



中国铝业股份有限公司

ALUMINUM CORPORATION OF CHINA LIMITED

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



CHALCO

2018

Annual Report



CHALCO

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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 product competitive edge;
- its advanced management concepts to ensure the realization of the operation objectives of the Company;
- its 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 direction led by, its overall operation guided by and its policy implementation guaranteed by the Communist Party Committee to ensure the health development of the Company through the combination of party building and operating management.



Corporate Profile (Continued)

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);
- Liancheng branch (mainly engaged in producing primary aluminum and alloy products);
- Guizhou branch (mainly engaged in mining bauxite and selling aluminum ore);

Subsidiaries:

- Chalco Shanxi New Material Co., Ltd.* (“Shanxi New Material”, “中鋁山西新材料有限公司”) (mainly engaged in producing alumina products, primary aluminum and alloy products);
- Shanxi Huasheng Aluminum Co., Ltd. (“Shanxi Huasheng”) (mainly engaged in producing primary aluminum products);
- Fushun Aluminum Co., Ltd. (“Fushun Aluminum”) (mainly engaged in producing carbon products);
- Zunyi Aluminum Co., Ltd. (“Zunyi Aluminum”) (mainly engaged in producing alumina products and primary aluminum products);
- Shandong Huayu Alloy Materials Co., Ltd. (“Shandong Huayu”) (mainly engaged in producing alloy 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);
- Chalco Material Co., Ltd. (“Chalco Material”) (mainly engaged in sales of metal, coal and other products);

Corporate Profile (Continued)

- Chalco Zhongzhou Mining Co., Ltd. (“Zhongzhou Mining”) (mainly engaged in mining and selling bauxite);
- Guizhou Huaren New Material Co., Ltd. (“Guizhou Huaren”) (mainly engaged in producing and selling primary aluminum);
- Chinalco International Trading Group Co., Ltd. (mainly engaged in importing and exporting goods and technologies);
- 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. (“Zhongzhou Company”) (中鋁中州鋁業有限公司) (mainly engaged in producing alumina products);
- Chalco Zhengzhou Research Institute of Non-ferrous Metal (“Zhengzhou institute”) (中國鋁業鄭州有色金屬研究院有限公司) (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);
- Chalco Shanghai Company Limited (“Chalco Shanghai”)(中鋁(上海)有限公司) (mainly engaged in trading and engineering project management);



Corporate Profile (Continued)

- Guangxi Huasheng New Material Co., Ltd. * (“Guangxi Huasheng”) (mainly engaged in producing alumina products);
- Shanxi Huaxing Alumina Co., Ltd.* (“Shanxi Huaxing”) (mainly engaged in producing alumina products);
- Shanxi Chalco China Resources Co., Ltd.* (“Shanxi Zhongrun”) (mainly engaged in producing and selling primary aluminum);
- Chinalco Shanxi Jiaokou Xinghua Technology Co., Ltd. (“Xinghua Technology”) (中鋁集團山西交口興華科技股份有限公司) (mainly engaged in producing alumina products);
- Gansu Hualu Aluminum Co., Ltd. (“Gansu Hualu”) (mainly engaged in producing carbon products);
- Lanzhou Aluminum Co., Ltd. (“Lanzhou Aluminum”) (mainly engaged in producing electrolytic aluminum);

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 electrolytic aluminum)

Corporate Information

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 9/F, The Center, 99 Queen's Road Central, Central, Hong Kong *(Note 1)*

3. Legal representative Lu Dongliang *(Note 2)*
Company Secretary Wang Jun *(Note 3)*
(Secretary to the Board)
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

Corporate Information (Continued)

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^(Note 4)
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
Certified Public Accountants
22/F, CITIC Tower, 1 Tim Mei Avenue, Central, Hong Kong
- Ernst & Young Hua Ming LLP
16/F, Ernst & Young Tower, Oriental Plaza, 1 East Chang'an
Avenue, Dongcheng District, Beijing, the PRC
Postal code:100738

Corporate Information (Continued)

9. Legal advisers

as to Hong Kong laws:

Baker & McKenzie
14/F, One Taikoo Place, 929 King's Road, Quarry Bay,
Hong Kong^(Note 5)

as to PRC laws:

Jincheng Tongda & Neal Law Firm^(Note 6)
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 : On 30 March 2018, the Company changed its principal place of business in Hong Kong, from 6th Floor, Nexus Building, 41 Connaught Road, Central, Hong Kong to 9/F, The Center, 99 Queen's Road Central, Central, Hong Kong.

Note 2 : On 21 February 2019, Mr. Yu Dehui resigned as the Chairman and an executive Director of the Company with effect from the same date. As elected at the 39th meeting of the 6th session of the Board of the Company held on the same day, Mr. Lu Dongliang was elected as the Chairman of the Company. According to relevant requirements of the Articles of Association of Aluminum Corporation of China Limited, the Company will change its legal representative from Mr. Yu Dehui to Mr. Lu Dongliang, the Company is undergoing industrial and commercial registration for the change at the moment.

Note 3 : On 20 February 2019, Mr. Zhang Zhankui resigned as the chief financial officer and Company Secretary (Secretary to the Board) of the Company with effect from the same date. As considered and approved at the 38th meeting of the 6th session of the Board of the Company held on the same day, the Company engaged Mr. Wang Jun as the chief financial officer and Company Secretary (Secretary to the Board) of the Company.

Note 4 : On 16 July 2018, the address of the share registrar of American Depositary Receipt of the Company was changed from 101 Barclay Street, New York 10286, USA to 240 Greenwich Street, New York, NY 10286, USA.

Note 5 : From 18 March 2019, Baker & McKenzie, the legal adviser of the Company as to Hong Kong laws, changed its office address to 14/F, One Taikoo Place, 929 King's Road, Quarry Bay, Hong Kong.

Note 6 : In July 2018, the Company changed its legal adviser as to PRC laws, from Beijing DeHeng Law Offices to Jincheng Tongda & Neal Law Firm, with a term from 1 July 2018 to 30 June 2019.

Financial Summary

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

The revenue of the Group for the year ended 31 December 2018 amounted to RMB180,240 million, basically flat compared with the same period of last year. Profit attributable to the owners of the parent for the year amounted to RMB746 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 2018 and year 2014 to year 2017:

	For the year ended 31 December				
	2018 <i>RMB'000</i>	2017 <i>RMB'000</i> (Restated)	2016 <i>RMB'000</i> (Restated)	2015 <i>RMB'000</i> (Restated)	2014 <i>RMB'000</i> (Restated)
Revenue	180,240,154	181,020,428	144,854,582	123,922,795	142,419,555
Cost of sales	(167,029,416)	(166,290,235)	(133,700,192)	(121,408,135)	(141,797,923)
Gross profit	13,210,738	14,730,193	11,154,390	2,514,660	621,632
Selling expenses	(2,496,933)	(2,372,966)	(2,111,787)	(1,798,154)	(1,772,525)
Administrative expenses	(3,958,067)	(4,549,206)	(3,336,095)	(2,386,950)	(4,874,342)
Research and development expenses	(626,873)	(498,234)	(168,862)	(168,870)	(293,766)
Impairment losses on property, plant and equipment	(7,450)	(16,200)	(57,080)	(10,011)	(5,679,521)
Other income	135,367	89,873	155,576	1,787,774	832,239
Impairment losses on financial assets	(107,841)	-	-	-	-
Impairment losses on investments in joint ventures	(216,953)	-	-	-	-
Other gains, net	921,904	319,382	169,143	5,027,661	362,407
Finance costs, net	(4,390,264)	(4,496,734)	(4,204,179)	(5,167,030)	(5,705,117)
Share of profits and losses of joint ventures	(199,452)	8,151	(95,508)	23,238	89,510
Share of profits and losses of associates	39,335	(165,249)	115,091	284,531	350,575

Financial Summary (Continued)

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

	2018 <i>RMB'000</i>	For the year ended 31 December			
		2017 <i>RMB'000</i> (Restated)	2016 <i>RMB'000</i> (Restated)	2015 <i>RMB'000</i> (Restated)	2014 <i>RMB'000</i> (Restated)
Profit/(loss) before income tax	2,303,511	3,049,010	1,620,689	106,849	(16,068,908)
Income tax (expense)/gain	(822,499)	(643,734)	(403,899)	226,220	(1,076,559)
Net profit/(loss) for the year	1,481,012	2,405,276	1,216,790	333,069	(17,145,467)
Profit/(loss) attributable to:					
Owners of the Company	746,477	1,413,028	365,697	118,029	(16,308,391)
Non-controlling interests	734,535	992,248	851,093	215,040	(837,076)
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:

	2018 <i>RMB'000</i>	For the year ended 31 December			
		2017 <i>RMB'000</i> (Restated)	2016 <i>RMB'000</i> (Restated)	2015 <i>RMB'000</i> (Restated)	2014 <i>RMB'000</i> (Restated)
Total assets	200,876,114	199,816,799	191,227,877	192,937,332	195,639,867
Total liabilities	133,206,912	134,074,203	135,335,246	140,893,830	154,177,166
Net assets	67,669,202	65,742,596	55,892,631	52,043,502	41,462,701

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

Item	For the year ended 31 December 2018 <i>RMB'000</i>
Operating profit	2,424,292
Profit for the year	1,607,828
Profit attributable to owners of the parent	870,230
Profit attributable to owners of the parent after excluding gains or losses from non-recurring items	158,161
Net cash flows generated from the operating activities	13,185,490

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

	For the year ended 31 December 2018 <i>RMB'000</i>
Gains or losses from non-recurring items	
Gains from disposal of non-current assets	101,098
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)	115,363
Profit of subsidiaries from the beginning of the year to the consolidation date arising from business combination under common control	9,629
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	141,459
Write back of the provision for impairment of receivables and contract assets that are individually tested for impairment	1,731
Investment income on disposal of right of control over subsidiaries	3,517
Investment loss on disposal of interests in associates	(1,904)
Gain on previously held long-term equity interests re-measured at acquisition-date fair value after stepwise acquisition of control over subsidiaries	748,086
Other non-operating income and expenses other than above items, net	(53,450)
Income tax effect	(245,588)
Non-controlling interests effect	(107,872)
Total	712,069

Financial Summary (Continued)

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

Principal accounting information and financial indicators for 2018 and 2017 of the Group:

	2018 <i>RMB'000</i>	2017 <i>RMB'000</i> (Restated)	Increase/ (decrease) for the year 2018 over 2017 (%)
Revenue	180,240,154	181,020,428	-0.43
Profit before income tax	2,430,327	3,049,010	-20.29
Profit attributable to owners of the parent	870,230	1,413,028	-38.41
Profit attributable to owners of the parent after excluding gains from non-recurring items	158,161	814,530	-80.58
Basic earnings per share (<i>RMB</i>)	0.044	0.087	-49.69
Diluted earnings per share (<i>RMB</i>)	0.044	0.087	-49.69
Basic earnings per share after excluding gains from non-recurring items (<i>RMB</i>)	0.002	0.047	-95.74
Weighted average rate of return on net assets (%)	1.89	3.62	Decreased by 1.73 percentage points
Weighted average rate of return on net assets after excluding gains from non-recurring items (%)	0.34	2.10	Decreased by 1.76 percentage points
Net cash flows generated from operating activities	13,185,490	13,351,397	-1.24
Net cash flows generated from operating activities per share (<i>RMB</i>)	0.78	0.90	-13.33
Total assets	200,876,114	199,816,799	0.53
Equity attributable to owners of the parent	52,414,890	39,688,029	32.07
Equity attributable to owners of the parent per share (<i>RMB</i>)	3.11	2.66	16.92

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	
	2018 <i>RMB'000</i>	2017 <i>RMB'000</i> (Restated)	2018 <i>RMB'000</i>	2017 <i>RMB'000</i> (Restated)
Prepared in accordance with the PRC Accounting Standards for Business Enterprises	870,230	1,413,028	52,414,890	39,688,029
Prepared in accordance with International Financial Reporting Standards	746,477	1,413,028	52,414,890	39,688,029

Directors, Supervisors, Senior Management and Employees

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

Name	Position <i>(Note)</i>	Gender	Age	Start date of his/ her tenure	End date of his/ her tenure	Remuneration	
						before tax received from the Company during the reporting period <i>(RMB'000)</i>	Whether receiving emolument from related parties
Yu Dehui <i>Note 1</i>	Chairman and Executive Director (resigned)	M	59	2016.06.28	2019.02.21	0	Yes
Ao Hong <i>Note 2</i>	Non-executive Director President (resigned)	M	57	2016.06.28 2015.11.20	2019.06.30 2018.02.13	0	Yes
Liu Caiming <i>Note 3</i>	Non-executive Director (resigned)	M	56	2016.06.28	2018.05.25	0	Yes
Lu Dongliang <i>Note 4</i>	Chairman Executive Director President (resigned)	M	45	2019.02.21 2016.06.28 2018.02.13	2019.06.30 2019.06.30 2019.02.21	0	Yes
He Zhihui <i>Note 5</i>	President	M	56	2019.02.21		0	No
Jiang Yinggang <i>Note 6</i>	Executive Director Senior Vice President Vice President (resigned)	M	55	2016.06.28 2018.06.26 2007.05.18	2019.06.30 2018.06.26 2018.06.26	852.5	No
Zhu Runzhou <i>Note 7</i>	Executive Director Vice President	M	54	2018.12.11 2018.05.25	2019.06.30	492.0	No
Wang jun	Non-executive Director	M	53	2016.06.28	2019.06.30	150.0	No
Chen Lijie	Independent non-executive Director	F	64	2016.06.28	2019.06.30	201.8	No
Hu Shihai	Independent non-executive Director	M	64	2016.06.28	2019.06.30	201.8	No
Lie-A-Cheong Tai Chong, David	Independent non-executive Director	M	59	2016.06.28	2019.06.30	201.8	No
Liu Xiangmin <i>Note 8</i>	Chairman of Supervisory Committee (resigned)	M	56	2016.06.28	2018.12.11	0	Yes

Directors, Supervisors, Senior Management and Employees (Continued)

Name	Position <i>(Note)</i>	Gender	Age	Start date of his/ her tenure	End date of his/ her tenure	Remuneration	
						before tax received from the Company during the reporting period <i>(RMB'000)</i>	Whether receiving emolument from related parties
Ye Guohua <i>Note 9</i>	Chairman of Supervisory Committee	M	50	2018.12.11	2019.06.30	0	Yes
Wangjun <i>Note 10</i>	Supervisor (resigned) Chief Financial Officer, Secretary to the Board	M	48	2016.06.28 2019.02.20	2019.02.20	0	Yes
Wu Zuoming	Supervisor	M	52	2016.06.28	2019.06.30	739.4	No
Shan Shulan <i>Note 11</i>	Supervisor	F	47	2019.02.20	2019.06.30	0	Yes
Xu Bo <i>Note 12</i>	Vice President (resigned)	M	54	2013.05.09	2018.06.06	418.0	No
Zhang Zhankui <i>Note 13</i>	Chief Financial Officer (resigned) Secretary to the Board (resigned)	M	60	2015.11.13 2016.03.17	2019.02.20	786.9	No
Leng Zhengxu <i>Note 14</i>	Vice President (resigned)	M	58	2017.01.20	2018.10.26	682.9	No
Tian Yong <i>Note 15</i>	Vice President	M	59	2018.06.06		464.4	No
Wu Maosen <i>Note 16</i>	Vice President	M	55	2019.03.21		0	No
Total	/	/	/	/	/	5,191.1	/

Note 1: On 21 February 2019, Mr. Yu Dehui resigned as the Chairman and the executive Director of the Company and from all other positions in each of the special committees under the Board. The resignation of Mr. Yu took effect on the same day.

Note 2: On 13 February 2018, as considered and approved at the 20th meeting of the sixth session of the Board of the Company, Mr. Ao Hong was dismissed from the position of the president of the Company, with effect from the same day. Meanwhile, as Mr. Ao Hong no longer held any administrative position in the Company, he was re-designated from an executive Director to a non-executive Director.

Note 3: On 25 May 2018, Mr. Liu Caiming resigned as a non-executive Director of the Company with effect from the same day.

