The pricing policy is the same as that set out in (i) above.

(vi) Pursuant to the Land Use Right Lease Agreements entered into between the Group and Chinalco Group, operating leases for industrial or commercial land are charged at the market rent rate. The Group also entered into a building rental agreement with Chinalco Group and paid rents based on the market rate for its lease of buildings owned by Chinalco.

(vii) Other services are environmental protection operation services. The prevailing market price is adopted for pricing purposes.

(viii) Chinalco Finance Company Limited ("Chinalco Finance") (中鋁財務有限責任公司), a wholly-owned subsidiary of Chinalco and a non-bank financial institution established in the PRC, provides deposit services, credit services and miscellaneous financial services to the Group. The terms for the provision of financial services to the Group are no less favourable than those of the same type of financial services provided by Chinalco Finance to Chinalco and other members of its group or those of the same type of financial services that may be provided to the Group by other financial institutions.

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (Continued)

All transactions with related parties were conducted at prices and on terms mutually agreed by the parties involved, which are determined as follows: (Continued)

(ix) These related party transactions also constitute connected transactions or continuing connected transactions as defined in Chapter 13A of the Listing Rules.

(x) In December 2006, Ningxia Energy, a subsidiary of the Company, entered into a financial guarantee contract with China Construction Bank providing a financial guarantee to Tian Jing Shen Zhou Wind Power Co., Ltd, a joint venture of the Company, for its 14-year bank loan amounting to RMB35 million. As at 31 December 2019, the outstanding amount of the guarantee was RMB6 million.

(xi) As disclosed in Note 20, the Group has entered into several sale and leaseback contracts with Chalco Financial Leasing Co., Ltd.

(xii) As disclosed in Note 38, the Group acquired a 100% equity interest in Suzhou Zhongcai from Zhongse Technology and Suzhou Research Institute, which constituted a related party transaction.

(xiii) As disclosed in Note 27, in May 2019, the Group entered into transactions with its fellow subsidiaries including the disposals of subsidiaries and disposal of electronic aluminium capacity quota. These transactions constituted related party transactions.

(xiv) As disclosed in Note 8 (b), the Company completed the acquisitions of equity interests in Yunnan Aluminum and Yixin Aluminum, respectively. These transactions constituted related party transactions.

* The English names represent the best effort made by management of the Group in translating the Chinese names of the Companies as they do not have any official English names.

(Amounts expressed in thousands of RMB
unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(b) Balances with related parties

Other than those disclosed elsewhere in the consolidated financial statements, the outstanding balances with related parties at the year end are as follows:

	31 December 2019	31 December 2018 (Restated)
Cash and cash equivalents deposited with		
A subsidiary of Chinalco*	**3,285,093**	9,101,541
Trade and notes receivables		
Chinalco and its subsidiaries	**1,054,168**	1,281,395
Associates of Chinalco	**6,034**	18,655
Joint ventures	**788,183**	819,878
Associates	**25**	6,615
	1,848,410	2,126,543
Provision for impairment of receivables	**(17,815)**	(77,657)
	1,830,595	2,048,886

* On 26 August 2011, the Company entered into an agreement with Chinalco Finance, pursuant to which, Chinalco Finance agreed to provide deposit services, credit services and other financial services to the Group. On 24 August 2012, 28 April 2015 and 26 October 2017, the Company renewed the financial service agreement with Chinalco Finance with a validation term of three years ending on 26 October 2020.

(Amounts expressed in thousands of RMB unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(b) Balances with related parties (Continued)

	31 December 2019	31 December 2018 (Restated)
Other current assets		
Chinalco and its subsidiaries	**482,195**	830,615
Joint ventures	**1,503,505**	1,424,678
Associates	**47,743**	29,701
	2,033,443	2,284,994
Provision for impairment of other current assets	**(30,509)**	(40,830)
	2,002,934	2,244,164
Other non-current assets		
Associates	**111,845**	111,845
Interest-bearing loans and borrowings:		
Subsidiaries of Chinalco (including lease liabilities)	**9,857,187**	4,373,033
Trade and notes payables		
Chinalco and its subsidiaries	**334,840**	404,278
Associates of Chinalco	**917**	4,012
Joint ventures	**527,744**	631,570
Associates	**9,789**	13,033
	873,290	1,052,893

(Amounts expressed in thousands of RMB
unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(b) Balances with related parties (Continued)

	31 December 2019	31 December 2018 (Restated)
Other payables and accrued liabilities		
Chinalco and its subsidiaries	**1,810,514**	1,930,947
Associates of Chinalco	**17,056**	17,128
Associates	**80,012**	148,978
Joint ventures	**73,823**	8,860
	1,981,405	2,105,913
Contract liabilities:		
Chinalco and its subsidiaries	**29,210**	22,307
Associates of Chinalco	**–**	20
Associates	**223**	12,451
Joint ventures	**56,010**	94,367
	85,443	129,145

As at 31 December 2019, included in long-term loans and borrowings and short-term loans and borrowings were from other state-owned enterprises amounting to RMB35,029 million (31 December 2018: RMB42,553 million) and RMB29,781 million (31 December 2018: RMB41,189 million), respectively.

The terms of all balances with the exception of the entrusted loans were unsecured and were in accordance with terms as set out in the respective agreements or as mutually agreed between the parties concerned.

(Amounts expressed in thousands of RMB
unless otherwise stated)

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(c) Compensation of key management personnel

	2019	2018
Fees	**780**	756
Basic salaries, housing fund, other allowances and benefits in kind	**6,945**	3,953
Pension costs	**715**	482
	8,440	5,191

* The year-on-year increase in the salaries of key management personnel was mainly due to the company's addition of a salaried supervisor this year and changes in the positions of some key management personnel, which caused the year-on-year changes in the scope and duration of salaries paid by the company.

Details of directors' remuneration are included in Note 30 to the financial statements.

(d) Commitments with related parties

As at 31 December 2019 and 2018, except for the other capital commitments disclosed in Note 42(b) to these financial statements, the Group had no significant commitments with related parties.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT

36.1 Financial risk management

The Group's activities expose it to a variety of financial risks, including market risk (including foreign currency risk, interest rate risk and commodity price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise the potential adverse effects on the Group's financial performance.

Risk management is carried out by the treasury management department (the "Group Treasury") under policies approved by the board of directors of the Company. The Group Treasury identifies, evaluates and hedges financial risks through close co-operation with the Group's operating units.

(a) Market risk

(i) Foreign currency risk

Foreign currency risk primarily arises from certain significant foreign currency deposits, trade and notes receivables, trade and notes payables, advances paid to suppliers, and short-term and long-term loans denominated in United States dollars ("USD"), Australian dollars ("AUD"), Euro ("EUR"), Japanese yen ("JPY"), and Hong Kong dollars ("HKD"). Related exposures are disclosed in Notes 13, 14, 15, 18, 22, 23 and 40 to the financial statements, respectively. The Group Treasury closely monitors the international foreign currency market on the change of exchange rates and takes these into consideration when investing in foreign currency deposits and borrowing loans. As at 31 December 2019, the Group only had significant exposure to USD.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(a) Market risk (Continued)

(i) Foreign currency risk (Continued)

As at 31 December 2019, if RMB had strengthened/weakened by 5% against USD with all other variables held constant, the profit for the year would have been approximately RMB95 million higher/lower (2018: RMB10 million lower/higher), mainly as a result of foreign exchange gains and losses arising from translation of USD-denominated borrowings, other payables and medium-term notes. Profit was more sensitive to the fluctuation in the RMB/USD exchange rates in 2019 than in 2018, mainly due to the increase in the USD denominated other payables and medium-term notes.