Directors, Supervisors, Senior Management and Employees (Continued)

- Note 4:* On 13 February 2018, as considered and approved at the 20th meeting of the sixth session of the Board of the Company, Mr. Lu Dongliang was appointed as the president of the Company and was dismissed from the original position of senior vice president of the Company. On 21 February 2019, Mr. Lu Dongliang tendered resignation as the president of the Company. At the 39th meeting of the sixth session of the Board convened by the Company on the same day, the dismissal of Mr. Lu Dongliang from the position of the president was approved and Mr. Lu Dongliang was elected as the Chairman of the sixth session of the Board of the Company.
- Note 5:* On 21 February 2019, as considered and approved at the 39th meeting of the sixth session of the Board of the Company, Mr. He Zihui was appointed as the president of the Company and nominated as a candidate for an executive Director of the sixth session of the Board of the Company.
- Note 6:* On 26 June 2018, as considered and approved at the 27th meeting of the sixth session of the Board, Mr. Jiang Yinggang was appointed as the senior vice president of the Company and dismissed from the position of vice president of the Company, with effect from the same day.
- Note 7:* On 25 May 2018, as considered and approved at the 24th meeting of the sixth session of the Board of the Company, Mr. Zhu Runzhou was appointed as the vice president of the Company. On 20 November 2018, as considered and approved at the 34th meeting of the sixth session of the Board of the Company, Mr. Zhu Runzhou was nominated as a candidate for an executive Director of the sixth session of the Board of the Company. On 11 December 2018, Mr. Zhu Runzhou was elected as an executive Director of the sixth session of the board of directors of the Company at the 2018 second extraordinary general meeting of the Company.
- Note 8:* On 20 November 2018, Mr. Liu Xiangmin tendered resignation as the chairman of the Supervisory Committee and a Supervisor of the Company. Mr. Liu's resignation took effect after a new Supervisor was elected at the 2018 second extraordinary general meeting of the Company on 11 December 2018.
- Note 9:* On 20 November 2018, as considered and approved at the 14th meeting of the sixth session of the Supervisory Committee of the Company, Mr. Ye Guohua was nominated as a candidate for a shareholder representative Supervisor of the sixth session of the Supervisory Committee of the Company. On 11 December 2018, Mr. Ye Guohua was elected as a shareholder representative Supervisor of the sixth session of the Supervisory Committee of the Company at the 2018 second extraordinary general meeting of the Company. On the same day, at the 15th meeting of the sixth session of the Supervisory Committee of the Company, Mr. Ye Guohua was elected as the chairman of the sixth session of the Supervisory Committee of the Company.

Directors, Supervisors, Senior Management and Employees (Continued)

- Note 10:* On 24 December 2018, Mr. Wang Jun tendered resignation as a Supervisor of the Company. Mr. Wang's resignation took effect after a new Supervisor of the sixth session of Supervisory Committee was elected at the first extraordinary general meeting of the Company held on 20 February 2019. On 20 February 2019, as considered and approved at the 38th meeting of the sixth session of the Board, Mr. Wang Jun was appointed as the chief financial officer and the Company Secretary (Secretary to the Board) of the Company.
- Note 11:* On 24 December 2018, as considered and approved at the 16th meeting of the sixth session of the Supervisory Committee of the Company, Ms. Shan Shulan was nominated as a candidate for a shareholder representative Supervisor 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.
- Note 12:* On 6 June 2018, as considered and approved at the 25th meeting of the sixth session of the Board, Mr. Xu Bo was dismissed from the position of the vice president of the Company, with effect from the same day.
- Note 13:* Mr. Zhang Zhankui resigned as the chief financial officer, and the Secretary to the Board (Company Secretary) of the Company on 20 February 2019 due to reaching statutory retirement age.
- Note 14:* On 26 October 2018, as considered and approved at the 33rd meeting of the sixth session of the Board, Mr. Leng Zhengxu was dismissed from the position of the vice president of the Company, with effect from the same day.
- Note 15:* On 6 June 2018, as considered and approved at the 25th meeting of the sixth session of the Board of the Company, Mr. Tian Yong was appointed as a vice president of the Company.
- Note 16:* On 21 March 2019, as considered and approved at the 40th meeting of the sixth session of the Board of the Company, Mr. Wu Maosen was appointed as a vice president of the Company. Mr. Wu Maosen did not receive any remuneration from the Company as he did not hold any positions in the Company in 2018.

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

Major working experience of directors (“Directors”), supervisors (“Supervisors”) and senior management of the Company as at the date of this annual report:

Executive Directors

Mr. Lu Dongliang, aged 45, is currently the Chairman 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 the deputy general manager of Aluminum Corporation of China (“Chinalco”) (中國鋁業集團有限公司).

Directors, Supervisors, Senior Management and Employees (Continued)

Mr. He Zhihui, aged 56, is currently a 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 55, 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.

Directors, Supervisors, Senior Management and Employees (Continued)

Mr. Zhu Runzhou, aged 54, 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 Co., Ltd.* (中鋁能源有限公司), a director and the general manager of Chalco Ningxia Energy Group Co., Ltd.* (中鋁寧夏能源集團有限公司), the general manager of Chalco Xinjiang Aluminum Power Co., Ltd.* (中鋁新疆鋁電有限公司), the chairman of Chalco Ningxia Energy Group Co., Ltd.* and the general manager of Chalco Xinjiang Aluminum Power Co., Ltd.*.

Directors, Supervisors, Senior Management and Employees (Continued)

Non-executive Directors

Mr. Ao Hong, aged 57, 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 of Chinalco.

Mr. Wang Jun, aged 53, 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.

Directors, Supervisors, Senior Management and Employees (Continued)

Independent Non-executive Directors

Ms. Chen Lijie, aged 64, 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 64, 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 58, 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.

Directors, Supervisors, Senior Management and Employees (Continued)

Supervisors

Mr. Ye Guohua, aged 50, 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.

Ms. Shan Shulan, aged 47, 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 Chinalco. Ms. Shan currently serves as the deputy director of the finance department of 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).

Directors, Supervisors, Senior Management and Employees (Continued)

Mr. Wu Zuoming, aged 52, is currently a Supervisor of the Company. Mr. Wu holds an MBA degree from Renmin University of China. He is a senior engineer. Mr. Wu has extensive experience in human resource management. He successively acted as the deputy manager of Personnel Division, Human Resource Department of China Aluminum Corporation* (中國鋁業集團公司); the person in charge of the Personnel Division, Human Resource Department for the Preparatory Team of Aluminum Corporation of China* (中國鋁業公司); the deputy manager of the Personnel Division(Training Division), Human Resource Department of Aluminum Corporation of China*; the deputy manager of Assessment and Training Division, the manager of Employee Management Division and the manager of General Division of the Company; the senior manager of the Human Resource Department (Retired Cadres Department) and the manager of the General Division of Aluminum Corporation of China*; the deputy general manager and general manager of the Human Resource Department of the Company, and the deputy secretary of the Communist Party Committee, deputy general manager and the chairman of the labor union of Guangxi Branch of the Company. Mr. Wu currently serves as the deputy secretary of the Communist Party Committee and a general manager of Chalco Shanxi New Material Co., Ltd.* (中鋁山西新材料有限公司).

Other Senior Management

Mr. Tian Yong, aged 59, is currently a vice president of the Company. 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 Aluminium Plant (雲南鋁廠), the chief dispatcher and the head of the dispatching office of Yunnan Aluminium 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 Aluminium Plant (雲南鋁廠), the deputy head and head of Yunnan Aluminium Plant (雲南鋁廠), the vice chairman and general manager of Yunnan Aluminium 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).

Directors, Supervisors, Senior Management and Employees (Continued)

Mr. Wang Jun, aged 48, resigned as a Supervisor of the Company on 20 February 2019 and was appointed as the chief financial officer and Secretary to the Board (Company Secretary) on the same day. 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 admitted to the National Training Program for Accounting Leading Talent Backup. 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* (中國鋁業公司(中國鋁業集團有限公司)) and a supervisor of Aluminum Corporation of China Limited*. Mr. Wang is currently the chairman of the supervisory committee of China Rare Earth Holdings Limited* (中國稀有稀土股份有限公司) and a director of China Aluminum International Engineering Corporation Limited, Chinalco Assets Operation and Management Co., Ltd.* (中鋁資產經營管理有限公司), 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 and the president of Aluminum Corporation of China Overseas Holdings Limited* (中鋁海外控股有限公司).

Directors, Supervisors, Senior Management and Employees (Continued)

Mr. Wu Maosen, aged 55, 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 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 chairman of the board 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 an executive director of Chinalco Research Institute of Science and Technology Co., Ltd.* (中鋁科學技術研究院有限公司).

Directors, Supervisors, Senior Management and Employees (Continued)

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

Positions in the Shareholders of the Company

Name	Name of Shareholder	Position(s) in Shareholder entity	Date of appointment	Whether receiving remuneration or allowance
Yu Dehui (resigned)	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
Liu Caiming (resigned)	Aluminum Corporation of China	Deputy General Manager (resigned)	2007.01.25	Yes
Lu Dongliang ^{Note}	Aluminum Corporation of China	Deputy General Manager	2016.04.22	Yes
Wang Jun (Director)	China Cinda Asset Management Co., Ltd	Business Director	2013.08.19	Yes
Liu Xiangmin (resigned)	Aluminum Corporation of China	Deputy General Manager (resigned)	2017.12.19	Yes
Wang Jun (Supervisor, resigned)	Aluminum Corporation of China	Deputy Chief Accountant, Director of the Finance Department and Capital Operation Department (resigned)	2015.11.13	Yes
Shan Shulan (Supervisor)	Aluminum Corporation of China	Deputy Director of the Finance Department	2016.05.05	Yes

Note: As the deputy general manager of Aluminum Corporation of China, Mr. Lu is primarily responsible for the production, operation and daily work of Aluminum Corporation of China Limited.

Directors, Supervisors, Senior Management and Employees (Continued)

Positions in Other Entities

Name	Name of other entities	Position(s)	Date of appointment	Whether receiving remuneration or allowance
Liu Caiming (resigned)	Aluminum Corporation of China Overseas Holdings Limited*	Non-executive Director (resigned)	2013.04.25	No
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 Director	2005.06.16	Yes
	Harbour Centre Development Limited	Independent Director	2018.12.01	Yes
Wang Jun (Supervisor, resigned, currently a chief financial officer and the Company Secretary)	China Rare Earth Holdings Limited*	Chairman of 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

Directors, Supervisors, Senior Management and Employees (Continued)

Positions in Other Entities (Continued)

Name	Name of other entities	Position(s)	Date of appointment	Whether receiving remuneration or allowance
Wu Maosen	Chinalco Investment Development Co., Ltd.* (中鋁投資發展有限公司)	Chairman	2015.12.31	No
	Chinalco Research Institute of Science and Technology Co., Ltd.* (中鋁科學技術研究院有限公司),	Executive Director	2018.11.19	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 2018, the total pre-tax remunerations of the Directors, Supervisors and senior management received from the Company amounted to RMB5.19 million (including the travelling expenses of the independent non-executive Directors).

Directors, Supervisors, Senior Management and Employees (Continued)

5. CHANGES IN DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT AS AT 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 engagements and the reform.
Ao Hong	President	Dismissed	The dismissal of Mr. Ao Hong from the position of the president of the Company due to work engagements was approved at the 20th meeting of the sixth session of the Board held on 13 February 2018 by the Company.
	Executive Director	Re-designated	As Mr. Ao Hong no longer holds any administrative position in the Company, Mr. Ao Hong was re-designated from an executive Director to a non-executive Director on 13 February 2018.
Liu Caiming	Non-executive Director	Resigned	On 25 May 2018, Mr. Liu Caiming resigned as a non-executive Director of the Company due to job re-designation.

Directors, Supervisors, Senior Management and Employees (Continued)

Name	Position(s)	Status	Reason for the change
Liu Xiangmin	Chairman of the Supervisory Committee	Resigned	On 20 November 2018, Mr. Liu Xiangmin tendered resignation as the chairman of the Supervisory Committee and a Supervisor of the Company due to job re-designation, which took effect after a new Supervisor was elected at the 2018 second extraordinary general meeting of the Company on 11 December 2018.
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.
	Senior Vice President, President	Dismissed	On 13 February 2018, the appointment of Mr. Lu Dongliang as the president of the Company and dismissal of Mr. Lu from the position of the senior vice president of the Company were approved at the 20th meeting of the sixth session of the Board. On 21 February 2019, Mr. Lu Dongliang tendered resignation as the president of the Company due to job engagement. The dismissal of Mr. Lu Dongliang from the position of the president was approved at the 39th meeting of the sixth session of the Board convened by the Company on the same day.

Directors, Supervisors, Senior Management and Employees (Continued)

Name	Position(s)	Status	Reason for the change
He Zhihui	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.
Jiang Yinggang	Senior Vice President Vice President	Appointed Dismissed	On 26 June 2018, the appointment of Mr. Jiang Yinggang as the senior vice president of the Company and dismissal of Mr. Jiang from the position of vice president at the same time was approved at the 27th meeting of the sixth session of the Board of the Company.
Xu Bo	Vice President	Dismissed	The dismissal of Mr. Xu Bo from the position of the vice president of the Company due to job re-designation was approved at the 25th meeting of the sixth session of the Board held by the Company on 6 June 2018.
Zhang Zhankui	Chief Financial Officer and Company Secretary (Secretary to the Board)	Dismissed	As approved at the 38th meeting of the sixth session of the Board held by the Company on 20 February 2019, Mr. Zhang Zhankui was dismissed 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.

Directors, Supervisors, Senior Management and Employees (Continued)

Name	Position(s)	Status	Reason for the change
Leng Zhengxu	Vice President	Dismissed	As approved at the 33rd meeting of the sixth session of the Board held by the Company on 26 October 2018, Mr. Leng Zhengxu was dismissed from the position of vice president of the Company due to job re-designation.
Zhu Runzhou	Executive Director	Elected	The nomination of Mr. Zhu Runzhou as a candidate for an executive Director of the sixth session of the Board of the Company was approved at the 34th meeting of the sixth session of the Board held by the Company on 20 November 2018. Mr. Zhu Runzhou was elected as an executive Director of the sixth session of the Board of the Company at the 2018 second extraordinary general meeting of the Company held on 11 December 2018.
	Vice President	Appointed	On 25 May 2018, the appointment of Mr. Zhu Runzhou as the vice president of the Company was approved at the 24th meeting of the sixth session of the Board of the Company.

Directors, Supervisors, Senior Management and Employees (Continued)

Name	Position(s)	Status	Reason for the change
Tian Yong	Vice President	Appointed	On 6 June 2018, the appointment of Mr. Tian Yong as a vice president of the Company was approved at the 25th meeting of the sixth session of the Board of the Company.
Wang Jun	Supervisor	Resigned	On 24 December 2018, Mr. Wang Jun tendered resignation as a Supervisor of the Company due to job re-designation, which took effect after a new Supervisor was elected at the 2019 first extraordinary general meeting of the Company held on 20 February 2019.
	Chief Financial Officer and Secretary to the Board (Company Secretary)	Appointed	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.
Wu Maosen	Vice President	Appointed	On 21 March 2019, the appointment of Mr. Maosen as a vice president of the Company was approved at the 40th meeting of the sixth session of the Board of the Company.

Directors, Supervisors, Senior Management and Employees (Continued)

Name	Position(s)	Status	Reason for the change
Ye Guohua	Chairman of the Supervisory Committee	Elected	On 20 November 2018, the nomination of Mr. Ye Guohua as a candidate for a shareholder representative Supervisor of the sixth session of the Supervisory Committee of the Company was approved at the 14th meeting of the sixth session of the Supervisory Committee of the Company. On 11 December 2018, Mr. Ye Guohua was elected as a shareholder representative Supervisor of the sixth session of the Supervisory Committee of the Company at the 2018 second extraordinary general meeting of the Company. At the 15th meeting of the sixth session of the Supervisory Committee held by the Company on the same day, Mr. Ye Guohua was elected as the chairman of the Supervisory Committee.
Shan Shulan	Supervisor	Elected	On 24 December 2018, the nomination of Ms. Shan Shulan as a candidate for a 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. 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.

Directors, Supervisors, Senior Management and Employees (Continued)

6. EMPLOYEES OF THE COMPANY

As of 31 December 2018, the Group had 65,211 employees. The structure of employees is as follows:

Composition by Function

Category	Headcounts
Production personnel	54,796
Sales personnel	483
Technology personnel	3,261
Finance personnel	1,454
Administration personnel	5,217
Total	65,211

By Education Background

Category	Headcounts
Post-graduates and above	613
University graduates	10,310
Technical institute graduates	14,836
Secondary/technical school graduates or below	39,452
Total	65,211

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 33.89% equity interest of the Company and together with its subsidiaries held an aggregate of 36.62% equity interest of the Company as of 31 December 2018. As of 31 December 2018, Chinalco was the Company's ultimate holding company.

As of 31 December 2018, the share capital structure of the Company was as follows:

	As of 31 December 2018	
	Number of Shares <i>(In million)</i>	Percentage to total issued share capital <i>(%)</i>
Holder of A shares	10,959.83	73.54
Holder of H shares	3,943.97	26.46
Total	14,903.80	100

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

On 25 February 2019, the registration procedure for the additional shares of the Company in connection with the acquisition of assets by issuance of shares by the Company was completed with Shanghai Branch of China Securities Depository and Clearing Corporation Limited. With 2,118,874,715 additional A shares issued, the total share capital of the Company was increased to 17,022,672,951 shares. Upon completion of the issuance of additional shares, the Company's share capital structure is as follows:

	As of 25 February 2019	
	Number of shares (In million)	Percentage to total issued share capital (%)
Holders of A shares	13,078.70	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").

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

2. CHANGES IN SHAREHOLDING AND SHAREHOLDERS

In 2018, there were no changes in share capital of the Company. As of 31 December 2018, the total share capital of the Company was 14,903,798,236 shares.

Particulars of Shareholding as of 31 December 2018

	Share (Number)	Percentage (%)
Shares subject to trading moratorium	0	0
Shares not subject to trading moratorium		
1. Renminbi ordinary shares	10,959,832,268	73.54
2. Overseas listed foreign invested shares	3,943,965,968	26.46
Total shares not subject to trading moratorium	14,903,798,236	100
Total shares	14,903,798,236	100

On 25 February 2019, the Company issued 2,118,874,715 additional A shares. Subject to trading moratorium, the additional shares issued shall not be transferred within twelve months of the lock-up period from the completion date of the issuance and can be traded on the Shanghai Stock Exchange on the next trading day upon the expiry of the lock-up period (In case of statutory holidays or rest days, the trading is postponed to the next working day). For details, please refer to relevant announcements of the Company published on 26 February 2019.

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

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

Transfer of Changes in Shareholding

In 2018, there was no transfer of changes in shareholding 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. The total shares of the Company were increased from 14,903,798,236 shares to 17,022,672,951 shares.

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

3. SHARE ISSUANCE AND LISTING

(1) Share Issuance in the Past Three Years

From 2016 to 2018, no share was issued by the Company.

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 China Securities Regulatory Commission, 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 Co., Ltd.* (包頭鋁業有限公司), 30.7954% equity interests in Chalco Shandong Co., Ltd.* (中鋁山東有限公司), 81.1361% equity interests in Chalco Mining Co., Ltd.* (中鋁礦業有限公司) and 36.8990% equity interests in Chalco Zhongzhou Aluminum Co., Ltd.* (中鋁中州鋁業有限公司) 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.

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

In 2018, there were no changes in total number of shares or the shareholding structure of the Company.

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

On 25 February 2019, the registration procedure for the additional shares of the Company in connection with the acquisition of assets by issuance of shares was completed, 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:

Class of shares	Number of shares <i>(share)</i>	Percentage in total share capital <i>(%)</i>
Before the issuance		
A shares	10,959,832,268	73.54
H shares	3,943,965,968	26.46
Total	14,903,798,236	100
After the issuance		
A shares	13,078,706,983	76.83
H shares	3,943,965,968	23.17
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 2018, 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 of Hong Kong ("SFO"), 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.

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

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	48.32%(L)	35.53%(L)
	H shares	162,276,000(L) ^{Note 1}	Interests of controlled corporation	4.11%(L)	1.09%(L)
BlackRock, Inc.	H shares	289,777,137(L) ^{Note 2}	Interests of controlled corporation	7.35%(L)	1.94%(L)
		1,906,000(S) ^{Note 2}	Interests of controlled corporation	0.05%(S)	0.01%(S)
The Capital Group Companies, Inc.	H shares	275,175,500(L) ^{Note 3}	Interests of controlled corporation	6.98%(L)	1.85%(L)

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 Aluminum Corporation of China, and an aggregate interest of 245,518,049 A shares and 162,276,000 H shares held by various controlled subsidiaries of Aluminum Corporation of China, comprising 238,377,795 A shares held by Baotou Aluminum (Group) Co., Ltd., 7,140,254 A shares held by Chalco Shanxi Aluminum Co., Ltd.* (中鋁山西鋁業有限公司) 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).

Note 2 : These interests were held directly by various corporations controlled by BlackRock, Inc.. Among the aggregate interests in the long position in H shares, 184,000 H shares were held as derivatives. Among the aggregate interests in the short position in H shares, 1,580,000 H shares were held as derivatives.

Note 3: These interests were held directly by Capital Research and Management Company which was controlled by The Capital Group Companies, Inc..

Save as disclosed above and so far as the Directors are aware, as of 31 December 2018, 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.

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

5. NUMBER OF SHAREHOLDERS

Unit: Number of Shareholders

Total number of shareholders as of 31 December 2018 505,826

6. PARTICULARS OF SHAREHOLDINGS HELD BY TOP TEN SHAREHOLDERS

Name (full name)	Number of shares held at the end of the period	Nature of shareholders	Percentage of shareholding (%)
Aluminum Corporation of China ^{Note 1}	5,050,376,970	A shares	33.89
Hong Kong Securities Clearing Company Limited (H shares) ^{Note 2, Note 3}	3,931,329,193	H shares	26.38
China Securities Finance Corporation Limited	448,284,993	A shares	3.01
Baotou Aluminum (Group) Co., Ltd.	238,377,795	A shares	1.60
Hong Kong Securities Clearing Company Limited (A shares)	167,895,228	A shares	1.13
Central Huijin Investment Ltd. (中央匯金資產管理有限責任公司)	137,295,400	A shares	0.92
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	0.89
China Construction Bank Corporation-Boshi Industry Mixed Securities Investment Fund (LOF) (中國建設銀行股份有限公司-博時主題行業混合型證券投資基金(LOF))	70,000,021	A shares	0.47
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 集合資金信託計劃)	67,700,000	A shares	0.45
China Merchants Bank Co., Ltd.- Boshi CSI Tradable Open Index Securities Investment Fund for State-owned Enterprises Structure Adjustment (招商銀行股份有限公司-博時中證央企結構調整交易型開放式指數證券投資基金)	54,044,707	A shares	0.36

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

Note 1 : The number of shares held by Aluminum Corporation of China doesn't include the A shares of the Company indirectly held by it through its subsidiaries Baotou Aluminum (Group) Co., Ltd. and Chalco Shanxi Aluminum Co., Ltd.* (中鋁山西鋁業有限公司) and the H shares of the Company indirectly held by it through its subsidiary Aluminum Corporation of China Overseas Holdings Limited. As of 31 December 2018, Aluminum Corporation of China 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, in the Company, accounting for 36.62% of the total share capital of the Company.

Note 2 : Hong Kong Securities Clearing Company Limited holds the 162,276,000 H shares of the Company on behalf of Aluminum Corporation of China Overseas Holdings Limited, a subsidiary of Aluminum Corporation of China.

Note 3 : The 3,931,329,193 H shares of the Company held by Hong Kong Securities Clearing Company Limited include 162,276,000 H shares it holds on behalf of Aluminum Corporation of China Overseas Holdings Limited, a subsidiary of Aluminum Corporation of China.

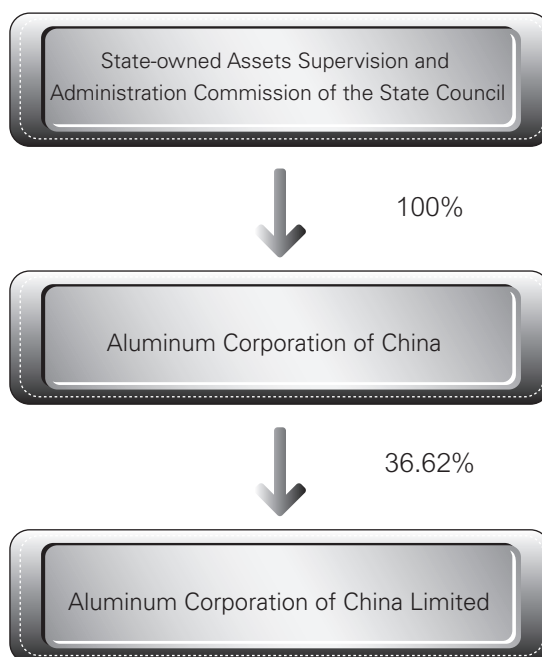
7. PARTICULARS OF THE CONTROLLING SHAREHOLDER

(1) Particulars of the Controlling Shareholder

Name of the controlling shareholder :	Aluminum Corporation of China
Legal representative:	Ge Honglin
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.

Particulars and Changes of Shareholding Structure, and Details of Substantial Shareholders (Continued)

(2) Diagram of the Direct Equity Interests and Controlling Relationship between the Company and the Controlling Shareholder



Note: The controlling shareholder of the Company is Aluminum Corporation of China, and the actual controller of the Company is the State-owned Assets Supervision and Administration Commission of the State Council. As at 31 December 2018, Aluminum Corporation of China directly holds 33.89% equity interest in the Company and holds 5,458,171,019 shares in the Company together with its subsidiaries, including 238,377,795 A shares held by Baotou Aluminum (Group) Co., Ltd, 7,140,254 A shares held by Chalco Shanxi Aluminum Co., Ltd.* (中鋁山西鋁業有限公司) 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), accounting for 36.62% of the total 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 2018 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

Alumina Market

Alumina was in short supply in the overseas market as affected by the US's sanction imposed on RUSAL, the output reduction of the Alunorte alumina plant of Hydro Aluminum in Brazil, the Alcoa strike and other incidents; domestic supply of alumina was also tight due to the insufficient supply of ores in Shanxi, Henan and other places resulted from the stricter environmental supervision in the PRC. Consequently, alumina price in 2018 fluctuated at high levels.

In the international market, the overseas alumina price set a new historical record as stimulated by the aforesaid contingent incidents. In 2018, the highest and lowest prices of alumina in the international market were USD710 per tonne and USD357 per tonne, respectively, with the annual average of USD473 per tonne, representing an increase of 33.6% as compared to 2017.

In the domestic market, China's alumina export was increased due to the alumina supply shortage caused by the international incidents. Besides, some manufacturers implemented flexible production modes. Accordingly, the price of alumina fluctuated at a smaller range than that of 2017. In 2018, the highest and lowest prices of alumina in the domestic market were RMB3,291 per tonne and RMB2,691 per tonne, respectively, with the average of RMB2,992 per tonne, representing an increase of 2.85% as compared to 2017.

According to the statistics, the respective global output and consumption of alumina for 2018 was approximately 124.69 million tonnes and approximately 128.40 million tonnes, representing a year-on-year decrease of 4.5% and 1.5%, respectively. The respective domestic output and consumption of alumina were approximately 71.61 million tonnes and approximately 72.70 million tonnes, representing a year-on-year increase of 1.9% and 0.3%, respectively, representing approximately 57.43% and 56.62% of global output and consumption, respectively. As of the end of December 2018, the alumina capacity utilization rate in the world (inclusive of the PRC) was approximately 79%, while that of the PRC was approximately 85%, 1.5 percentage points lower than that of the previous year.

Chairman's Statement (Continued)

Primary Aluminum Market

In 2018, under the complicated and fickle market environment, the supply and demand of aluminium in the market was sluggish and fluctuated substantially with twists and turns, and the price went downward consequently.

In the international market, as impacted by the US's sanction on RUSAL, international aluminium price fluctuated violently in the first half of the year and price of the three-month aluminium futures at LME soared to USD2,718 per tonne in April, the peak in the year; in the second half of the year, despite the impact of the sanction wearing off, Sino-US trade frictions escalated stepwise, sending the aluminium price to decline continuously to USD1,830 per tonne at the end of December, the lowest level in the year. In 2018, the average prices of spot aluminum and three-month aluminium futures at LME were approximately USD2,108 per tonne and USD2,114 per tonne, respectively, representing increases of 7.11% and 6.78% over 2017.

In the domestic market, the overall price of electrolytic aluminum was depressed and undulated in a wide range in 2018. Affected by domestic economy and higher tariffs imposed by the US, consumption growth declined as compared with the previous year, resulting in a general decline in aluminum price. In the first half of the year, the international aluminum price rose sharply and the domestic aluminum price also increased correspondingly. In the second half of the year, the domestic aluminum price rose first and then fell following the track of alumina price. In 2018, the average prices of spot aluminum and three-month aluminum futures at SHFE amounted to RMB14,254 per tonne and RMB14,375 per tonne, respectively, representing decreases of 2.11% and 2.42% from 2017.

According to the statistics, the global output and consumption of primary aluminum for 2018 were approximately 64.21 million tonnes and approximately 65.70 million tonnes, respectively, representing a year-on-year increase of 1.5% and 3.32%, respectively. The domestic output and consumption of primary aluminum were approximately 36.48 million tonnes and approximately 37.13 million tonnes, respectively, representing a year-on-year decrease of 0.5% and a year-on-year increase of 4.89% respectively, representing approximately 56.81% and 56.51% of global output and consumption respectively. As of the end of December 2018, the capacity utilization rate of primary aluminum in the world (inclusive of the PRC) was 83.9%, while that of the PRC was approximately 83.4%, 1.8 percentage points higher than that of the previous year.

BUSINESS REVIEW


In 2018, in accordance with the working principle of “low cost, high quality, optimal mechanism and admirable performance”, the Company continued to implement the cost-oriented strategies, proactively carried on with the missions in respect of safety, environmental protection and quality, and exerted consistent efforts to improve competitiveness and profitability by shoring up weakness, addressing inadequacies, enhancing strengths and building up the brand. As a result, transformation and upgrading stepped into new stage, and new prospects were created in operation and management. With resource guarantee, production of major products, proportion of mid-to-high end products further improved, the Company's costs for alumina and electrolytic aluminum were further reduced and cost competitiveness was going up. The Company mainly carried out the following tasks:

1. Further optimised the appraisal mechanism with a primary focus on cost assessment. Upholding the management philosophy of “reasoning out costs based on market conditions and promoting reform with costs” adopted since 2016, the Company took dynamic cost assessment as the main thrust and established the appraisal results-related “three-linkage” mechanism, which required to arrive at the performance appraisal results after taking into account the remuneration and qualification rating of the enterprise principals as well as the staff payroll of an enterprise; in addition, it conducted process management and annual evaluation using the assessment methods of “monthly monitoring and warning, quarterly summary through conversation, semi-annual qualification rating, and annual comprehensive evaluation”; moreover, it implemented the “quarterly appraisal and quarterly reward” incentive mechanism to “reward the worthy and urge the laggard”, thereby effectively arousing the working enthusiasm of the enterprises and their employees to drive down costs and drive up efficiency.

Chairman's Statement (Continued)

2. Implemented comprehensive management and control to further improve management standard. The Company continued with the "morning scheduling meeting + thematic seminars" mode adopted in 2017 to relentlessly enhance the comprehensive management and control capability of the Company. It effectuated output increase, consumption reduction and quality improvement in respect of alumina in virtue of balanced and stable production arrangements; boosted the continuous optimisation of electrolytic aluminum indicators by intensifying key breakthroughs; and implemented the requirements under Company's "Year for Breakthroughs in Respect of Carbon Quality" aiming for the work objectives of "reasonable layout, advantageous costs, top-notch quality, advanced indicators" and laid down the Process Technology and Relevant Operation and Maintenance Guidance on Carbon Anodes Moulding System, resulting in satisfactory results in tapping potentials and creating benefits; besides, the Company also optimised and adjusted the top-level design plan on alloying and arranged for screening and handling aluminum casting-specialised hidden hazards; in terms of the "three quality control projects", the Company classified the goals, tasks and requirements into eight specific starting points, strived for upgrade in the five aspects comprising quality indicators, quality systems, operation standards, operation practices and the equipment and shored up weak points in respect of acute quality problems, quality breakthroughs and quality brand construction, having resulted in remarkable achievements in solving quality problems.