As the assets and liabilities denominated in other foreign currencies other than USD were relatively minimal to the total assets and liabilities of the Group, the directors of the Company are of the opinion that the Group was not exposed to any significant foreign currency risk arising from these foreign currency denominated assets and liabilities as at 31 December 2019 and 2018.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(a) Market risk (Continued)

(ii) Interest rate risk

As at 31 December 2019, as the Group had no significant interest-bearing assets except for bank deposits (Note 15), entrusted loans (Note 14), the Group's income and operating cash flows are substantially independent of changes in market interest rates.

Most of the bank deposits are maintained in savings and time deposit accounts in the PRC. The interest rates are regulated by the People's Bank of China and the Group Treasury closely monitors the fluctuation on such rates periodically. The interest rates of entrusted loans are fixed. As the interest rates applied to the entrusted loans were fixed, the directors of the Company are of the opinion that the Group was not exposed to any significant interest rate risk for its financial assets held as at 31 December 2019 and 2018.

The interest rate risk for the Group's financial liabilities primarily arises from interest-bearing loans. Loans borrowed at floating interest rates expose the Group to cash flow interest rate risk. The Group enters into debt obligations to support general corporate purposes including capital expenditures and working capital needs. The Group Treasury closely monitors market interest rates and maintains a balance between variable rate and fixed rate borrowings in order to reduce the exposures to the interest rate risk described above.

As at 31 December 2019, if interest rates had been 100 basis points (31 December 2018: 100 basis points) higher/lower for bank and other loans borrowed at floating interest rates with all other variables held constant, net profit for the year would have been RMB451 million lower/higher (2018: RMB641 million (Restated)), respectively, mainly as a result of the higher/lower interest expense on floating rate borrowings.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(a) Market risk (Continued)

(ii) Interest rate risk (Continued)

The interest rate risk of the Group mainly arises from medium-term notes and short-term bonds issued at fixed rates. As the fluctuation of comparable interest rates of corporate bonds with similar terms was relatively low, the directors of the Company are of the opinion that the Group was not exposed to any significant fair value interest rate risk for its fixed interest rate borrowings held as at 31 December 2019 and 2018.

(iii) Commodity price risk

The Group uses futures and option contracts to reduce its exposure to fluctuations in the price of primary aluminum and other products. The Group uses the futures contract for hedging other than speculation. With reference to the hedging of primary aluminum, production company hedges the output of primary aluminum and trading company hedges the quantities of buyout and self-supporting.

The Group uses mainly futures contracts and option contracts traded on the Shanghai Futures Exchange and London Metal Exchange ("LME") to hedge against fluctuations in primary aluminum prices. As at 31 December 2019, the fair values of the outstanding futures contracts amounting to RMB3 million (31 December 2018: RMB16 million) and RMB1 million (31 December 2018: RMB2 million) were recognised in financial assets and financial liabilities at fair value through profit or loss, respectively. As at 31 December 2019, the Company did not hold any option contracts (31 December 2018: the Company did not hold any option contracts).

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(a) Market risk (Continued)

(iii) Commodity price risk (Continued)

As at 31 December 2019, if the commodity futures prices had increased/decreased by 3% (31 December 2018: 3%) and all other variables held constant, profit for the year would have changed by the amounts shown below:

	2019	2018
Primary aluminum	**Decrease/increase RMB40 million**	Decrease/increase RMB14 million
Copper	**Increase/decrease RMB0.9 million**	Increase/decrease RMB0.9 million
Zinc	**Decrease/increase RMB5.1 million**	Decrease/increase RMB1.0 million
Coal	**Decrease/increase RMB0.2million**	Decrease/increase RMB2.7 million

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(b) Credit risk

Credit risk arises from balances with banks and financial institutions, trade and notes receivables, other current and non-current receivables as well as credit exposures of customers, including outstanding receivables and committed transactions.

The Group maintains substantially all of its bank balances and cash and short-term investments in several major state-owned banks in the PRC. With strong support from the PRC government to these state-owned banks, the directors of the Company are of the opinion that there is no significant credit risk on such assets being exposed to losses.

The Group applies the simplified approach to most of its trade receivables to provide for expected credit losses prescribed by IFRS 9, which permits the use of the lifetime expected loss provision for trade receivables. The Group has made individual assessment for trade receivables from clients with top rating and those receivables with pledged assets separately and impairment provisions are made.

To measure the expected credit losses of trade receivables excluding individually assessed and impaired receivables, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected credit loss model also incorporates forward-looking information.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(b) Credit risk (Continued)

The Group has performed historical analysis and identified the key economic variables impacting credit risk and expected credit losses. It considers available reasonable and supportive forwarding-looking information. Especially the following indicators are incorporated:

- internal credit rating
- external credit rating
- actual or expected significant adverse changes in business, financial or economic conditions that are expected to cause a significant change to the borrower's ability to meet its obligations
- actual or expected significant changes in the operating results of individual clients
- significant changes in the expected performance and behaviour of the clients

The Group measures expected credit loss rates on the basis of a loss rate approach by segmenting its portfolio into appropriate groupings based on shared credit risk characteristics. At the end of each year, the Group updates its historical loss information with forward-looking information. As the historical credit loss rates were comparatively stable and no significant changes were expected to the forward-looking information after the consideration of reasonable and supportable forecasts of comparatively stable customer relationship and customers' credit ratings, the expected credit loss rates remained consistent during 2019.

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(b) Credit risk (Continued)

Maximum exposure and year-end staging as at 31 December 2019

The table below shows the credit quality and the maximum exposure to credit risk based on the Group's credit policy, which is mainly based on past due information unless other information is available without undue cost or effort, and year-end staging classification as at 31 December 2019. The amounts presented are carrying amounts for financial assets and the exposure to credit risk for the financial guarantee contracts.

	Stage 1	Stage 2	Stage 3	Simplified	Total
Trade receivables*	–	–	–	4,559,112	4,559,112
Financial assets in other current assets	1,632,766	3,970,620	120,538	–	5,723,924
Restricted cash	1,305,781	–	–	–	1,305,781
Notes receivable	2,834,011	–	–	–	2,834,011
Cash and cash equivalents	7,759,190	–	–	–	7,759,190
Financial assets in other non-current assets	128,673	–	–	–	128,673
Financial guarantees – not yet past due	5,772	–	–	–	5,772
Total	13,666,193	3,970,620	120,538	4,559,112	22,316,463

* For trade receivables to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in Note 13 to the consolidated financial statements.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(b) Credit risk (Continued)

The carrying amounts of short-term investments and these receivables included in Notes 9, 11, 13 and 14 represent the Group's maximum exposure to credit risk in relation to its financial assets. The Group also provided financial guarantees to certain subsidiaries and a joint venture. The guarantees to the joint venture mentioned in Note 35 represented the Group's maximum exposure to credit risk in relation to its guarantees to the joint venture.