3. Carried forward the transformation and upgrade and implemented the industrial layout covering "coastal and overseas" regions. The Company gained access to overseas bauxite resources of 1,750 million tonnes, and commenced the construction of the Boffa bauxite project in Guinea, port projects and the 2 million tonnes alumina and supporting projects of Guangxi Huasheng, representing the Company's concrete steps towards the international development strategy; the production lines for near-end products of high added value such as tabular corundum, fine molecular sieves and high-purity aluminium were completed and put into operation, signaling new strides towards high-quality development; it also actively developed clean energy business, and commenced the construction of a wind power project in Alxa Left Banner; the carbon projects designed to support Lvliang and Qingzhen aluminum industrial bases and meet the demand of Mengdong market were completed and put into production one after another, indicating synergetic development reaching a new level; the Company deepened the reform of investment mechanisms by clarifying the development



Chairman's Statement (Continued)

positioning of enterprises, classifying investment levels, amending the performance appraisal system for investment projects, implementing centralized management of management of bids and tenders and deepening the "pilot management reform", thereby establishing an all-round quality management system for investment projects, and achieving the goal of "ensuring the success and profitability of every initiated project".

4. Continued to implement the innovative development concepts and enhanced the promotion and application of scientific results, new products development and scientific technologies. Thanks to the Company's efforts in the promoting the construction of innovation platforms and accelerating technological development and application, periodic success was made in the development and research of two cutting-edge technologies, i.e., the single-piece moulding technology for cathode from aluminum electrolysis and the technology for improving seed crystal decomposition rate under the Bayer process; technological breakthroughs were achieved in new product/technology development or trial expansion projects with regard to flotation and desulphurisation of bauxite with very high sulphur content, dry sintering of low-grade bauxite, boehmite used for DMO/MTO catalysts, aluminum nitride produced through carbon-thermal reduction process, etc.; the technologies for hazard-free treatment of overhaul residue generated from aluminium electrolysis, the intelligent crust breaking technology as well as the electrolytic aluminum "FHEST" technology were generalised; major breakthroughs were made in high-quality aluminum production technology, making it possible to substitute imported products. In 2018, the Company organized and carried out 135 technological research and development projects, including 46 projects undertaken by the Company itself and 89 projects undertaken independently by subordinate enterprises, and made 122 new patent applications. As at the end of December 2018, the Company had 1,267 valid patents, with remarkable results achieved for demonstration and promotion projects concerning the industrialization of technological achievements.

Chairman's Statement (Continued)

5. Established operation platforms for further implementing the strategy of scientific marketing, concentrated procurement and integrated logistics. The Company put into practice the “big marketing, procurement and logistics” strategy, progressively carried forward the establishment of operation platforms to level up the operating capability of the Company on a continuous basis. In virtue of its industry experience, the Company took initiative to diminish the adverse impact of the sharp fluctuation of commodity prices caused by external contingent incidents and the Sino-US trade frictions; it participated in the alumina spot trading at Qianhai Exchange in Shenzhen so as to further standardise domestic spot alumina transaction mechanism and bolster up the healthy development of the industry; meanwhile, it enhanced strategic cooperation with suppliers by implementing cooperative projects and cementing cooperative relations; enhanced market research for accurate judgement, adopted and improved the concentrated procurement negotiations and separate contracting approach, and seized opportunities to procure at low prices instead of the peak while guaranteeing supply, which facilitated cost reduction in the aspect of procurement; further, it also advanced the logistics classification and integration and strengthened business expansion and functional construction, having improved the ability to create benefits from the logistics business.
6. Innovated and replenished financing approaches and ensured capital security of the Company. The Company obtained approval from the CSRC for the acquisition of assets by issuance of shares, and the debtors of relevant subsidiaries of the Company, upon completion of the acquisition, became institutional investors of the Company, which has optimised its capital structure and further improved its corporate governance structure; it also obtained approval from the CSRC for the issuance of “Little Mutual-Fund” debentures in the amount of RMB10 billion; meanwhile, the Company adjusted its financing channels and thereby obtained follow-on funding at low cost; while capitalising on the window period for bonds issuance in the market, it managed to safeguard the safety of overseas capital and ward off exchange control risks; in addition, it commenced the operation of “notes pool” to speed up the circulation of financial notes; and it activated the “capital pool” plan, which enabled efficient operation of funds by integrating the account, cash, settlement, fundraising and operation to reduce occupation of capital on hand, increase capital use efficiency effectively and scale down interest-bearing liabilities and financing costs.

Chairman's Statement (Continued)

7. Enhanced internal control to further prevent and control operation risks. The Company arranged a number of internal control-related interim self-evaluation, interactive B2B review and independent supervision and inspection activities. It also urged the relevant departments and subsidiaries to emphasize the rectifications of problems identified in the course of audit, inspection and internal control evaluation, conduct persistent follow-ups on the progress made in rectifying various problems and report the same termwise to the management on a monthly basis, and escalate significant and contingent matters to the superiors promptly. As a result, various risks in the operation and management were well anchored, internal control work was further built up. All the enterprises were required to carry out internal control self-evaluation and risk control, which placed the emphasis on the inspections over key management aspects such as contract management, authorisation management and reduction of funds occupied by receivables and inventories, and had effectively hedged risks in contract management and authorisation management.

8. Further upgraded the quality of Party construction and procured the close integration of Party construction, operation and management so as to give play to the comprehensive leading role of the Party committee of the Company. The Company made amendments to and supplemented such normative documents as the Administrative Measures on Decision-making Purview and Rules for Implementing the Decision-making Systems on "Three Important Matters and One Big Concern", clarified the terms of reference of each governing entity, and earnestly followed through the requirements of preliminary research procedures of the Party organisation, with the view to integrating the leadership of the Party into each aspect of its corporate governance. The Party committee of the Company carried out studies on over fifty material matters in regard of the operation and management of the Company throughout the year; in the meantime, the Company furthered the "double-hundred" assessment giving equal weight to Party construction and operation and included the implementing progress of matters superintended by the Company into the assessment systems of Party construction; besides, it also organised the "five-new" seminars painstakingly. At such seminars, 134 pieces of advice in fifteen aspects were put forward, consensus in nine perspectives were reached, the working principle of "low cost, high quality, optimal mechanism and rewarding benefits" was concluded, which have become the important source for solidifying all Party members to accelerate the "three major renovations" and pursue high quality development. Moreover, the Company thoroughly carried out the "two guidings and two makings" activities and nailed down 132 projects on benefit making of Party members under the guidance of Party organisation and 136 subjects in regard of innovation by the masses under the guidance of Party members, which resulted in remarkable benefit-making achievements.

Chairman's Statement (Continued)

DIVIDENDS


As the Company's profit for the year 2018 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 2018 and such proposal is subject to approval of shareholders at the forthcoming 2018 annual general meeting. The Company will publish an announcement after the arrangement of such general meeting.

RESULTS

For the year ended 31 December 2018, the Group recorded revenue of RMB180,200 million, basically flat as compared to RMB181,000 million in 2017. Profit attributable to owners of the parent and earnings per share attributable to owners of the parent was RMB746 million and RMB0.037 respectively.

BUSINESS OUTLOOK AND PROSPECTS

In 2019, the Company will, in accordance with the working principle of "low cost, high quality, optimal mechanism and admirable performance", uphold the new development philosophy to deepen reform and innovation and accelerate the transformation and upgrading with the view to optimising, strengthening and expanding the business of the Company and fully advancing the Company's high-quality development. In particular, it will continue to implement the cost-oriented strategy to constantly improve the advantageous competitiveness of cost; optimise the industrial layout and adjust the product portfolio to manufacture quality products with high technology and build up the market image of "better aluminium, Chalco's forte"; and drill down the management reform in a comprehensive way to establish an operation mechanism that is fit for market competition and full of business vitality. In 2019, the Company will focus on the following tasks:




Chairman's Statement (Continued)

1. Emphasizing cost assessment to enhance cost competitiveness. The Company will continue to intensify the performance appraisal “three-linkage” incentive and constraint mechanism, implement the cost-oriented strategy steadfastly and further carry out the cost reduction and efficiency enhancement special actions. The Company will use dynamic cost assessment for assessing alumina and electrolytic aluminum enterprises, with a focus on lowering the costs of ores and electricity to solve the principal contradictions of key enterprises; continue to carry out the promotion plan for the “FHEST technology”; encourage the application of the anodic oxidative stability technology in the Company; and initiate the introduction of the aluminum electrolysis technologies with lower energy consumption into the verification tests of 400kA and 500kA electrolyzers and the industrial demonstration of full-automatic welding systems for anodic guide rod sets, so as to reduce energy consumption and cost. In sum, the Company will adopt multiple measures to lower costs and upgrade its ranking among industry peers in terms of cost competitiveness, outperforming both the market and its peers.
2. Further developing and improving technological innovation systems. The Company will level up technology content and realise product upgrade in virtue of technological innovations. In addition, the Company will speed up the progress of transforming itself into a material production enterprise from a raw material manufacturer and pursue better and superior product portfolio by optimising and strengthening refined alumina and developing aluminum base alloys in a synergic manner. To this end, it will prioritise the development of products with high added value such as micro powder grade aluminum hydroxide and tabular corundum and set up worldwide leading alumina research, manufacturing and marketing platform; continue with the research on the removal of organics from alumina and develop high-quality alumina and fine aluminum ingots; and accelerate the company-wide popularisation and application of ecological reclamation technology designed for red mud yards, the intelligent crust technology and accurate aluminum generation technology, whereby technology support for the Company's cost reduction and efficiency enhancement is provided.

Chairman's Statement (Continued)

3. Further intensifying production management and opening up a new stage of green development. The Company will pay special attention to the critical aspects in the production segment, deepen the management of mines, improve the quality of mining rights and establish green mines; it will optimise the main process to level up operation quality on a continuous basis and strive for stable and efficient production of alumina; take great efforts to put new electrolytic aluminum projects into operation and make such projects accomplish the designed capacity, meet up with the standards and generate the expected profits as soon as practicable; introduce the Quality Carbon Anodes Standards of Chalco to guide the upgrade of carbon products; tap the frontier market of aluminium base alloys for better product portfolio and stronger benefit-making capability; and roll out special projects for cost reduction in respect of coal and electricity management as well as macro energy and implement the electricity tariff policy. In addition, the Company will make full use of the morning scheduling meeting to reinforce process management. It will also further consummate equipment management systems by setting up the four sets of major standards comprising the maintenance technology standards, the sequenced detection standards, the lubrication standards and the maintenance operation standards so as to create a long-lasting mechanism in this regard; under the guidance of the comprehensive and precise management philosophy, the Company will establish a precise management and business system of the Company, and keep normalising business outsourcing to specify the outsourcing scope and achieve standard contractor management, contract management, statistics and accounting.
4. Proceeding with the critical projects in relation to safety, environmental protection and quality to cement the foundation of sustainable development and promote the green, healthy, safe and sustainable development of the Company. The Company will reduce accident costs and create a safe and healthy production environment through the four safety management projects; make active response to the ultra-low emission appeal, avert losses arising from production reduction and abeyance and carry forward the construction of green and low-carbon enterprises through the three environment protection projects; and develop model products in the industry, build up a brand image with stringent specifications and earn higher customer approbation through the three quality management projects.



Chairman's Statement (Continued)

5. Launching second round of “larger, efficient, stronger and dynamic” initiative steadfastly to ameliorate the industrial layout of the Company by branching out scientifically, obsoleting redundancy resolutely and forging ahead or retreating as appropriate. The Company will move its alumina and electrolytic aluminum businesses to regions abundant in coal resources, superior in clean energy and with high environmental tolerance such as coastal ports in an orderly manner. To be specific, it will proactively experiment on the management and control mode adopted in Guinea Boffa Project to level up the international operation standards; implement standard, intelligent and eco-friendly management for the alumina project of Guangxi Huasheng; and strive to turn the Alxa Left Banner wind power project into the Company's largest and most profitable wind power base. Besides, it will phase out electrolytic aluminum capacities that suffer from heavy electricity costs and are unlikely to turn around with strong determination, and carry out capacity shift, enterprise transformation and personnel transfer in close compliance with the “larger, efficient, stronger and dynamic” principle.

6. Consummating marketing management mechanism, making adjustments to and optimising procurement strategies and exerting more efforts on classification and consolidation of logistics resources. In addition to proceeding with market research and judgement work, the Company will also optimise the marketing strategies, further improve the marketing management mechanism, enhance risk control capability and pay attention to the pace of sales, thereby achieving smooth sale of products, increasing the market influence of the Company and strengthening the benefit making capability; besides, it will accelerate the construction of the procurement platform, deeply promote the construction and application of the e-commerce platform and perfect the procurement performance and supplier rating systems to improve the Company's procurement management standards and enhance the price negotiation capability in a comprehensive manner. Moreover, it will carry out classification and consolidation of logistics resources to exert the strengths of the logistics platform, accelerate the expansion of logistics businesses and improve the guarantee capacity of logistics and the profitability thereof.

Chairman's Statement (Continued)

7. Intensifying financial management and control to increase asset operation efficiency and decrease financing costs. The Company will continue to reinforce concentrated fund management and fully implement the “capital pool” and “notes pool” businesses to reduce dormant budgetary funds and interest-bearing liabilities and lowering the financing costs and leverage ratio; adopt dynamic measures to manage and scale down the Company’s receivables and inventories; further the construction of regional or business-based accounting centre and tentatively set up regional or business-based financial sharing centre so as to provide strong support for the improvement of financial management and control standards; and make full use of the capital market to energetically expand financing channels and enhance capital cooperation to invigorate the Company’s assets in stock and achieve the synergistic effects of capital and capital operation.
8. Continuing to give priority to Party building to convert political advantages into competitive advantages. The Company will continue to give the rein to the leading role of Party organisation, thoroughly advance the “two guidings and two makings” activities and integrate Party building into key and demanding tasks in relation to production and management, reform and development as well as transformation and upgrading with the view to enhancing the initiative and creativity of the crew and having powerful political guarantee in place for the quality development of the Company.

Lu Dongliang
Chairman

Beijing, the PRC
28 March 2019

Management's Discussion and Analysis of Financial Position and Results of Operations

DEVELOPMENT STRATEGY AND MODEL

The Company is committed to sustaining its leadership in the domestic market and insists on extending the front end of the industrial chain and developing the high-end of the value chain. It has established the general direction of “scientifically consolidating upstream businesses, optimizing and adjusting midstream businesses and expanding into downstream businesses.” Adhering to the development idea featuring innovation, coordination, green, opening up and sharing, the survival bottom-line thinking, progress amidst stabilization, and reform and innovation, the Company will promote reform in terms of quality, efficiency and power. Centering on economic benefits in work, the Company, with “quality and efficiency enhancement, reform and innovation, and transformation and upgrading” as the main goal of work, will accelerate structural adjustment and promote transformation and upgrading. In addition, the industrial chain will be constantly perfected and reform and innovation will be deepened to quicken the high-quality development and transfer of production capacity. The Company will increase international cooperation in production capacity and enhance its operation capacity as a global player, actively promote the change of the Company from extensive development to intensive development and from a domestic enterprise producing basic raw materials to a global enterprise manufacturing high-tech materials, to solidly strengthen, optimise and expand its business, thereby building itself into 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 results 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 aluminum enterprises and trading enterprises and externally to customers outside the Group. This segment also includes the production and sales of refined alumina and metal gallium.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

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 nonferrous metal products, and crude fuels such as coal products, as well as 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 corporate and other aluminum-related research and development and other activities of the Group.

RESULTS OF OPERATIONS

The Group's net profit attributable to owners of the parent for the year 2018 was RMB746 million, representing a decrease of RMB667 million from RMB1,413 million for the previous year. This was mainly attributable to the year-on-year decrease in price of aluminum in primary aluminum segment and year-on-year increase in prices of raw materials.

REVENUE

The Group's revenue for the year 2018 was RMB180,240 million, basically flat with RMB181,020 million for the same period of the previous year.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

COST OF SALES

The Group's cost of sales for the year 2018 was RMB167,029 million, basically flat with RMB166,290 million for the same period of the previous year.

EXPENSES FOR THE PERIOD

1. Selling expenses: The Group's selling expenses for the year 2018 amounted to RMB2,497 million, representing an increase of RMB124 million from RMB2,373 million for the same period of the previous year, mainly due to the increase of freight charges arising from increased sales.
2. Administrative expenses: The Group's administrative expenses for the year 2018 amounted to RMB3,958 million, representing a decrease of RMB591 million from RMB4,549 million for the same period of the previous year, mainly attributable to the large amount of provisions for termination benefits made by the Company in 2017.
3. Finance costs, net: The Group's finance costs for the year 2018 amounted to RMB4,390 million, representing a decrease of RMB107 million from RMB4,497 million for the same period of the previous year, mainly due to the decrease in interest-bearing loans and borrowings.

RESEARCH AND DEVELOPMENT EXPENSES

The Group's research and development expenses for 2018 amounted to RMB627 million, representing an increase of RMB129 million from RMB498 million for the same period of the previous year, mainly due to more research and development investments made by the Group during the year.

OTHER GAINS, NET

In 2018, other gains of the Group amounted to RMB922 million, representing an increase of RMB603 million from RMB319 million for the same period of the previous year, mainly due to the gains realized in the acquisition of joint ventures and associates as subsidiaries in stages during the year.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

INCOME TAX EXPENSES/BENEFITS

Income tax expenses for the year 2018 amounted to RMB822 million, representing an increase of RMB178 million from RMB644 million for the same period of the previous year, mainly due to tax losses on deferred income tax assets recognized at the end of the year and the increase in time difference.

Alumina Segment

Revenue

The Group's revenue from the alumina segment for the year 2018 was RMB44,151 million, representing an increase of RMB5,154 million from RMB38,997 million for the same period of the previous year, mainly attributable to the increase in the price and trading volume of alumina.

Segment Results

The Group's profit before income tax in the alumina segment for the year 2018 was RMB3,496 million, representing an increase of RMB205 million from RMB3,291 million for the same period of the previous year, mainly attributable to the rising price and increase in trading volume of alumina.

Primary Aluminum Segment

Revenue

The Group's revenue from the primary aluminum segment for the year 2018 was RMB53,802 million, representing an increase of RMB6,556 million from RMB47,246 million for the same period of the previous year mainly attributable to the increase in the trading volume of primary aluminum.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

Segment Results

The Group's profit before income tax in the primary aluminum segment for the year 2018 was RMB-929 million, representing a decrease of RMB1,756 million in profit from RMB827 million for the same period of the previous year. This was mainly attributable to an increase in prices of alumina and anode in the costs of primary aluminum and a decrease in prices of products.

Trading Segment

Revenue

The Group's revenue from the trading segment for the year 2018 was RMB142,017 million, representing a decrease of RMB4,838 million from RMB146,855 million for the same period of the previous year, mainly attributable to the decrease in trading volume.

Segment Results

The Group's profit before income tax in the trading segment for the year 2018 was RMB779 million, representing an increase of RMB45 million from RMB734 million for the same period of last year.

Energy Segment

Revenue

The Group's revenue from the energy segment for the year 2018 was RMB7,235 million, representing an increase of RMB984 million from RMB6,251 million for the same period of the previous year, mainly due to the increase in the prices of coal and electricity and in trading volume.

Segment Results

The Group's profit before income tax in the energy segment for the year 2018 was RMB26 million, representing an increase of RMB197 million in profit from the loss before income tax of RMB171 million for the same period of the previous year, mainly attributable to the increase in the prices of coal and electricity and in trading volume.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

Corporate and Other Operating Segments

Revenue

The Group's revenue from corporate and other operating segments for the year 2018 was RMB667 million, basically flat compared with RMB645 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 2018 was RMB1,267 million, representing a decrease of RMB462 million in loss from the loss of RMB1,729 million for the same period of the previous year, mainly due to revenue resulted from stepwise acquisition of joint ventures and associates as subsidiaries during the year.

STRUCTURE OF ASSETS AND LIABILITIES

Current Assets and Liabilities

As of 31 December 2018, the Group's current assets amounted to RMB58,895 million, representing a decrease of RMB9,749 million from RMB68,644 million at the end of 2017, primarily due to that the Group strengthened capital turnover and reduced monetary capital reserves.

As of 31 December 2018, the Group's current liabilities amounted to RMB74,749 million, representing a decrease of RMB15,588 million from RMB90,337 million as the end of 2017, primarily due to decrease in short-term interest-bearing liabilities resulting from debt restructuring.

As of 31 December 2018, the current ratio of the Group was 0.79, representing an increase of 0.03 from 0.76 as of the end of 2017, and the quick ratio was 0.49, representing a decrease of 0.03 from 0.52 as at the end of 2017.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

Non-Current Liabilities

As of 31 December 2018, the Group's non-current liabilities amounted to RMB58,458 million, representing an increase of RMB14,721 million from RMB43,737 million as the end of 2017, primarily due to the optimization of the debt structure by the Group and newly-added medium- and long-term debts.

As of 31 December 2018, the debt to asset ratio of the Group was 66.3%, representing a decrease of 0.8 percentage point from 67.1% as of the end of 2017, primarily due to decrease in liabilities.

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 that financial assets and liabilities at fair value through profit or loss and equity and industrial fund investments in listed company classified as equity investments designated at fair value through other comprehensive income are accounted at fair value, others are stated at historical cost.

As of 31 December 2018, the Group's financial assets at fair value through profit or loss increased by RMB7 million as compared with the end of 2017, which was recognised as profit from fair value changes. The Group's financial liabilities at fair value through profit or loss decreased by RMB88 million as compared with the end of 2017, which was recognised as profit from fair value changes.

PROVISION FOR INVENTORY IMPAIRMENT

As of 31 December 2018, the Group assessed the net realizable value of its inventories. For the inventory relevant to aluminum products, the assessment was made on the net realizable 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 inventory and the influence of events subsequent to the balance sheet date. For the inventory held by the energy segment, the Group unanimously calculated with the most recent market price.

Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

As of 31 December 2018, the balance of provision for impairment of inventories held by the Group was RMB811 million, representing an increase of RMB354 million as compared with RMB457 million as of the end of 2017.

The Company has always adopted the same approach to determine the net realizable 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 2018, the Group's project investment expenditures (excluding equity investments) amounted to RMB9,128 million, which mainly consisted of investments in energy saving and consumption reduction, environmental governance, resources acquisition and technological research and development.

As of 31 December 2018, the Group's contracted but not provided capital commitment to fixed asset investment amounted to RMB3,943 million.


As of 31 December 2018, the Group's investment undertakings to joint ventures and associates amounted to RMB543 million, mainly comprised of the capital contributions of RMB450 million to Chinalco Overseas Development Co., Ltd. (中鋁海外發展有限公司).

CASH AND CASH EQUIVALENTS

As of 31 December 2018, the Group's cash and cash equivalents amounted to RMB19,131 million.

CASH FLOWS FROM OPERATING ACTIVITIES

For the year 2018, the Group's cash flows generated from operating activities were net cash inflows amounting to RMB13,018 million, basically the same with RMB13,206 million of net cash inflows for the same period last year.



Management's Discussion and Analysis of Financial Position and Results of Operations (Continued)

CASH FLOWS FROM INVESTING ACTIVITIES

For the year 2018, the Group's cash flows generated from investing activities were net cash outflows amounting to RMB5,528 million, basically the same with RMB5,597 million of net cash outflows for the same period of last year.

CASH FLOWS FROM FINANCING ACTIVITIES

For the year 2018, the Group's cash flows generated from financing activities were net cash outflows amounting to RMB16,266 million, representing an increase of RMB12,867 million in net cash outflows from RMB3,399 million of net cash outflows for the same period last year, mainly attributable to the increase in repayment of debts by the Company in 2018.

Report of the Board

The Board hereby submits the Report of the Board together with the audited financial statements for the year ended 31 December 2018.

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.

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”.

The Company will actively adopt various measures to avoid all types of operating risks in the course of production and operations. However, risk factors associated with the changing competition, market, economy and social environment at home and abroad may adversely affect the business, financial position and operating results of the Company, which mainly include:

1. **Market Price Risks:** The bulk commodity market price witnessed unstable fluctuation. The price of aluminum products and raw and auxiliary materials fluctuate sharply as affected by the weakened domestic market demand and the China-U.S. trade conflicts, which have material and potential impacts on the Company’s financial position and operating results.

To cope with such risks, the Company will intensify research and judgment on the market, closely follow policy and fundamental factors, adjust marketing and procurement policies in a timely manner, fully bring about the effect of supervision and control over market price risk and alert thereof, adjust its output against supply-demand relations and continuously improve its risk control capability in market price; it will further enhance the analysis of supply-side market, optimize purchase strategies, increase the centralization of the procurement for lower cost and higher benefit; meanwhile, it will reasonably make use of financial derivatives and enhances profitability from the interaction between futures and spot commodities.

2. **Safety and Environmental Risks:** More stringent requirements in relation to safety production and environmental protection ability for a company have been stipulated in the Production Safety Law of People's Republic of China, the Environmental Protection Law of People's Republic of China and Implementation Measures of Permits for Control over Pollutant Discharge. As the Company's production and operations cover coal and non-coal mines, construction, chemicals and other activities, the Company may not discover potential environmental hazards in a timely manner. Due to outdated environmental facilities in certain enterprises, any safety or environmental accident will inflict huge losses on the reputation and assets of the Company.

To cope with such risks, the Company established the Safety, Environmental Protection and Health Department (Coal Power Safety Supervision Bureau) as a functional department. On the one hand, it keeps improving management rules and assigning responsibilities in terms of safety and environmental protection. On the other hand, it screens environmental problems and actively advances environmental upgrading and transformation with investment and other departments. Meanwhile, it established a zero reporting system and pays attention to the trends in environmental protection every day.

3. **Cash Flow Risks:** Due to higher demands for capital expenditure on transformation and upgrading, cash flow is affected to certain extent. Besides, it may still fail to avoid a shortfall in cash inflow due to the influence of the national monetary policy, which may materially affect the Company's financial position.

To cope with such risks, the Company tries to control the investment size and slow down in investment progress. It formulates and strictly implements financial management measures on investment. It will also strengthen budget management, manage funds from the source, avoid large-amount or accidental expenditure out of the budget, expand financing channels, innovate financing methods and ensure capital chain safety.

Report of the Board (Continued)

4. Interest Rate Risks: Changes in interest rates will increase uncertainties in the Company's financing costs, which may in turn affect the Company's business objectives.

To cope with such risks, the Company will strengthen analysis and research in the trend of interest rate, proactively expand low-cost financing channels, optimize debt structure and reduce financial costs.

5. Information Disclosure Risks: The information disclosure risks of the Company mainly include the inaccurate, incomplete and untimely disclosure of the contents of information, which are related to the failure to provide relevant information in a timely and complete manner by business departments, the insufficient communication between business and disclosure departments or no timely confirmation with domestic and overseas lawyers of the Company. As a result, it may result in complaints from investors and inquiries and investigations by relevant regulatory authorities as it fails to disclose detailed and accurate information in a timely manner. It may require the Company to make further information disclosure, denounce or punish the Company, which will have negative effects on the image of the Company in the capital market.

To cope with such risks, the Company will organize leaders and departments of the Company to attend trainings on information disclosure rules; maintain sufficient communication with domestic and overseas legal consultants to guarantee that there are no mistakes in the contents of the announcement. The information disclosure department will remind business departments of the time for information disclosure to guarantee the timely releasing of announcements.

6. Operational Risks on Overseas Projects: They are mainly health risks of staff and exchange risks. As the Company carries out its business in remote districts in Africa and Southeast Asia where the economy and healthcare are underdeveloped, health risks of staff are rising. 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 health risks of staff, the Company has formulated logistic guarantee plans on the health and safety of overseas staff and prepared overseas safety and health systems. To cope with exchange rate risks, the Company will formulate and improve the systems and measures.

SOCIAL RESPONSIBILITY AND ENVIRONMENT PROTECTION

While enjoying the development opportunities brought by the country and society, the Company voluntarily integrates Corporate Social responsibilities (“CSR”) 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. Guided by the responsibility concept with the social responsibility view of “turning stone into gold and benefiting mankind”, the Company has incorporated social responsibility into daily corporate management systems, making the relevant departments accountable for results, and making such responsibilities part of performance appraisal criteria.

The Company set up a leadership group for CSR with Chairman of the Board of Directors as the group leader and the President as the representative of CSR management. With the guidance by the leadership group for CSR, full-time agencies are set up at the department and branch levels, making the relevant departments accountable for responsibility management in five fields: company governance, the environment, employment and employee rights, operating practices and community. In addition, management positions and liaisons for CSR are appointed to execute the Company’s CSR policies in every section of operations.

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.

Report of the Board (Continued)

The Company always prioritizes employees' safety and health, with the goal of achieving zero accident and zero damage, in order to provide a safe platform for employees to progress with dignity. We comply with 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, the Coal Mine Safety Administration Regulation, and other national production safety laws and regulations. In addition to such compliance measures, based on the Company's operation situation, we formulated the Safety Production Management Measures of Aluminum Corporation of China Limited, the Safety and Environmental Protection Responsibility Rules of Headquarters of Aluminum Corporation of China Limited, and other safety and health management rules. As early as 2004, we passed the accreditation ISO14004 environmental management system and the occupational health and safety system of OHSAS18001. 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, 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 pays close attention to the improvement of employees' safety awareness and quality, and closely supervise our employees to strictly follow effective safety and health management systems.

The Company always upholds the principle of respecting employees and equal employment. It follows a non-discriminatory labor 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 labor employment and income distribution systems, the Company aims to strengthen labor management, regulate employment activities and determine reasonable distribution of income.

The Company emphasizes talents training and succession and is committed to the "talents oriented" strategy, with a focus on career education and training. A training system that covers employees according to their ranks and professional background has been set up, along with innovative ideas of training and development and working mechanisms. The Company is determined to be a lifelong learner, with efforts to build a learning team, to cultivate and create a well-structured, professional, and innovative talent pool, thus contributing to the Company's continuous and healthy growth.

Report of the Board (Continued)

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. It has also established volunteer teams that constantly promote projects and activities to contribute to community welfare, local development and to improve local livelihoods.

In accordance with the Management Methods for Charitable Donations of Aluminum Corporation of China Limited, the Company adopted diverse approaches to poverty alleviation and applied the innovative idea into the poverty alleviation, creating an intelligent poverty alleviation mode. The Company helped people in poverty shrug off poverty and become rich through technical training, field teaching and other ways. In 2018, the funds used in poverty alleviation and other donations amounted to RMB23.684 million, representing an increase of RMB13.366 million from 2017. Details are set out as follows:

Unit: 0'000 Currency: RMB

Poverty alleviation and donation targets	Nature	Form	Amount
Changdu City, Tibet Autonomous Region	Fixed-point assistance	Cash	1,440.00
Haiyan County, Qinghai Province	Fixed-point assistance	Cash	410.00
Yangxin County, Hubei Province	Fixed-point assistance	Cash	90.00
People's Government of Qinqi Village, Weiyuan County, Gansu Province	Fixed-point poverty alleviation	Cash	12.00
Tiejiang Village, Qixian Town, Xiuwu County, Jiaozuo City	Fixed-point poverty alleviation	Cash	4.50
China-Mongolia Friendship Children's Clinic of Bayanzul District, Ulaanbaatar, Mongolia	Donation to medical and healthcare causes	Cash	100.00
Others	Other donations	Cash	311.9

Report of the Board (Continued)

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 Ministry of Environmental Protection, a number of subordinate enterprises under the Company are listed as the key monitoring entities for discharge in air, water and soil, among which 22 enterprises were included in the key monitoring entities for discharge in atmosphere, 4 enterprises were included in the key monitoring entities for discharge in water environment, 8 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 puts great 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, improves environmental management systems, increases investment in environmental protection, carries out new-tech transformation, strengthens management through eliminating 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.

The Company carried out harmless and recycling treatment to the flue gas, waste water and wastes of the aluminum industry by promoting and implementing the technical renovation projects for environmental protection. Meanwhile, it tackled the production and technical problems based on the actual production conditions of the Company.

With regard to waste gas treatment: sulfur dioxide, nitrogen oxides, and soot are the main waste gasses produced in the production process of the Company. The Company has been committed to reducing emission of waste gas through improving and innovating production process.