For the year ended 31 December 2019, revenues of approximately RMB40,567 million (2018: RMB32,852 million) were derived from entities directly or indirectly owned or controlled by the PRC government including Chinalco. There were no other individual customers from whom the Group has derived revenue of more than 10% of the Group's revenue during the years ended 31 December 2019 and 2018. Thus, the directors of the Company are of the opinion that the Group was not exposed to any significant concentration of credit risk as at 31 December 2019 and 2018.

(c) Liquidity risk

Cash flow forecast is performed in the operating entities of the Group and aggregated by the Group Treasury. The Group Treasury monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. This forecast takes into consideration of the Group's debt financing plans, covenant compliance, compliance with internal balance sheet ratio targets and, if applicable, external regulatory or legal requirements, for example, currency restrictions.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(c) Liquidity risk (Continued)

As at 31 December 2019, the Group had total banking facilities of approximately RMB167,431 million of which amounts totalling RMB49,347 million have been utilised as at 31 December 2019. Banking facilities of approximately RMB108,360 million will be subject to renewal during the next 12 months. The directors of the Company are confident that such banking facilities can be renewed upon expiration based on their past experience and good credit standing.

In addition, as at 31 December 2019, the Group had no credit facilities through its futures agent at the LME (31 December 2018: USD12 million (equivalent to RMB82 million), of which USD1 million (equivalent to RMB7 million) has been utilised. The futures agent has the right to adjust the related credit facilities.)

Management also monitors rolling forecasts of the Group's liquidity reserve on the basis of expected cash flows.

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(c) Liquidity risk (Continued)

The table below analyses the maturity profile of the Group's financial liabilities as at the end of the reporting period. The amounts disclosed in the table are the contractual undiscounted cash flows.

	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
As at 31 December 2019					
Lease liabilities, including current portion	1,729,933	1,106,701	1,333,762	10,377,143	14,547,539
Long-term bank and other loans, including current portion	3,339,687	7,525,775	9,159,028	18,811,397	38,835,887
Medium-term notes and bonds, including current portion	–	7,285,840	9,500,000	–	16,785,840
Short-term bonds	9,300,000	–	–	–	9,300,000
Gold leasing arrangement	6,921,860	–	–	–	6,921,860
Short-term bank and other loans	21,238,166	–	–	–	21,238,166
Interest payables for loans and borrowings	4,955,925	2,289,092	4,220,111	978,041	12,443,169
Financial liabilities at fair value through profit or loss	805	–	–	–	805
Financial liabilities included in other payables and accrued liabilities, excluding accrued interest	10,288,657	–	–	–	10,288,657
Financial liabilities included in other non-current liabilities *(Note)*	–	176,232	182,006	857,647	1,215,885
Trade and notes payables	12,584,755	–	–	–	12,584,755
	70,359,788	18,383,640	24,394,907	31,024,228	144,162,563

(Amounts expressed in thousands of RMB unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (Continued)

(c) Liquidity risk (Continued)

	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
As at 31 December 2018					
Finance lease payables, including current portion	2,518,653	1,161,490	707,716	13,238	4,401,097
Long-term bank and other loans, including current portion	3,384,400	7,377,956	16,593,587	18,784,797	46,140,740
Medium-term notes and bonds, including current portion	400,000	–	9,785,840	–	10,185,840
Short-term bonds	500,000	–	–	–	500,000
Gold leasing arrangement	1,607,905	–	–	–	1,607,905
Short-term bank and other loans	39,348,100	–	–	–	39,348,100
Interest payables for borrowings	4,848,968	2,602,751	4,197,364	898,786	12,547,869
Financial liabilities at fair value through profit or loss	1,766	–	–	–	1,766
Financial liabilities included in other payables and accrued liabilities, excluding accrued interest	8,890,176	–	–	–	8,890,176
Financial liabilities included in other non-current liabilities *(Note)*	–	108,896	333,354	420,258	862,508
Trade and notes payables	14,009,264	–	–	–	14,009,264
	75,509,232	11,251,093	31,617,861	20,117,079	138,495,265

Note: As disclosed in Note 21, as at 31 December 2019, the carrying value of financial liabilities included in other non-current liabilities was RMB1,153 million (31 December 2018: RMB841 million).

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments

(a) Financial instruments by category

The carrying amounts of each of the categories of financial instruments of the Group as at the end of the reporting period are as follows:

Financial assets

	Group 31 December 2019					
	Financial assets at fair value through profit or loss					
	Designated as such upon initial recognition	Held for trading	Financial assets at amortised cost	Equity investments designated at fair value through other comprehensive income	Debt instruments at fair value through other comprehensive income	Total
Current						
Trade receivables	–	–	4,559,112	–	–	4,559,112
Notes receivable	–	–	–	–	2,834,011	2,834,011
Financial assets at fair value through profit or loss*	–	3,503,175	–	–	–	3,503,175
Restricted cash and time deposits	–	–	1,305,781	–	–	1,305,781
Cash and cash equivalents	–	–	7,759,190	–	–	7,759,190
Financial assets included in other current assets	–	–	5,723,924	–	–	5,723,924
Subtotal	–	3,503,175	19,348,007	–	2,834,011	25,685,193
Non-current						
Equity investments designated at fair value through other comprehensive income	–	–	–	2,239,251	–	2,239,251
Other non-current assets	–	–	128,673	–	–	128,673
Subtotal	–	–	128,673	2,239,251	–	2,367,924
Total	–	3,503,175	19,476,680	2,239,251	2,834,011	28,053,117

* Financial assets measured at fair value through profit or loss are mainly wealth management products, denominated in RMB, with expected rates of return depending on the interest rates and yield curves observable at commonly quoted intervals. The fair value approximates to the carrying amount of the financial assets measured at fair value through profit or loss.

(Amounts expressed in thousands of RMB unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(a) Financial instruments by category (Continued)

Financial liabilities

	Group 31 December 2019			
	Financial liabilities at fair value through profit or loss			
	Designated as such upon initial recognition	Held for trading	Financial liabilities at amortised cost	Total
Current				
Financial liabilities at fair value through profit or loss	–	805	–	805
Interest-bearing loans and borrowings	–	–	42,286,604	42,286,604
Financial liabilities included in other payables and accrued liabilities *(Note 22)*	–	–	10,782,998	10,782,998
Trade and notes payables	–	–	12,584,755	12,584,755
Subtotal	–	805	65,654,357	65,655,162
Non-current				
Financial liabilities included in other non-current liabilities *(Note 21)*	–	–	1,153,487	1,153,487
Interest-bearing loans and borrowings	–	–	59,243,563	59,243,563
Subtotal	–	–	60,397,050	60,397,050
Total	–	805	126,051,407	126,052,212

(Amounts expressed in thousands of RMB unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(a) Financial instruments by category (Continued)

Financial assets

	Group 31 December 2018 (Restated)				
	Financial assets at fair value through profit or loss				
	Designated as such upon initial recognition	Held for trading	Financial assets at amortised cost	Equity investments designated at fair value through other comprehensive income	Total
Current					
Trade and notes receivables	–	–	8,104,017	–	8,104,017
Financial assets at fair value through profit or loss	–	16,141	–	–	16,141
Restricted cash and time deposits	–	–	2,165, 288		2,165, 288
Cash and cash equivalents	–	–	19,130,835	–	19,130,835
Financial assets included in other current assets	–	–	4,875,530	–	4,875,530
Subtotal	–	16,141	34,275,670	–	34,291,811
Non-current					
Equity investments designated at fair value through other comprehensive income	–	–	–	1,729,825	1,729,825
Other non-current assets	–	–	204,718	–	204,718
Subtotal	–	–	204,718	1,729,825	1,934,543
Total	–	16,141	34,480,388	1,729,825	36,226,354

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(a) Financial instruments by category (Continued)

Financial liabilities

	Group 31 December 2018 (Restated)			
	Financial liabilities at fair value through profit or loss			
	Designated as such upon initial recognition	Held for trading	Financial liabilities at amortised cost	Total
Current				
Financial liabilities at fair value through profit or loss	–	1,766	–	1,766
Interest-bearing loans and borrowings	–	–	47,565,490	47,565,490
Financial liabilities included in other payables and accrued liabilities *(Note 22)*	–	–	9,286,462	9,286,462
Trade and notes payables	–	–	14,009,264	14,009,264
Subtotal	–	1,766	70,861,216	70,862,982
Non-current				
Financial liabilities included in other non-current liabilities *(Note 21)*	–	–	841,059	841,059
Interest-bearing loans and borrowings	–	–	54,207,386	54,207,386
Subtotal	–	–	55,048,445	55,048,445
Total	–	1,766	125,909,661	125,911,427

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy

Fair value

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values and those carried at fair value, are as follows:

	Carrying amounts		Fair values	
	31 December 2019	31 December 2018	**31 December 2019**	31 December 2018
Financial assets				
Other non-current assets *(Note 11)*	**128,673**	204,718	**111,935**	182,132

	Carrying amounts		Fair values	
	31 December 2019	31 December 2018	**31 December 2019**	31 December 2018
Financial liabilities				
Financial liabilities included in other non-current liabilities *(Note 21)*	**1,153,487**	841,059	**1,146,893**	816,529
Long-term interest-bearing loans and borrowings, excluding lease liability *(Note 18)*	**52,232,955**	54,207,386	**50,952,676**	53,207,052
	53,386,442	55,048,445	**52,099,569**	54,023,581

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value (Continued)

Management has assessed that the fair values of cash and cash equivalents, restricted cash and time deposits, trade and notes receivables, financial assets included in other current assets, entrusted loans, trade and notes payables, financial liabilities included in other payables and accrued liabilities, short-term and the current portion of interest-bearing loans and borrowings, interest payable and the current portion of long-term payables approximate to their carrying amounts largely due to the short term maturities of these instruments.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

The fair values of the financial assets included in other non-current assets and financial liabilities included in other non-current liabilities and long-term interest-bearing loans and borrowings have been calculated by discounting the expected future cash flows using rates currently available for instruments on with similar terms, credit risk and remaining maturities.

The Group's own non-performance risk for financial liabilities included in other non-current liabilities and long-term interest-bearing loans and borrowings as at 31 December 2019 was assessed to be insignificant.

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

Assets measured at fair value

As at 31 December 2019	**Fair value measurement using**			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
Financial assets at fair value through profit or loss:				
Futures contracts	**3,175**	**–**	**–**	**3,175**
Financial product	**–**	**3,500,000**	**–**	**3,500,000**
Debt instruments at fair value through other comprehensive income – notes receivable	**–**	**2,834,011**	**–**	**2,834,011**
Equity investments designated at fair value through other comprehensive income:				
Listed equity investments	**8,853**	**–**	**–**	**8,853**
Other unlisted investment	**–**	**–**	**2,230,398**	**2,230,398**
	12,028	**6,334,011**	**2,230,398**	**8,576,437**

(Amounts expressed in thousands of RMB unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value hierarchy (Continued)

Assets measured at fair value (Continued)

As at 31 December 2018	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Financial assets at fair value through profit or loss:				
Futures contracts	16,141	–	–	16,141
Equity investments designated at fair value through other comprehensive income:				
Listed equity investments	6,441	–	–	6,441
Other unlisted investment	–	–	1,723,384	1,723,384
	22,582	–	1,723,384	1,745,966

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value hierarchy (Continued)

Liabilities measured at fair value

As at 31 December 2019	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Financial liabilities at fair value through profit or loss:				
Futures contracts	805	–	–	805
	805	–	–	805

As at 31 December 2018	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Financial liabilities at fair value through profit or loss:				
Futures contracts	1,766	–	–	1,766
	1,766	–	–	1,766

(Amounts expressed in thousands of RMB unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value hierarchy (Continued)

Assets for which fair values are disclosed:

As at 31 December 2019	**Fair value measurement using**			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
Loans and receivables:				
Financial assets included in other non-current assets	**–**	**111,935**	**–**	**111,935**

As at 31 December 2018	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Loans and receivables:				
Financial assets included in other non-current assets	–	182,132	–	182,132

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value hierarchy (Continued)

Liabilities for which fair values are disclosed

As at 31 December 2019	**Fair value measurement using**			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
Financial liabilities at amortised cost:				
Financial liabilities included in other non-current liabilities	**–**	**1,146,893**	**–**	**1,146,893**
Long-term interest-bearing loans and borrowings	**–**	**50,952,676**	**–**	**50,952,676**
	–	**52,099,569**	**–**	**52,099,569**

As at 31 December 2018	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Financial liabilities at amortised cost:				
Financial liabilities included in other non-current liabilities	–	816,529	–	816,529
Long-term interest-bearing loans and borrowings	–	53,207,052	–	53,207,052
	–	54,023,581	–	54,023,581

(Amounts expressed in thousands of RMB
unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (Continued)

(b) Fair value and fair value hierarchy (Continued)

Fair value hierarchy (Continued)

Liabilities for which fair values are disclosed: *(Continued)*

During the year ended 31 December 2019 the Group had no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 for both financial assets and financial liabilities (2018: Nil).

Below is a summary of significant unobservable inputs to the valuation of financial instruments as at 31 December 2019 and 2018:

	Valuation Technique	Significant unobservable input	Range
Equity investments in Size Industry Investment Fund			
31 December 2019	Net Assets Method	Net Assets	5,000,000
31 December 2018	Net Assets Method	Net Assets	5,000,000
Chinalco Innovative			
31 December 2019	Net Assets Method	Net Assets	350,911

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.3 Capital risk management

The Group's capital management objectives are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, issue new shares or sell assets to reduce debts.

Consistent with other entities in the industry, the Group monitors capital on the basis of its gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total liabilities (excluding deferred tax liabilities, income tax payable and deferred government grants) less restricted cash, time deposits and cash and cash equivalents. Total capital is calculated as equity, as shown in the consolidated statement of financial position, plus net debt less non-controlling interests.