With regard to waste water reduction: the Company has continuously implemented circulating utilization of water resources project in alumina enterprises and electrolytic aluminum enterprises, building water circulating technological processes, including rectified circulating water, casting circulating water, air compression station circulating water, carbon technology circulating water, green anode circulating water, and alumina water. In this way, the Company has 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.

With regard to disposal of solid waste treatment: according to the related national laws and regulations, the Company classifies solid waste and regularly treats the waste. Solid waste mainly includes red mud produced in alumina production, waste in the aluminum electrolysis spent potline, packing materials used in production and transportation, fly ash produced by power plants, and domestic waste. The Company turns trash into treasure by doing research on red mud and fly ash as well as recycling and reusing packing materials, not only improving resource use efficiency, but also achieving safe treatment of solid wastes.

In 2018, the Company further carried out a comprehensive rectification of environmental protection. The Company established two harmless production lines for aluminum electrolysis spent potline through the construction of three major environmental protection projects, including the harmless treatment project of hazardous waste, clean plant construction project and green and low-carbon demonstration project; implemented rectification within a time limit and renovation under higher standards to the industrial furnaces of 7 enterprises; implemented 5 ultra-low emission renovation projects of thermal power boilers; carried out 4 rectification projects of raw fuels storage yards; carried out 4 zero-discharge renovation projects of industrial waste water; implemented 3 rainwater and sewage diversion projects, 3 comprehensive utilization projects of red mud, 1 green product development project, and 4 green mine construction and reclamation projects. The construction of these environmental protection facilities has greatly promoted the continuous improvement of the Company's ecological environment quality.

For further information on CSR and environmental protection of the Company, please refer to the 2018 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 2018 are set out in the consolidated statement of profit or loss and other comprehensive income on pages 167 to 169. A five-year financial summary of the Group is set out on pages 9 to 14.

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 provided that the earnings and accumulative undistributed dividends for the year are positive;
 - (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 are negative, the Company's profit were used in making up losses and conducted no dividend distribution in cash.

Report of the Board (Continued)

DIVIDEND

The Board did not recommend any distribution or payment of final dividend for the year ended 31 December 2018. Total dividends paid during the preceding two years are as follows:

	2018	2017
Total dividends paid: <i>(RMB million)</i>	Nil	Nil
Percentage to profits attributable to holders of the interests of the Company: <i>(%)</i>	Nil	Nil

SHARE CAPITAL

The total share capital of the Company is 14,903,798,236 shares in 2018. The Company completed the registration procedure for the additional shares in connection with acquisition of assets by issuance of shares on 25 February 2019. The total share capital of the Company was changed to 17,022,672,951 shares.

CORPORATE BONDS

The corporate bonds issued by the Company as at the end of 2018 are as follows:

Unit: RMB in '00 million

Name	Abbreviation	Code	Issue date	Maturity date	Balance	Rate <i>(%)</i>	Exchange
2016 Corporate Bonds (Tranche 16 Chalco 01) 1) privately issued by Aluminum Corporation of China Limited		135890	2016.09.23	2019.09.23	4	4.30	Shanghai Stock Exchange
2018 Corporate Bonds (Tranche 18 Chalco 01) 1) (Type 1) publicly issued by Aluminum Corporation of China Limited		143804	2018.09.14	2021.09.18	11	4.55	Shanghai Stock Exchange

Report of the Board (Continued)

Name	Abbreviation	Code	Issue date	Maturity date	Balance	Rate (%)	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

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 170 to 172 and note 45 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 (the “Articles of Association”), 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 2018, the Company had no distributable reserves.

USE OF PROCEEDS

The Company has no use of proceeds in 2018.

USE OF FUND OTHER THAN PROCEEDS

The 500,000-tonne aluminum alloy product structure adjustment, upgrade and technical innovation project of Inner Mongolia Huayun New Materials (內蒙古華雲新材料50萬噸鋁合金產品結構調整升級技術改造項目): Investment in project construction amounted to RMB6,450 million, and by the end of 2018, an aggregate of RMB5,640 million of capital expenditure had been incurred. The project has been officially put into operation.

The 400,000-tonne light alloy material project of Guangxi Hualei New Material Co., Ltd. (廣西華磊新材料有限公司40萬噸輕合金材料項目): Investment in project construction amounted to RMB5,939 million, and by the end of 2018, an aggregate of RMB5,000 million of capital expenditure had been incurred. The project has been completed and put into operation with all of the 3 units connected to the grid and started power generation by the end of 2018.

The Boffa bauxite project in Guinea with an annual capacity of 12 million tonnes: total investment in project construction amounted to US\$706 million, and by the end of 2018, an aggregate of US\$64 million of capital expenditure had been incurred. The quarry is expected to be qualified for mining by the end of 2019 and be completed and put into operation in end-March 2020.

The light alloy project of Shanxi China Huarun Co., Ltd. (山西中鋁華潤有限公司): total investment of the project amounted to RMB3,909 million, and by the end of 2018, an aggregate of RMB2,660 million of capital expenditure had been incurred. As at the end of 2018, the project was largely completed and put into operation.

Report of the Board (Continued)

The alumina project in Fangchenggang Guangxi with an annual capacity of 2 million tonnes: Investment in project construction amounted to RMB5,805 million, and by the end of 2018, an aggregate of RMB330 million of capital expenditure had been incurred. The thermoelectric and finished products warehousing area, the decomposition and sedimentation area, the evaporation and recycled water area and the fundamental civil engineering in front of plant are under construction.

PRE-EMPTIVE RIGHTS

Pursuant to the Articles of Association 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 donated approximately RMB23,684,000 during the year (2017: approximately RMB10,318,000).

LITIGATION AND CONTINGENT LIABILITIES

(a) Litigation

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

(b) Contingent Liabilities

There were no significant contingent liabilities during the year which were required to be disclosed.

DIRECTORS AND SUPERVISORS

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

Executive Directors

Lu Dongliang	Appointed on 28 June 2016
Jiang Yinggang	Re-appointed on 28 June 2016
Zhu Runzhou	Appointed on 11 December 2018

Non-executive Directors

Ao Hong	Re-appointed on 28 June 2016 (re-designated from executive Director to non-executive Director on 13 February 2018)
Wang Jun	Re-appointed on 28 June 2016

Independent Non-executive Directors

Chen Lijie	Re-appointed on 28 June 2016
Hu Shihai	Re-appointed on 28 June 2016
Lie-A-Cheong Tai Chong, David	Re-appointed on 28 June 2016

Report of the Board (Continued)

Supervisors

Ye Guohua Appointed on 11 December 2018

Shan Shulan Appointed on 20 February 2019

Wu Zuoming Appointed on 28 June 2016

Profiles of the current Directors and Supervisors are set out on pages 15 to 38.

DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS AND REMUNERATION

Pursuant to Articles 108 and 150 of the Articles of Association, 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 2018, 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 2018, 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 2018, following Director and Supervisor of the Company were 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 2018, 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 2018, 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 2018, 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 2018, the Group had 65,211 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 pension schemes regulated by various provincial and municipal governments, under which each of the Company's subsidiaries are required to contribute a percentage of its employees' salaries, bonuses and various allowances to the retirement pension fund. The percentage of the contribution in the employees' salaries is around 20%.

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.

REPURCHASE, SALE AND REDEMPTION OF THE COMPANY'S SHARES

The Company did not redeem any of its shares during 2018. Neither the Company nor any of its subsidiaries purchased or sold any of its listed securities during 2018.

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 always puts customers' interests first, 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 solution for customers, so as to create more value for them. The Company guarantees the high quality of our reliable products through the quality management system that covers the whole industrial line, including the procurement of materials, production and manufacturing, sales and services. The Company has established various channels to communicate with customers, adopted diversified online and offline communication channels to promote our products, held regular summit forums with key customers to understand customers' demands, took part in various industrial exhibitions to enhance our communication with upstream and downstream customers and consolidate our cooperation. The Company has set up a pre-sale, sale and after-sales service management system. In addition, we provide consumers with well-established channels for complaints and feedback, investigate customer satisfaction in the form of questionnaires in line with the ISO9001 management system and constantly improve service levels; after deeply understanding the demands of customers, we provide customers with comprehensive solutions including lowering the cost of procurement and enhancing coordination capacity. As a result, we largely improve 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 monthly or annual sales quantities, sales price, pricing policies, 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) supply and demand of the upstream and downstream companies at home and abroad; (ii) CIF price of imported alumina arrived at Chinese ports and import related expenses; (iii) international and domestic transportation costs of alumina; (iv) the impacts of national policy on the price of raw materials of alumina enterprises; and (v) the Company's short- and medium-term forecast for alumina prices.

Report of the Board (Continued)

The Company sells primary aluminum products to customers mainly through the following 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 2018, sales to the five largest customers of the Group amounted to RMB17,041 million and accounted for 9.45% of the Group's total annual sales, among which sales to related parties were RMB3,143 million, accounting for 1.74% of the Group's total annual sales.

2. Suppliers

The Company believes in a win-win philosophy and helps suppliers and contractors improve their environmental, social and governance level, so as fulfill environmental and social responsibilities while achieving economic benefits growth together, thereby building a sustainable supply chain. The Company formulated the Regulation for Suppliers of Aluminum Corporation of China Limited, strictly implemented access procedure for suppliers to ensure the contract performance and after-sale service abilities of suppliers; the Company established long-term and stable communication channels with suppliers, and strengthened the relationship with suppliers by various ways such as holding annual meetings with suppliers, summarizing procurement work and attending commodity fairs; the Company conducted comprehensive appraisal on suppliers and continuously followed up their products and performance, kept track of suppliers' overall strength, share of supply, execution of contract as well as awards and punishments, compiled list of excellent suppliers and removal list of suppliers according to the annual comprehensive appraisal results, and streamlined suppliers to promote effective management.

In 2018, the procurement amounts from the top five suppliers of the Group amounted to RMB15,369 million, accounting for 8.59% of the total procurement amounts, among which procurement from related parties were RMB4,226 million, accounting for 2.36% of the Group's total procurement amounts.

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 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 2018 have been reviewed by the Audit Committee of the Company.

AUDITORS

The financial statements have been audited by Ernst & Young. Ernst & Young was the auditors of the Company for its 2018 Hong Kong annual report, and it was also the auditors of the Company for its 2012, 2013, 2014, 2015, 2016 and 2017 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
28 March 2019

Report of the Supervisory Committee

Dear Shareholders,

In 2018, the Supervisory Committee of the Company proactively 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 statements, behavior of Directors, Supervisors and senior management as well as operation condition of the Company, it continually standardized its supervision-related practices and improved supervision efficiency through convening regular or irregular meetings, conducting physical investigation and other means. Such measures facilitated the transparent and standard operation of the Company and built up a positive image of the Company in the capital market. In addition, it also adopted effective measures to safeguard the interests of investors, in particular, the minority investors. The specific works are reported as follows:

I. CHANGE OF THE SUPERVISORS

The sixth session of the Supervisory Committee of the Company comprises of 3 Supervisors, including 2 shareholders representative Supervisors and 1 employee representative Supervisor. On 28 June 2016, Mr. Liu Xiangmin and Mr. Wang Jun were elected as shareholders representative Supervisors of the sixth session of the Supervisory committee of the Company at the general meeting, and Mr. Wu Zuoming was elected as an employee representative Supervisor of the sixth session of the Supervisory committee of the Company at the staff representative conference, among which Mr. Liu Xiangmin acts as the chairman of the sixth session of the Supervisory Committee.

Due to work engagement, Mr. Liu Xiangmin tendered his resignation as a Supervisor (chairman of the Supervisory Committee) on 20 November 2018. At the 2018 second extraordinary general meeting of the Company convened on 11 December 2018, Mr. Ye Guohua was elected as a shareholders representative Supervisor of the sixth session of the Supervisory Committee and the resignation of Mr. Liu Xiangmin became effective at the same time. On the same date, Mr. Ye Guohua was elected as the chairman of the sixth session of the Supervisory Committee at the fifteenth meeting of the sixth session of the Supervisory Committee.

Report of the Supervisory Committee (Continued)

Due to work engagement, Mr. Wang Jun tendered his resignation as a Supervisor of the Company on 24 December 2018. At the 2019 first extraordinary general meeting of the Company convened on 20 February 2019, Ms. Shan Shulan was elected as a shareholders representative Supervisor of the sixth session of the Supervisory Committee of the Company and the resignation of Mr. Wang Jun became effective on the same date accordingly.

II. CONVENING OF MEETINGS

In 2018, 8 meetings were held by the Supervisory Committee of the Company, of which 3 were onsite meeting, and 5 were telecommunication meetings. The particulars of which are as follows:

1. The ninth meeting of the sixth session of the Supervisory Committee of the Company was held on 22 March 2018, with all three Supervisors attending the meeting in person. The meeting considered and approved a total of five proposals in respect of the 2017 Annual Results Announcement, the 2017 Report of the Supervisory Committee, the 2017 Assessment Report on Internal Control, the 2017 Environmental, Social and Governance Report and the 2017 Special Report on the Deposit and the Actual Utilization of the Previously Raised Proceeds, etc.
2. The tenth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 17 April 2018, with all three Supervisors attending the meeting. The meeting considered and approved the 2018 First Quarterly Report of the Company.
3. The eleventh meeting of the sixth session of the Supervisory Committee of the Company was held on 30 July 2018. Mr. Wang Jun and Mr. Wu Zuoming attended the meeting while Mr. Liu Xiangmin appointed Mr. Wang Jun to vote on his behalf. The meeting considered and approved three resolutions in relation to acquisition of assets by issuance of shares by the Company.

Report of the Supervisory Committee (Continued)

4. The twelfth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 15 August 2018, with all three Supervisors attending the meeting. The meeting considered and approved the 2018 Interim Results Announcement.
5. The thirteenth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 25 October 2018, with all three Supervisors attending the meeting. The meeting considered and approved the 2018 Third Quarterly Report of the Company.
6. The fourteenth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 20 November 2018, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to Recommendation of Mr. Ye Guohua as a Candidate for Shareholders Representative Supervisor of the Company.
7. The fifteenth meeting of the sixth session of the Supervisory Committee of the Company was held on 11 December 2018, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to Election of the Chairman of the Sixth Session of the Supervisory Committee of the Company.
8. The sixteenth meeting of the sixth session of the Supervisory Committee of the Company was held by means of telecommunications on 24 December 2018, with all three Supervisors attending the meeting. The meeting considered and approved the Resolution in Relation to Nomination of Ms. Shan Shulan as a Candidate for Shareholders Representative Supervisor 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 Articles of Association of the Company and the Rules of Procedures for the Supervisory Committee Meeting of the Company.

Report of the Supervisory Committee (Continued)

III. PERFORMANCE OF THE SUPERVISORY COMMITTEE

In 2018, each member of the Supervisory Committee of the Company effectively supervised the Company's financial management, related party transactions, capital operation, investing and financing activities etc. by attending the general meeting and the Board meeting, convening the Supervisory Committee meeting, launching on-site investigation and proposing operation-related suggestion, enabling the Company to operate in a more standardized and transparent manner and further optimizing the corporate governance structure for the Company. The particulars are set out as below:

(I) Supervision of Implementation of Resolutions of the General Meetings

Members of the Supervisory Committee attended the general meetings and Board meetings as observers. No objection had been made to the reports and proposals submitted by the Board to the general meetings for consideration after exercising supervision on the relevant matters. Moreover, the Supervisory Committee exercised supervision and inspection on implementation of the general meetings' resolutions by the Board, all Directors and the senior management. The Supervisory Committee is of the opinion that the Directors and the senior management of the Company, in exercising their duties and powers, have diligently discharged their responsibilities in good faith and strictly fulfilled the resolutions passed at the general meetings in compliance with the laws and regulations.

(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 Supervisory Committee unanimously considers that the Company's operation and decision-making procedures, have complied with the relevant provisions of laws and regulations including the Company Law of the People's Republic of China and the Articles of Association of the Company; the Directors and senior management of the Company have discharged their duties according to the principle of due diligence and good faith; and it has found no violation of the laws and regulation and the Articles of Association of the Company, no authorization beyond prescribed scope or damages to the interests of the Company and the shareholders.