(Amounts expressed in thousands of RMB unless otherwise stated)

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.3 Capital risk management (Continued)

The gearing ratio as at 31 December 2019 is as follows:

	31 December 2019	31 December 2018 (Restated)
Total liabilities (excluding deferred tax liabilities, income tax payable and deferred government grants)	**130,170,395**	131,054,499
Less: Restricted cash, time deposits and cash and cash equivalents	**(9,064,971)**	(21,296,123)
Net debt	**121,105,424**	109,758,376
Total equity	**70,725,060**	67,669,619
Add: Net debt	**121,105,424**	109,758,376
Less: Non-controlling interests	**(16,065,427)**	(15,254,312)
Total capital attributable to owners of the parent	**175,765,057**	162,173,683
Gearing ratio	**69%**	68%

(Amounts expressed in thousands of RMB unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS

Other than the senior perpetual securities issued by a subsidiary of the Group, which is disclosed in Note 40, details of the Group's subsidiaries that have material non-controlling interests are set out below:

	2019	2018
Percentage of equity interest held by non-controlling interests		
Ningxia Energy	**29.18%**	29.18%
Shanxi Zhongrun	**56.61%**	60.00%
Guizhou Huaren	**60.00%**	60.00%
Profit for the year allocated to non-controlling interests		
Ningxia Energy	**240,504**	214,479
Shanxi Zhongrun	**69,701**	291,009
Guizhou Huaren	**198,016**	20,783
Dividends distributed to non-controlling interests		
Ningxia Energy	**76,469**	351,979
Shanxi Zhongrun	**–**	200,000
Guizhou Huaren	**–**	–
Accumulated balances of non-controlling interests at the Year ended		
Ningxia Energy	**4,978,089**	4,757,014
Shanxi Zhongrun	**996,686**	782,176
Guizhou Huaren	**1,028,426**	820,675

(Amounts expressed in thousands of RMB
unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS (CONTINUED)

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations:

2019	**Ningxia Energy**
Revenue	**6,695,724**
Total expenses	**6,314,098**
Profit for the year	**381,626**
Total comprehensive income for the year	**381,626**
Current assets	**5,081,743**
Non-current assets	**32,133,495**
Current liabilities	**8,688,475**
Non-current liabilities	**17,559,995**
Net cash flows from operating activities	**3,274,683**
Net cash flows used in investing activities	**(939,054)**
Net cash flows from/financing activities	**(2,611,597)**
Effect of foreign exchange rate changes, net	**–**
Net decrease in cash and cash equivalents	**(275,968)**

(Amounts expressed in thousands of RMB
unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS (CONTINUED)

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations: (Continued)

2018	Ningxia Energy
Revenue	6,714,040
Total expenses	6,555,933
Profit for the year	158,107
Total comprehensive income for the year	158,107
Current assets	5,036,413
Non-current assets	32,677,977
Current liabilities	8,723,922
Non-current liabilities	18,367,979
Net cash flows from operating activities	2,755,612
Net cash flows used in investing activities	(1,616,513)
Net cash flows from/financing activities	(991,998)
Effect of foreign exchange rate changes, net	–
Net increase in cash and cash equivalents	147,101

(Amounts expressed in thousands of RMB unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS (CONTINUED)

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations: (Continued)

2019	Shanxi Zhongrun
Revenue	2,204,777
Total expenses	2,081,652
Profit for the year	123,125
Total comprehensive income for the year	123,125
Current assets	783,726
Non-current assets	4,010,818
Current liabilities	1,084,890
Non-current liabilities	2,093,735
Net cash flows from operating activities	234,014
Net cash flows used in investing activities	(402,636)
Net cash flows from/financing activities	307,452
Effect of foreign exchange rate changes, net	–
Net increase in cash and cash equivalents	138,830

(Amounts expressed in thousands of RMB
unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS (CONTINUED)

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations: (Continued)

2018	Shanxi Zhongrun
Revenue	645,413
Total expenses	644,596
Profit for the year	817
Total comprehensive income for the year	817
Current assets	605,140
Non-current assets	3,421,608
Current liabilities	790,819
Non-current liabilities	2,258,089
Net cash flows from operating activities	(19,718)
Net cash flows used in investing activities	(781,869)
Net cash flows from/financing activities	(1,335,579)
Effect of foreign exchange rate changes, net	–
Net decrease in cash and cash equivalents	(2,137,166)

(Amounts expressed in thousands of RMB
unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS (CONTINUED)

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations: (Continued)

2019	Guizhou Huaren
Revenue	5,982,665
Total expenses	5,677,075
Profit for the year	305,590
Total comprehensive income for the year	305,590
Current assets	1,034,442
Non-current assets	2,650,822
Current liabilities	1,164,346
Non-current liabilities	1,006,360
Net cash flows from operating activities	565,027
Net cash flows used in investing activities	(91,319)
Net cash flows from/financing activities	(354,187)
Effect of foreign exchange rate changes, net	–
Net increase in cash and cash equivalents	119,521

(Amounts expressed in thousands of RMB
unless otherwise stated)

37. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS (CONTINUED)

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations: (Continued)

2018	Guizhou Huaren
Revenue	4,282,882
Total expenses	4,248,243
Profit for the year	34,639
Total comprehensive income for the year	34,639
Current assets	
Non-current assets	1,169,453
Current liabilities	3,038,875
Non-current liabilities	1,381,541
Net cash flows from operating activities	134,781
Net cash flows used in investing activities	(510,243)
Net cash flows from/financing activities	(115,222)
Effect of foreign exchange rate changes, net	–
Net decrease in cash and cash equivalents	(490,684)

38. BUSINESS COMBINATIONS

(a) Acquisition of Suzhou Zhongcai

On 29 April 2019, Chinalco Shanghai Company Limited ("Chinalco Shanghai") ("中鋁上海有限公司"), a subsidiary of the Company, entered into an equity transfer agreement with Zhongse Technology Co., Ltd. ("Zhongse Technology") ("中色科技股份有限公司") and Suzhou Research Institute of Non-ferrous Metals Co., Ltd. ("Suzhou Research Institute") ("蘇州有色金屬研究院有限公司"), pursuant to which, Chinalco Shanghai acquired 70% and 30% equity interests in Suzhou Zhongse Metal Materials Technology Co., Ltd.* ("Suzhou Zhongcai") ("蘇州中色金屬材料科技有限公司") from Zhongse Technology and Suzhou Research Institute, respectively. The consideration for the acquisition was RMB237 thousand, which was determined based on the appraisal value of the 100% equity interest in Suzhou Zhongcai. Chinalco Shanghai has paid the consideration in full as of 30 June 2019. The acquisition date was 1 June 2019, which was the date that the Group obtained control of Suzhou Zhongcai. Before and after the acquisition, both Suzhou Zhongcai and Chinalco Shanghai were controlled by Chinalco, and the control was not temporary. Thus, the acquisition of the 100% equity interest in Suzhou Zhongcai is considered to be a business combination under common control, other than significant influence or joint control.