Report of the Supervisory Committee (Continued)

(III) Inspection of the Company's Financial Activities

The Supervisory Committee cautiously reviewed the financial statements of 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 and related party transactions. The Supervisory Committee considered that the operating results achieved by the Company were true and all the related party transactions were entered into on a fair basis. The financial reports of the Company truly reflected the financial position and operating results of the Company. 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 the all significant events of the Company in 2018 has been disclosed under the principles of truthfulness, timeliness, accuracy, completeness and fairness pursuant to relevant regulations. The Supervisory Committee approved the 2018 annual audit report of the Company as issued by Ernst & Young Hua Ming LLP and Ernst & Young.

(IV) Inspection of the Acquisitions and Disposals of the Company's Assets

During the reporting period, after reviewing the acquisitions and disposals of assets of the Company during the year, the Supervisory Committee is of the opinion that, the consideration for such acquisitions and disposals of assets conducted by the Company was fair and reasonable, without insider dealings and acts impairing the interests of the shareholders or leading to a loss in the Company's assets.

(V) Inspection of Related Party Transactions of the Company

During the reporting period, the Supervisory Committee reviewed the related party transactions conducted by the Company and its subsidiaries with its controlling shareholder Aluminum Corporation of China (中國鋁業集團有限公司) and its subsidiaries, and is of the opinion that, the procedures for entering into related party transactions were in compliance with the requirements of relevant laws and regulations and the Articles and Association of the Company and on fair and reasonable terms. The information on related party transactions was timely and sufficiently disclosed, without acts impairing the interests of the shareholders or the Company.

Report of the Supervisory Committee (Continued)

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

During the reporting period, the Supervisory Committee listened to reporting in respect of the Company's internal control and examination and fully performed its role of guidance and supervision. The Supervisory Committee reviewed "2018 Assessment Report on Internal Control of the Company" and "Draft of Directors in respect of Assessment of Internal Control of the Company", and is of the opinion that the Company has established and improved sound internal control systems applicable to the Company covering all procedures in accordance with the requirements of the "Guidelines on Internal Control for Listed Companies" and "Basic Principles of Corporate Internal Control", thereby ensuring that all business activities of the Company are carried out in a standardized and orderly manner and guaranteeing the security and integrity of the Company's assets. The Supervisory Committee is of the view that the self-assessment on the internal control of the Company is comprehensive, true and accurate in reflecting the status quo therein.

In 2019, the Supervisory Committee will continue to diligently perform the duties of the Company's standing supervisory body in accordance with the powers and responsibilities conferred by the Company Law of the People's Republic of China and other relevant laws and regulations as well as the Articles of Association of the Company and the Rules of Procedures for the Supervisory Committee meeting. The Supervisory Committee will perform the duty of supervising the Company in such aspects as operation, information disclosure, related parties transactions, financial report 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 its staff.

By Order of the Supervisory Committee

Ye Guohua

Chairman of the Supervisory Committee

Beijing, the PRC
28 March 2019

Report on Corporate Governance and Internal Control

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 Code of Conduct for Securities Dealings by Directors, Supervisors and Specific Employees and other relevant systems of the Company constitute the framework for the code on corporate governance of the Company. The Board believes that the internal corporate governance documents of the Company are more stringent than the CG Code and the Internal Control Guidelines in the following areas:

1. 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.
2. All members of the Audit Committee are independent non-executive Directors, of whom Mr. Lie-A-Cheong Tai Chong, David, the chairman of the 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 2018.

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 Listing Rules 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.

Report on Corporate Governance and Internal Control (Continued)

THE BOARD

As at the date of this report, the sixth session of the Board of the Company consists of eight Directors, with three executive Directors, namely Mr. Lu Dongliang, Mr. Jiang Yinggang and Mr. Zhu Runzhou (appointed on 11 December 2018), two non-executive Directors, namely Mr. Ao Hong (re-designated from an executive Director to a non-executive Director on 13 February 2018) and Mr. Wang Jun, and three independent non-executive Directors, namely Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David. Mr. Lu Dongliang acts as the Chairman of the Board.

Mr. Yu Dehui, the former Chairman of the Company, resigned as the Chairman and an executive Director of the Company on 21 February 2019, with effect from the same day. Mr. Liu Caiming, a former non-executive Director of the Company, resigned as a non-executive Director of the Company on 25 May 2018, with effect from the same day.

The terms of all Directors of the sixth session of the Board of the Company will end at the conclusion of the 2018 annual general meeting of the Company. As at the date of this report, the terms of the non-executive Directors are as follows:

	Commencement date	Expiry date	Whether allowed to be re-appointed upon expiry of the term
Ao Hong	28 June 2016	Date of the 2018 general meeting	Allowed to be re-appointed
Wang Jun	28 June 2016	Date of the 2018 general meeting	Allowed to be re-appointed
Chen Lijie	28 June 2016	Date of the 2018 general meeting	Allowed to be re-appointed
Hu Shihai	28 June 2016	Date of the 2018 general meeting	Allowed to be re-appointed
Lie-A-Cheong Tai Chong, David	28 June 2016	Date of the 2018 general meeting	Allowed to be re-appointed

The Board 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 due enquiry, considered that Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David were independent.

Report on Corporate Governance and Internal Control (Continued)

Each Director acted in the interests of the shareholders, and used his or her best endeavors to perform the duties and obligations in accordance with all the applicable laws and regulations. The duties of the Board include: deciding on the Company's business plans and investment proposals, formulating the Company's profit distribution and loss recovery proposals; formulating debt and finance policies, and the issue of bonds, etc.; determining plans for material acquisitions or disposals as well as mergers, demergers and dissolution of the Company; determining the Company's capital operation proposals, and implementing shareholders' resolutions, etc. Details of the functions of the Board are set out in the Articles of Association of the Company. Please refer to the "Articles of Association of Aluminum Corporation of China Limited" under "IPO Release" on the page of "Investor Relations" on the website of the Company.

The management is responsible for the daily operations and implementation of strategies of the Company. The major functions of the management include the management of the production and operation of the Company, organization and implementation of the Board's resolutions, formulation of the Company's development strategies, annual operation plans, investment plans and financial budget, formulation, organization and implementation of result and performance assessment as well as remuneration and incentives. The Board regularly reviewed the functions delegated to the management and their performance to safeguard the Group's overall interests. The management of the Company reported the execution of the resolutions of the general meeting and of the Board meetings, the signing and performance of major contracts of the Company as well as utilization of capital and profit and loss to the Board or the Supervisory Committee.

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 (including independent non-executive Directors), and fully understood their opinions and advices on the operation of the Company and the work of the Board.

Pursuant to Rule 3.10(1) of the Hong Kong Listing Rules, every board of a listed issuer must include at least three independent non-executive Directors. In 2018, the Board of the Company was comprised of three independent non-executive Directors, namely Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David. The three existing independent non-executive Directors of the Company are independent. They are professionals with profound knowledge and extensive experience in the respective fields of legal, energy sources, business management, finance and accounting. They have diligently provided the Company with professional advice with respect to the steady operation and development of the Company to protect the interests of the Company and its shareholders.

Report on Corporate Governance and Internal Control (Continued)

During the year, none of the independent non-executive Directors of the Company raised any objection to the resolutions proposed at Board meetings or other matters which are not Board resolutions. 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 2018.

In 2018, 18 meetings were held by the Board of the Company with 79 resolutions being considered and approved, of which 9 were physical meetings with 67 resolutions being considered and approved and 9 were telecommunication meetings with 12 resolutions being considered and approved. The resolutions cover regular reports of the Company, annual corporate social responsibility report, assessment report on internal control for the year, proposal for making up loss for the year, production plan and financial budget, issue of debt financing instruments, provision of guarantees for subsidiaries, annual target remuneration for the Company's Directors, Supervisors and senior management, re-appointment of auditors, appointment and dismissal of senior managements, connected transactions and acquisition and disposal of equity interests or assets and other capital operation projects, etc.

The attendance of all Directors in the 18 Board meetings held in 2018 is as follows:

Name of Director	Required attendance at physical meetings		Attendance rate of physical meetings		Required attendance at telecommunication Board meetings		Attendance rate of telecommunication meetings		Required Attendance at general meetings		Attendance rate of general meetings	
		Actual attendance				Actual attendance				Actual attendance		
Yu Dehui (resigned)	9	5	55.56%	9	9	100%	3	2	66.67%			
Ao Hong	9	8	88.89%	9	9	100%	3	3	100%			
Liu Caiming (resigned)	2	0	0%	3	3	100%	0	0	-			
Lu Dongliang	9	9	100%	9	9	100%	3	3	100%			
Jiang Yinggang	9	7	77.78%	9	9	100%	3	2	66.67%			
Zhu Runzhou	2	2	100%	0	0	-	1	1	100%			
Wang Jun	9	9	100%	9	9	100%	3	3	100%			
Chen Lijie	9	8	88.89%	9	9	100%	3	3	100%			
Hu Shihai	9	7	77.78%	9	9	100%	3	2	66.67%			
Lie-A-Cheong Tai Chong, David	9	9	100%	9	9	100%	3	3	100%			

Report on Corporate Governance and Internal Control (Continued)

Note 1: Attendance by proxies hasn't been accounted into the actual attendance and the attendance rate.

Note 2: As the 2018 first extraordinary general meeting, the 2018 first A shareholders class meeting and the 2018 first H shareholders class meeting were all held on 17 September 2018, such meetings were counted as one meeting.

Note 3: As Mr. Liu Caiming resigned as a Director of the Company on 25 May 2018, he did not attend the general meeting of the Company for 2018.

Note 4: Mr. Zhu Runzhou, as a candidate for the Director, attended the 2018 second extraordinary general meeting of the Company held on 11 December 2018.

CHAIRMAN AND CHIEF EXECUTIVE PRESIDENT

In order to ensure a balance of power and authority and avoid undue concentration of power, the Company set up two explicit defined positions of the Chairman and President with clear scope of official duty, so as to improve independence, accountability and responsibility. From the beginning of the reporting period to the date of this annual report, the position of Chairman has been assumed by Mr. Yu Dehui (resigned on 21 February 2019) and Mr. Lu Dongliang (appointed on 21 February 2019), the position of President has been assumed by Mr. Ao Hong (resigned on 13 February 2018), Mr. Lu Dongliang (appointed on 13 February 2018 and resigned on 21 February 2019) and Mr. He Zihui (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 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 of the Company.

Report on Corporate Governance and Internal Control (Continued)

The arrangements and agendas of the Board meetings were provided to all Directors in advance to ensure that they had the opportunity to propose matters to be discussed at the meetings. For each Board meeting, notice of the meeting and relevant documents about the proposals were given to the Directors in accordance with the time stipulated in the Articles of Association, which gave them sufficient time to review each of the proposals.

The Board shall supervise and review the implementation of resolutions of the Board meetings by the Company's management on a regular basis, and report any progress of material matters to all Directors.

The total pretax remuneration received by Directors from the Company, including the basic salary, performance-linked salary, incentive-linked salary and discretionary bonus of the Directors in 2018 amounted to RMB2.10 million, among which independent non-executive Directors are only entitled to receive director's fees but not 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 2018, no stock appreciation rights scheme had been adopted by 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 to ensure that they are notified of the Company's and the industry's affairs on a timely basis. It also maintained effective communications with shareholders by appropriate means to ensure that their views reach the Board. The Board Office sent Directors' Newsletter (《董事通訊》) to the Directors every month to inform the Directors about the latest information and brief of the current status and development of the industry and the Company. The Board Office also checked the latest amendments of the laws, regulations and regulatory rules of securities from time to 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. In addition, all Directors have participated in or educated themselves about continuous professional trainings with relevance to their roles and duties in 2018 to develop and refresh their knowledge and skill to ensure that they continue to make relevant contribution to the Board with comprehensive information.

Report on Corporate Governance and Internal Control (Continued)

The training received by each Director in 2018 is as follows:

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

Note:

- A. Training for Directors, Supervisors and senior management organized 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;

Report on Corporate Governance and Internal Control (Continued)

- (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 2018. It convened three general meetings and eighteen 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 supervise 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. As at the date of this report, the Audit Committee 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.

A total of 10 meetings were held by the Audit Committee of the Board of the Company in 2018. Ms. Chen Lijie, Mr. Hu Shihai and Mr. Lie-A-Cheong Tai Chong, David had attended all the meetings of the Audit Committee (including attendance by proxies). The validity of the meetings was in compliance with the relevant requirements of the "Detailed Implementation Rules for the Audit Committee under the Board of Aluminum Corporation of China Limited (《中國鋁業股份有限公司董事會審核委員會工作細則》)". The meetings considered various important issues of the Company such as the periodic financial reports, internal control, risk management, internal and external auditing, anti-fraud and related party transactions, etc.

Report on Corporate Governance and Internal Control (Continued)

Details of the Audit Committee meetings were recorded by a designated person with signatures of all members as confirmation, and all resolutions passed at each meeting were recorded and filed in accordance with relevant rules. Members of the committee performed their duties diligently and seriously and provided opinions and recommendations in relation to the financial reports, internal control, risk management, audit and related parties transactions of the Company from an independent and impartial perspective.

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 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 the year.

REMUNERATION COMMITTEE

During the reporting period, the Remuneration Committee 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, and one non-executive Director, Mr. Liu Caiming (Mr. Liu Caiming resigned on 25 May 2018). Mr. Hu Shihai serves as the chairman of the committee.

Duties of the Remuneration Committee 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 of senior management, performance assessment procedures and relevant rewards and punishments, 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; and other functions and authorities delegated by the Board.

Report on Corporate Governance and Internal Control (Continued)

In 2018, Remuneration Committee of the Board convened one meeting and all the members of the Remuneration Committee attended the meeting. Two resolutions were considered and approved at the above meeting, which were the “Proposal regarding the Formulation of the Target Remuneration of the Directors and Supervisors of the Company in 2018” and “Proposal regarding the Formulation of the Target Remuneration of Senior Management in 2018”. Both proposals were approved and passed by way of resolutions at the meeting.

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, employee representative Supervisors and senior management to the Board.

Minutes of each meeting of the Remuneration Committee were recorded by a designated person and signed by all members of the committee, and all items passed at each meeting were recorded, filed and kept in reserve in accordance with relevant rules.

NOMINATION COMMITTEE

During the reporting period, the Nomination Committee 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, one executive Director, Mr. Yu Dehui (resigned on 21 February 2019), and one non-executive Director, Mr. Ao Hong. Mr. Yu Dehui serves as the chairman of the committee.

Duties of the Nomination Committee 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; and other functions and authorities delegated by the Board.

Report on Corporate Governance and Internal Control (Continued)

The procedures for appointment of a new Director of the Company are: the Nomination Committee of the Board nominates a Director candidate (For any Director candidate nominated by the Supervisory Committee or shareholders separately or jointly holding 3 percent or more of the Company's shares carrying voting rights pursuant to the Articles of Association, the Nomination Committee shall review the qualifications of such Director candidate) for consideration and approval by the Board, which is then put forward for election at a general meeting. The Nomination Committee adopted the policy of diversification for new members of the Board in the Code on Corporate Governance, which took effect from 1 September 2013 when it selected Director candidates. The Nomination Committee shall ensure the balance of skills, experience and viewpoints in the Board, which is necessary for the need of the Company's business. The committee shall select candidates on the basis of a series of diversified criteria, including but not limited to gender, age, cultural and educational background, profession and other experience, skills and knowledge.

Five meetings were held in total by the Nomination Committee of the Board in 2018, and all the members of the committee attended the said meeting. The meeting considered the Proposal Regarding the Nomination of Candidates for Director and Senior Management, which was approved and passed by way of resolution at the meeting.

Minutes of each meeting of the Nomination Committee were signed by all members of the committee and filed and kept in reserve.

DEVELOPMENT AND PLANNING COMMITTEE

During the reporting period, the Development and Planning Committee of the Board of the Company consists of one independent non-executive Director, Mr. Hu Shihai, two executive Directors, namely Mr. Yu Dehui (resigned on 21 February 2019) and Mr. Jiang Yinggang, and one non-executive Director, Mr. Ao Hong. Mr. Yu Dehui 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, capital expenditure budget, investment, business operation and strategic plan of annual investment returns.

Only one meeting was held by the Development and Planning Committee of the Board in 2018, and all the members of the committee attended the said meeting. The meeting considered the production guidance plan for 2018, the capital expenditure plan for 2018 and the operating plan for 2018.