39. DISPOSAL OF BUSINESSES

(a) Disposal of 100% equity of China Aluminum Nanhai Alloy

In January 2019, the Company entered into a Capital Contribution Agreement with Chinalco and its subsidiary Chinalco Innovative, pursuant to which the Company shall make a capital contribution to Chinalco Innovative in form of its 100% equity interests in China Aluminum Nanhai Alloy Co., Ltd. ("China Aluminum Nanhai Alloy"). After the transaction, the Company holds 19.4852% in Chinalco Innovative. As of the date of deemed disposal, the Company re-measured the equity of China Aluminum Nanhai Alloy to a fair value of RMB350 million and recognized the fair value gain of RMB258 million accordingly.

39. DISPOSAL OF BUSINESSES (CONTINUED)

(b) Disposal of 40% equity interest of Inner Mongolia Fengrong and disposal of 60% equity interest of Ningxia Fenghao

On 20 February 2019, Chalco Energy Co., Ltd., a wholly-owned subsidiary of the Company, entered into equity transfer agreements with Chinalco Environment Protection Co., Ltd. on the partial disposal of 40% equity interest in Inner Mongolia Fengrong Co., Ltd. and 60% equity interest in Ningxia Fenghao Co., Ltd., respectively. A gain of RMB3,014 thousands from partial disposal of the two subsidiaries was recorded by the Group in the current period.

(c) Deregistration of Shanghai Kailin

Chalco Trade, a subsidiary of the Company, held 100% equity interest of Shanghai Chalco Kailin Aluminum Co., Ltd.* (上海中鋁凱林鋁業有限公司) ("Shanghai Kailin"). In July 2019, Shanghai Kailin was deregistered, from which the Company recorded a gain of RMB160 thousands.

(d) Disposal of Ruzhou Jinhua

Zhongzhou Aluminum, a subsidiary of the Company, held a 51% equity interest in Ruzhou Chinalco Jinhua Mining Co., Ltd.* (汝州中鋁金華礦業有限公司) ("Ruzhou Jinhua"). In July 2019, Zhongzhou Aluminum disposed all of its equity interest of Ruzhou Jinhua, and a gain of RMB113 thousands from the disposal was included in other gains during the year ended 31 December 2019.

* The English names represent the best effort made by management of the Group translating the Chinese names of the Companies as the companies do not have any official English names.

40. OTHER EQUITY INSTRUMENTS

On 27 October 2015, the Company issued RMB2,000 million perpetual medium-term notes with an initial distribution rate at 5.50% (the "2015 Perpetual Medium-term Notes"). The proceeds from the issuance of the 2015 Perpetual Medium-term Notes were RMB2,000 million. The proceeds were used for the repayment of interest-bearing loans and borrowings. Coupon payments of 5.50% per annum on the 2015 Perpetual Medium-term Notes have been made annually in arrears from 29 October 2015 and may be deferred at the discretion of the Company. The 2015 Perpetual Medium-term Notes have no fixed maturity date and are callable only at the Group's option on 29 October 2020 or any coupon distribution date after 29 October 2020 at their principal amounts together with any accrued, unpaid or deferred coupon distribution payments. The coupon distribution rate will be reset to a percentage per annum equal to the sum of (a) the initial spread of 2.61 percent, (b) the China Treasury Rate, and (c) a margin of maximum 300 Bps every five years after 29 October 2020. While any coupon distribution payments are unpaid or deferred, the Company cannot declare or pay dividends to shareholders or decrease the share capital, or make material fixed asset investments.

On 31 October 2016, Chalco Hong Kong Investment issued USD500 million senior perpetual securities with an initial distribution rate at 4.25% (the "2016 Senior Perpetual Securities"). The proceeds from the issuance of the 2016 Senior Perpetual Securities after the issuance costs were USD498 million (equivalent to RMB3,374 million). The proceeds were on-lent to the Company and any of its subsidiaries for general corporate use. Coupon payments of 4.25% per annum on the 2016 Senior Perpetual Securities have been made semi-annually on 29 April and 29 October in arrears from 7 November 2016 and may be deferred at the discretion of the Group. The first coupon payment date was 29 April 2017. The 2016 Senior Perpetual Securities have no fixed maturity date and are callable only at the Group's option on or after 7 November 2021 at their principal amounts together with any accrued, unpaid or deferred coupon distribution payments. After 7 November 2021, the coupon distribution rate will be reset to a percentage per annum equal to the sum of (a) the initial spread of 2.931 percent, (b) the U.S. Treasury Rate, and (c) a margin of 5.00 percent per annum. While any coupon distribution payments are unpaid or deferred, the Group, the wholly-owned subsidiaries of Chalco Hong Kong as guarantors, and the Issuer cannot declare or pay dividends or make distributions or similar discretionary payments in respect of, or repurchase, redeem or otherwise acquire any securities of lower or equal rank.

40. OTHER EQUITY INSTRUMENTS (CONTINUED)

On 19 October 2018, the Company issued RMB2,000 million perpetual medium-term notes with an initial distribution rate at 5.10% (the "2018 Perpetual Medium-term Notes"). The proceeds from the issuance of the 2018 Perpetual Medium-term Notes were RMB2,000 million. The proceeds were used for the repayment of interest-bearing loans and borrowings. Coupon payments of 5.10% per annum on the 2018 Perpetual Medium-term Notes have been made annually in arrears from 19 October 2018 and may be deferred at the discretion of the Company. The 2018 Perpetual Medium-term Notes have no fixed maturity date and are callable only at the Group's option on 23 October 2021 or any coupon distribution date after 23 October 2021 at their principal amounts together with any accrued, unpaid or deferred coupon distribution payments. The coupon distribution rate will be reset to a percentage per annum equal to the sum of (a) the initial spread of 2.61 percent, (b) the China Treasury Rate, and (c) a margin of maximum 500 Bps every five years after 23 October 2021. While any coupon distribution payments are unpaid or deferred, the Company cannot declare or pay dividends to shareholders or decrease the share capital, or make material fixed asset investments.

On 19 November 2019, the Company issued RMB1,500 million perpetual medium-term notes with an initial distribution rate at 4.20% (the "2019 Perpetual Medium-term Notes"). The proceeds from the issuance of the 2019 Perpetual Medium-term Notes were RMB1,499 million. The proceeds were used for the repayment of interest-bearing loans and borrowings. Coupon payments of 4.20% per annum on the 2019 Perpetual Medium-term Notes have been made annually in arrears from 19 November 2019 and may be deferred at the discretion of the Company. The 2019 Perpetual Medium-term Notes have no fixed maturity date and are callable only at the Group's option on 20 November 2022 or any coupon distribution date after 20 November 2022 at their principal amounts together with any accrued, unpaid or deferred coupon distribution payments. The coupon distribution rate will be reset to a percentage per annum equal to the sum of (a) the initial spread of 1.31 percent, (b) the China Treasury Rate, and (c) a margin of maximum 300 Bps every five years after 20 November 2022. While any coupon distribution payments are unpaid or deferred, the Company cannot declare or pay dividends to shareholders or decrease the share capital, or make material fixed asset investments.

40. OTHER EQUITY INSTRUMENTS (CONTINUED)

Pursuant to the terms and conditions of the 2016 Senior Perpetual Securities, the 2018 Perpetual Medium-term Notes and the 2019 Perpetual Medium-term Notes, the Group has no contractual obligations to repay their principal or to pay any coupon distributions. Thus in the opinion of the directors of the Company, they do not meet the definition of financial liabilities according to IAS 32 *Financial Instruments: Presentation*, and are classified as equity and subsequent distributions declared will be treated as distributions to equity owners.

41. CONTINGENT LIABILITIES

The Group was sued in the second quarter of 2019 against the project construction, financing arrangement and others, collectively aggregating to RMB591 million, which mainly arose from contract variation orders without merits and disagreed by the Group. As an administrative process, the local courts held to freeze the Group's bank accounts or other equivalent assets amounting to RMB214 million. As at 31 December 2019 and as at the date of approval of these financial statements, the local courts have already frozen several bank accounts of the Group aggregating to RMB61 million and a real estate of the Group of a net book value amounting to RMB46 million. Currently the lawsuits are in progress and the outcomes are unknown. The directors, based on the advice from the Group's legal counsels, believe that the Group has valid defence against all the allegations and accordingly, have not provided for any claim arising from the litigations, other than the related legal and other costs.

(Amounts expressed in thousands of RMB
unless otherwise stated)

42. COMMITMENTS

(a) Capital commitments on property, plant and equipment

	31 December 2019	31 December 2018
Contracted, but not provided for	**4,041,857**	3,942,933

(b) Operating lease commitments as at 31 December 2018

The future aggregate minimum lease payments as at 31 December 2018 pursuant to non-cancellable lease agreements entered into by the Group are summarised as follows:

	31 December 2018
Within one year	541,541
In the second to fifth years, inclusive	1,880,058
After five years	10,567,925
	12,989,524

(c) Other capital commitments

As at 31 December 2019, the commitments to make capital contributions to the Group's joint ventures and associates were as follows:

	31 December 2019	31 December 2018
Associates	**33,800**	82,800
Joint ventures	**410,000**	460,000
	443,800	542,800

43. EVENTS AFTER THE REPORTING PERIOD

(a) On 13 January 2020, the Group completed an issuance of short-term bonds with a total face value of RMB1.5 billion at par value of RMB100.00 per unit which will mature in April 2020 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.10%.

(b) On 15 January 2020, the Group completed an issuance of short-term bonds with a total face value of RMB2 billion at par value of RMB100.00 per unit which will mature in April 2020 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.20%.

(c) On 13 February 2020, the Group completed an issuance of short-term bonds with a total face value of RMB1 billion at par value of RMB100.00 per unit which will mature in May 2020 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.10%.

(d) On 20 February 2020, the Group completed an issuance of short-term bonds with a total face value of RMB1 billion at par value of RMB100.00 per unit which will mature in November 2020 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.50%.

(e) On 21 February 2020, the Group completed an issuance of short-term bonds with a total face value of RMB1 billion at par value of RMB100.00 per unit which will mature in May 2020 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.20%.

(f) On 5 March 2020, the Group completed an issuance of corporate bonds with a total face value of RMB0.5 billion at par value of RMB100.00 per unit which will mature in March 2025 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 3.30%.

(g) On 13 March 2020, the Group completed an issuance of short-term bonds with a total face value of RMB1.8 billion at par value of RMB100.00 per unit which will mature in September 2020 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.20%.

43. EVENTS AFTER THE REPORTING PERIOD (CONTINUED)

(h) On 20 March 2020, the Group completed an issuance of corporate bonds with a total face value of RMB1 billion at par value of RMB100.00 per unit which will mature in March 2023 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 3.05%.

(i) On 26 March 2020, the Group completed an issuance of medium-term notes with a total face value of RMB0.9 billion at par value of RMB100.00 per unit which will mature in March 2023 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 2.93%.

(j) The outbreak of the novel coronavirus (COVID-19)in the PRC since January 2020,the prevention and control of COVID-19 has continued. The Group has taken all possible effective measures to limit and keep the impact in control. The Group will follow and strengthen its support to the government’s requirements on COVID-19 prevention and control work.COVID-19 has significant impacts on production, consumption and investment. It is expected that the aluminum industry will face greater challenges as well as greater opportunities. The Group will continue to pay close attention to and evaluate the developments of COVID-19 and market changes, and actively respond to the possible impact on the Group’s financial situation and operating results. As of the date of this report, the evaluation is still in progress.

44. COMPARATIVE AMOUNTS

Certain comparative amounts have been restated as a result of the business combinations under common control as disclosed in Note 38.

(Amounts expressed in thousands of RMB
unless otherwise stated)

45. STATEMENT OF FINANCIAL POSITION OF THE COMPANY

Information about the statement of financial position of the Company at the end of the reporting period is as follows:

	31 December 2019	31 December 2018
ASSETS		
Non-current assets		
Intangible assets	**922,741**	2,847,450
Property, plant and equipment	**12,852,420**	17,376,731
Investment properties	**21,069**	–
Right-of-use assets	**1,816,982**	–
Land use rights	**–**	550,005
Investments in subsidiaries	**61,956,887**	57,559,298
Investments in joint ventures	**1,471,924**	1,421,924
Investments in associates	**5,968,055**	3,436,268
Equity investments designated at fair value through other comprehensive income	**2,034,398**	1,665,441
Deferred tax assets	**576,254**	656,317
Other non-current assets	**7,008,769**	8,023,750
Total non-current assets	**94,629,499**	93,537,184
Current assets		
Inventories	**2,202,255**	3,062,042
Trade and notes receivables	**912,872**	1,098,718
Other current assets	**22,428,349**	15,417,130
Financial assets at fair value through profit or loss	**3,500,000**	–
Restricted cash and time deposits	**148,908**	127,588
Cash and cash equivalents	**3,385,377**	4,357,656
Total current assets	**32,577,761**	24,063,134
Total assets	**127,207,260**	117,600,318

(Amounts expressed in thousands of RMB
unless otherwise stated)

45. STATEMENT OF FINANCIAL POSITION OF THE COMPANY (CONTINUED)

	31 December 2019	31 December 2018
EQUITY AND LIABILITIES		
EQUITY		
Equity attributable to owners of the parent		
Share capital	**17,022,673**	14,903,798
Other reserves	**42,015,946**	42,680,053
Accumulated losses	**(6,593,433)**	(7,176,832)
Total equity	**52,445,186**	50,407,019
LIABILITIES		
Non-current liabilities		
Interest-bearing loans and borrowings	**28,597,132**	27,877,479
Other non-current liabilities	**335,592**	674,105
Total non-current liabilities	**28,932,724**	28,551,584

(Amounts expressed in thousands of RMB unless otherwise stated)

45. STATEMENT OF FINANCIAL POSITION OF THE COMPANY (CONTINUED)

	31 December 2019	31 December 2018
EQUITY AND LIABILITIES		
LIABILITIES		
Current liabilities		
Interest-bearing loans and borrowings	**29,637,697**	27,801,492
Other payables and accrued liabilities	**15,322,156**	10,133,854
Contract liabilities	**73,991**	110,154
Trade and notes payables	**795,506**	596,215
Total current liabilities	**45,829,350**	38,641,715
Total liabilities	**74,762,074**	67,193,299
Total equity and liabilities	**127,207,260**	117,600,318
Net current liabilities	**13,251,589**	14,578,581
Total assets less current liabilities	**81,377,910**	78,958,603

Lu Dongliang	**Wang Jun**
Director	*Chief Financial Officer*

(Amounts expressed in thousands of RMB
unless otherwise stated)

45. STATEMENT OF FINANCIAL POSITION OF THE COMPANY (CONTINUED)

Note：

A summary of the Company's reserves is as follows:

	Share premium	Other capital reserves	Statutory surplus reserve	Special reserve	Fair value Reserve	Other equity instruments	Accumulated losses	Total
Balance at 31 December 2017	19,191,612	873,215	5,867,557	14,718	6,836	2,019,288	(7,648,158)	20,325,068
Change in accounting policy	–	–	–	–	6,469	–	(11,364)	(4,895)
At 1 January 2018 (Restated)	19,191,612	873,215	5,867,557	14,718	13,305	2,019,288	(7,659,522)	20,320,173
Profit for the year	–	–	–	–	–	–	573,412	573,412
Issuance of senior perpetual securities	–	–	–	–	–	1,988,000	–	1,988,000
Business combinations under common control	11,527	–	–	–	–	–	–	11,527
Release of deferred government subsidies	–	2,200	–	–	–	–	–	2,200
Changes in fair value of available-for-sale financial assets, net of tax	–	–	–	–	(5,880)	–	–	(5,880)
Other appropriation	–	–	–	10,551	–	–	–	10,551
Other equity instruments' distribution	–	–	–	–	–	(19,288)	(90,722)	(110,010)
Equity exchange arrangement	–	12,713,248	–	–	–	–	–	12,713,248
Balance at 31 December 2018	19,203,139	13,588,663	5,867,557	25,269	7,425	3,988,000	(7,176,832)	35,503,221
Profit for the year	**–**	**–**	**–**	**–**	**–**	**–**	**795,399**	**795,399**
Issuance of senior perpetual securities	**–**	**–**	**–**	**–**	**–**	**1,499,104**	**–**	**1,499,104**
Business combinations under common control	**1,020**	**–**	**–**	**–**	**–**	**–**	**–**	**1,020**
Changes in fair value of equity investments at fair value through other comprehensive income, net of tax	**–**	**–**	**–**	**–**	**13,352**	**–**	**–**	**13,352**
Other appropriation	**–**	**–**	**–**	**(7,030)**	**–**	**–**	**–**	**(7,030)**
Other equity instruments' distribution	**–**	**–**	**–**	**–**	**–**	**–**	**(212,000)**	**(212,000)**
Issuance of share capital	**8,564,661**	**(10,735,214)**	**–**	**–**	**–**	**–**	**–**	**(2,170,553)**
At 31 December 2019	**27,768,820**	**2,853,449**	**5,867,557**	**18,239**	**20,777**	**5,487,104**	**(6,593,433)**	**35,422,513**

46. APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved and authorised for issue by the board of directors on 26 March 2020.

1.	Registered name	中國鋁業股份有限公司
	Abbreviation of Chinese name	中國鋁業
	Name in English	ALUMINUM CORPORATION OF CHINA LIMITED
	Abbreviation of English name	CHALCO
2.	First registration date	10 September 2001
	Registered address	No.62 North Xizhimen Street, Haidian District, Beijing, the PRC (Postal code: 100082)
	Place of business	No.62 North Xizhimen Street, Haidian District, Beijing, the PRC (Postal code: 100082)
	Principal place of business in Hong Kong	Room 4501, Far East Finance Centre, No. 16 Harcourt Road, Admiralty, Hong Kong (Note 1)
3.	Legal representative	Lu Dongliang
	Company Secretary (Secretary to the Board)	Wang Jun
	Telephone	+86(10) 8229 8322
	Fax	+86(10) 8229 8158
	E-mail	IR@chalco.com.cn
	Address	No.62 North Xizhimen Street, Haidian District, Beijing, the PRC (Postal Code: 100082)
	Representative for the Company's securities related affairs	Zhao Hongmei
	Telephone	+86(10) 8229 8322
	Fax	+86(10) 8229 8158
	E-mail	IR@chalco.com.cn
	Address	No.62 North Xizhimen Street, Haidian District, Beijing, the PRC (Postal Code: 100082)
	Department for corporate information and inquiry	Office to the Board
	Telephone for corporate information and inquiry	+86(10) 8229 8322
4.	Share registrar and transfer office	
	H shares:	Hong Kong Registrars Limited 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong
	A shares:	China Securities Depository and Clearing Corporation Limited, Shanghai Branch 3/F, China Insurance Building, No. 166, Lujiazui Road (East), Shanghai, the PRC
	American Depositary Receipt:	The Bank of New York Corporate Trust Office 240 Greenwich Street, New York, NY 10286, USA
5.	Places of listing	The Stock Exchange of Hong Kong Limited Shanghai Stock Exchange New York Stock Exchange, Inc

	Stock name	CHALCO
	Stock codes	2600 (HK) 601600 (China) ACH (US)
6.	Principal bankers	China Construction Bank Industrial and Commercial Bank of China
7.	Unified social credit code for corporate legal person	911100007109288314
8.	Independent auditors	Ernst & Young *(Note 2)* Certified Public Accountants 22/F, CITIC Tower, 1 Tim Mei Avenue, Central, Hong Kong Ernst & Young Hua Ming LLP *(Note 2)* 16/F, Ernst & Young Tower, Oriental Plaza, 1 East Chang'an Avenue, Dongcheng District, Beijing, the PRC Postal code: 100738
9.	Legal advisers	*as to Hong Kong laws:* Baker & McKenzie 14/F, One Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong *as to PRC laws:* Jincheng Tongda & Neal Law Firm 10/F, China World Trade Tower A, 1 Jianguomenwai Avenue, Chaoyang District, Beijing, the PRC Postal code: 100004 *as to United States laws:* Sullivan & Cromwell (Hong Kong) LLP 28th Floor Nine Queen's Road Central, Central, Hong Kong
10.	Place for inspection of corporate information	Office of the Board of the Company

Note 1: As disclosed in the announcement of the Company dated 19 July 2019, the principal place of business of the Company in Hong Kong changed to Room 4501, Far East Finance Centre, No. 16 Harcourt Road, Admiralty, Hong Kong.

Note 2: Ernst & Young and Ernst & Young Hua Ming LLP, independent auditors of the Company for 2019, have reached the maximum auditing period for the Company, so the Company has proposed to appoint PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP as the independent auditors of the Company for 2020. The aforementioned matters were considered and approved at the seventh meeting of the seventh session of the Board of the Company held on 26 March 2020, and will be submitted to the 2019 annual general meeting of the Company for consideration and approval.

中国铝业股份有限公司
ALUMINUM CORPORATION OF CHINA LIMITED

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