OCCUPATIONAL HEALTH AND SAFETY AND ENVIRONMENT COMMITTEE

During the reporting period, the Occupational Health and Safety and Environment Committee of the Board of the Company consists of one non-executive Director, namely Mr. Wang Jun, and two executive Directors, namely, Mr. Lu Dongliang and Mr. Jiang Yinggang. Mr. Jiang Yinggang serves as the chairman of the committee.

Duties of the Occupational Health and Safety and Environment Committee 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.

One meeting was held by the Occupational Health and Safety and Environment Committee in 2018, and all members of the Committee were present at the meeting, at which the safety and environmental protection work plan for 2018 was considered and approved.

SUPERVISORY COMMITTEE

The Supervisory Committee is responsible for supervising the Board and its members and senior management, in order to prevent them from abusing their authorities and violating the legitimate interests of shareholders, the Company and its staff.

During the reporting period, the sixth session of the Supervisory Committee of the Company consists of three Supervisors, including two shareholder representative Supervisors, namely Mr. Liu Xiangmin (resigned on 11 December 2018 and Mr. Ye Guohua was appointed as a Supervisor of the Company on the same day) and Mr. Wang Jun (resigned on 20 February 2019, and Ms. Shan Shulan was appointed as a Supervisor of the Company on the same day), and one employee representative Supervisor, namely Mr. Wu Zuoming. Mr. Liu Xiangmin served as the chairman of the Supervisory Committee (after the resignation of Mr. Liu Xiangmin, Mr. Ye Guohua was elected as the chairman of the Supervisory Committee).

Report on Corporate Governance and Internal Control (Continued)

A total of 9 meetings were held by the Supervisory Committee of the Company in 2018, of which three were physical meetings and six were written ones, considered and approved fourteen resolutions, including the regular reports of the Company, annual report of the supervisory committee, annual report of internal control, annual corporate social responsibility report, nomination of candidates for Supervisors, election of the chairman of the Supervisory Committee and change of accounting policy, etc.

During this year, the Supervisory Committee performed its duties diligently with good faith in accordance with the terms of reference prescribed by the Company Law of the People's Republic of China and other laws and regulations and the Articles of Association of Aluminum Corporation of China Limited. It attended the general meetings and Board meetings as observers. Focusing on finding ways to adapt to the changes arising from the continuous development of the Company, enhance the Company's operational transparency and standardization, build a credible image in the capital market, in particular to adopt effective measures to protect the interests of investors, especially the interests of minority investors, the Supervisory Committee received and considered reports relating to the Company's production, operation, investment and finance etc., supervised the decision making process of the material decisions of the Company and strived to protect the interests of shareholders and the Company.

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 Board and the shareholders of the Company. Therefore, the Company attaches great importance to such meetings. During the reporting period, the Company convened a total of three general meetings, one A shareholders class meeting and one H shareholders class meeting, namely 2017 annual general meeting of the Company held on 26 June 2018, 2018 first extraordinary general meeting of the Company, 2018 first A shareholders class meeting and 2018 first H shareholders class meeting held on 17 September 2018 and 2018 second extraordinary general meeting of the Company held on 11 December 2018. The meetings mentioned above were held in the Company's conference room at No. 62, North Xizhimen Street, Beijing.

Report on Corporate Governance and Internal Control (Continued)

A total of 41 resolutions were considered and approved at the above meetings, including the annual report of the Board, the annual report of Supervisory Committee, the audited financial report, annual proposal for making up loss, annual financing plan, issue of debt financing instruments, re-appointment of auditors, provision of guarantees, acquisition of assets by issuance of shares, connected transactions constituted by 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, 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. Shareholder 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, 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 Company Secretary by written request ten working days prior to the relevant general meeting. The contact information of the Company Secretary is set out in the section entitled "Inquiry to the Board" in this chapter. Shareholder should follow the Rules of Procedures for the Shareholders' Meeting of Aluminum Corporation of China Limited as set out in the "IPO Release" under the section of "Investors Relations" on the website of the Company.

Report on Corporate Governance and Internal Control (Continued)

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

Mr. Zhang Zhankui, the Company Secretary (Secretary to the Board) (resigned on 20 February 2019), is a full-time staff of the Company. He 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. In 2018, Mr. Zhang Zhankui completed not less than 15 hours of relevant professional trainings, and completed the training of the strengthening and continuous professional development courses provided by associated members of the Hong Kong Institute of Chartered Secretaries (HKICS).

Mr. Zhang Zhankui resigned as the chief financial officer and the Company Secretary (Secretary to the Board) on 20 February 2019, and Mr. Wang Jun was appointed by the Board as the chief financial officer and the Company Secretary (Secretary to the Board) on the same day.

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.



Report on Corporate Governance and Internal Control (Continued)

Since 2018, facing the downward pressure from the capital market and aluminum industry stock prices, the Company continued to strengthen communications with investors in all dimensions through multiple channels. To fully maintain the capital market's confidence in the Company, it actively delivered positive information to the capital market, such as continuous improvement in the Company's operating results, constantly enhanced cost competitiveness, declining gearing ratio, accelerating pace of transformation and upgrade, breakthroughs in high-quality development and new chapter in overseas development. In 2018, the Company received 304 visits from 47 batches of institutional investors and analysts, including the world's leading investment banks, and held four results presentations, attracting 353 investment institutions and 474 investors or analysts. In April and August 2018, teams led by the senior management of the Company carried out roadshows in Hong Kong, Singapore, Europe and major domestic cities, respectively, during which a total of 130 investor meetings were held with about 468 investors. Thanks to these efforts, the Company was highly appraised by both domestic and overseas investors. Moreover, the Company also organized investors to visit its subordinate enterprises, enabled them to directly and fully understand such enterprises, and further enhanced their impression on the Company's transformation and upgrade as well as high-quality and diversified development, which deeply impressed investors. In the second half of 2018, a number of domestic and foreign institutions gave a "Buy" rating on the Company.

In recent years, the Company gained recognition from both domestic and overseas capital markets through adopting a series of measures to improve its operation and communication with domestic and foreign investors in an open, transparent and efficient way. Chalco was honored as the "2018 All-Asia Most Honored Company on Corporate Governance" in the highly influential annual selection in the international capital market organized by Institutional Investor, an international authoritative finance magazine. It was also awarded the "Gold Wing Awards—Most Valuable Hong Kong Listed Company under Stock Connect" by Securities Times. Besides, the Company's chief financial officer and the Secretary to the Board was granted the "Golden Bauhinia" – Best CFO of Listed Company Award and ranked among the "Best CFO" list in Asian basic materials industry once again.

CORPORATE GOVERNANCE AND INTERNAL CONTROL

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.

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. 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 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 Representative for the Company's securities related affairs, 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 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; Secretary to the Board (Company Secretary) 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 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 annual information disclosure and includes the assessment results in the assessment report on internal control of the Company.

Report on Corporate Governance and Internal Control (Continued)

Meetings of the Management

The management is responsible for the implementation of the Board resolutions for the Company and the organization of relevant operation and management activities. As and when required, the management convened president meetings which are chaired by the president and attended by the management personnel, and the presidential office meetings which are chaired by the senior management with attendants including department heads from the Company's headquarters. The Company's operation, implementation of investment projects and financial issues were considered and determined at such meetings. The Company's management including managers from branches, subsidiaries, associated companies and department heads from the headquarters convened annual, interim and monthly work meetings in order to summarize and arrange works on a yearly, half yearly and monthly basis. The meetings have facilitated the organization, coordination, communication and supervision on the commencement and implementation of the Company's various operations.

Risk Management and Internal Control

The objectives of risk management and internal control are to give a reasonable assurance that the Company's 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.

Report on Corporate Governance and Internal Control (Continued)

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 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 2018, 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.

Report on Corporate Governance and Internal Control (Continued)

The Audit Committee conducts two reviews over the risk management and internal control of the Company on an annual basis. On 13 March 2018, at the 12th 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 2017 and its results as well as the work plan for 2018, approved resolutions including resolution in relation to the 2017 Internal Control Work Report, the 2017 Assessment Report on Internal Control, the 2017 Auditing Report on Internal Control and the 2018 Comprehensive Risk Management Report. On 10 August 2018, at the 16th meeting of the Audit Committee under the sixth session of the Board of the Company, the Audit Committee reviewed the progress of the assessment on internal control for the first half of 2018 and the work arrangement for the second half of the year. The Audit Committee under the Board reported the abovementioned work to the Board. On 22 March 2018, at the 21st meeting of the sixth session of the Board of the Company, the 2017 Assessment Report on Internal Control, the 2017 Auditing Report on Internal Control and the 2018 Comprehensive Risk Management Report were considered and approved.

On 27 March 2019, at the 23rd meeting of the Audit Committee under the sixth session of the Board of the Company, the Audit Committee considered and approved 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, which were also considered and approved at the 41th meeting of the sixth session of the Board of the Company held on 28 March 2019. According to such reports, 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 2017 annual general meeting of the Company held on 26 June 2018, Ernst & Young Hua Ming LLP and Ernst & Young (collectively "Ernst & Young") were reappointed as the 2018 domestic and international auditors of the Company.

Report on Corporate Governance and Internal Control (Continued)

In 2018, Ernst & Young Hua Ming LLP and Ernst & Young received total emoluments of RMB22,720,000 for audits under PRC and international standards as well as internal control audits, and others payments amounting to RMB3,979,000 for other audit and non-audit services for other projects.

Services provided by Ernst & Young in 2018 for other projects mainly include: the issuance of audit reports in respect of internal equity transactions of the Company which involves its subsidiaries; the audit on pro forma statements for the transaction in respect of the introduction of third-party investors for capital contribution to certain affiliated enterprises and issuance of comfort letters in respect of the indebtedness statement and income valuation set out in the circular for the transaction; the issuance of comfort letters on the earnings estimates and indebtedness statement set out in the circular for the Company's Guinea investment project; the professional services regarding the content of the circular concerning the public issuance of senior debentures by Chalco Hong Kong; the issuance of comfort letters on the valuation method for the equity and assets of the carbon enterprises acquired by the Company; tax advisory services for the Company's investment.

DIRECTORS' AND AUDITORS' ACKNOWLEDGMENT

All Directors acknowledged their responsibility for preparing the accounts for the year ended 31 December 2018. Auditor's reporting responsibilities are set out in the independent auditor's report on page 155 to 163.

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 and the standards developed by NYSE, as follows:

Report on Corporate Governance and Internal Control (Continued)

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. The Board of the Company currently comprises three independent Directors and five 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 as at the date of this report.

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 charter. 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.

Significant Events

1. CORPORATE GOVERNANCE

The Company has strictly complied with the requirements of the Company Law of the People's Republic of China, 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 (the "Shanghai Stock Exchange Listing Rules") and Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (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 2018, except as disclosed on page 122 note 10. EXPLANATION OF OTHER SIGNIFICANT EVENTS, the Company had no material acquisition required to be disclosed.

3. TRUST ARRANGEMENT

In 2018, the Company had no trust arrangement required to be disclosed.

4. SUB-CONTRACTING

In 2018, the Company had no sub-contracting arrangement required to be disclosed.

5. CHARGE AND PLEDGES

As at 31 December 2018, the Group charged and pledged assets with a total amount of RMB6,738 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

As at 31 December 2018, the Company's external guarantee balance (excluding guarantee provided to subsidiaries) amounted to approximately RMB12 million and guarantee provided to subsidiaries amounted to approximately RMB12,860 million, details of which are as follows:

On 25 December 2006, Chalco Ningxia Energy Group Co., Ltd. (中鋁寧夏能源集團有限公司) (hereinafter referred to as "Ningxia Energy") 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 then 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 2018, the balance of the guarantee provided by Ningxia Energy in proportion to its shareholding amounted to RMB12 million.

As of 31 December 2018, the balance of the guarantee provided between Ningxia Energy, a controlled subsidiary of the Company and its subsidiaries mutually amounted to RMB2,870 million.

Significant Events (Continued)

In October 2016, Chalco Hong Kong Limited (hereinafter referred to as “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 2018, Chalco Hong Kong Investment Company Limited had outstanding senior perpetual bonds of USD900 million (equivalent to approximately RMB6,120 million) which were guaranteed by Chalco Hong Kong and its certain subsidiaries.

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 Aluminum Co., Ltd. (貴州華錦鋁業有限公司) (hereinafter referred to as “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 2018, the balance of guarantee provided by the Company amounted to RMB6 million.

In April 2015, the Company entered into a guarantee contract with the JIC Leasing (Shanghai) Co.,Ltd., pursuant to which the Company would provide guarantee in respect of its finance lease of up to RMB500 million in total in proportion to its 60% shareholding for 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 2018, the balance of guarantee provided by the Company in proportion to its shareholding amounted to RMB114 million.

In March 2017, Baotou Aluminum Co., Ltd. (hereinafter referred to as “Baotou Aluminum”) 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 banking facilities up to RMB2,000 million in total for its controlled subsidiary Inner Mongolia Huayun New Materials Co., Ltd.(內蒙古華雲新材料有限公司) (hereinafter referred to as “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 2018, the balance of guarantee provided by Baotou Aluminum to Inner Mongolia Huayun amounted to RMB1,600 million.



Significant Events (Continued)

In April 2018, Shandong Huayu Alloy Materials Co., Ltd. (hereinafter referred to as “Shandong Huayu”) 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) (hereinafter referred to as “Yixing Carbon”). As of 31 December 2018, the balance of guarantee provided by Shandong Huayu to Yixing Carbon amounted to RMB100 million.

In December 2018, Shandong Huayu entered into a guarantee contract with Jinan Branch of the Bank of Beijing, pursuant to which Shandong Huayu would provide guarantee in respect of a loan of RMB50 million for its controlled subsidiary Yixing Carbon. As of 31 December 2018, the balance of guarantee provided by Shandong Huayu to Yixing Carbon amounted to RMB50 million.

In October 2018, China Aluminum Logistics Group Corporation Co., Ltd (hereinafter referred to as “Chalco Logistics”) 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) (hereinafter referred to as “Central Port”). As of 31 December 2018, the balance of guarantee provided by Chalco Logistics to Central Port amounted to RMB1,000 million.

In August 2018, China Aluminum International Trading Co., Ltd. (hereinafter referred to as “Chalco Trading”) entered into a guarantee contract with the Dalian Commodity Exchange, pursuant to which Chalco Trading would provide guarantee of RMB1,000 million for its controlled subsidiary Chalco Inner Mongolian International Trading Co., Ltd. (中鋁國際貿易有限公司) (hereinafter referred to as “Inner Mongolian Trading”). As of 31 December 2018, the balance of guarantee provided by Chalco Trading to Inner Mongolian Trading amounted to RMB1,000 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 15 to the financial statements.

8. PERFORMANCE OF UNDERTAKINGS

In 2018, 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 2018, the Company and its Directors, Supervisors, senior management, shareholders, and de facto controllers were not under any investigation, administrative punishment, and public criticism from CSRC and public censures from stock exchanges.

10. EXPLANATION OF OTHER SIGNIFICANT EVENTS

Progress on the Acquisition of Assets by Issuance of Shares and the Related-Party Transaction of the Company

As the Company was planning a material matter, the trading in the A shares of the Company had been suspended with effect from 12 September 2017, and the Company started the procedures for suspension of trading in respect of the material assets reorganization since it related to assets acquisition by issuance of shares on 26 September 2017. On 31 January 2018, the Company convened the nineteenth meeting of the sixth session of the Board of the Company, at which the Resolution in relation to 'the Plan for the Acquisition of Assets by Issuance of Shares and the Related-Party Transaction of Aluminum Corporation of China Limited*' and its Summary (《關於<中國鋁業股份有限公司發行股份購買資產暨關聯交易預案>及其摘要的議案》) and other resolutions in relation to acquisition of assets by issuance of shares were considered and approved, pursuant to which, the Company proposed to acquire 30.80% equity interests in Chalco Shandong Co., Ltd.* (中鋁山東有限公司), 25.67% equity interests in Baotou Aluminum Co., Ltd.* (包頭鋁業有限公司), 81.14% equity interests in Chalco Mining

Significant Events (Continued)

Co., Ltd.* (中鋁礦業有限公司) and 36.90% equity interests in Chalco Zhongzhou Aluminum Co., Ltd.* (中鋁中州鋁業有限公司) (collectively "Target Equity") jointly held by 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 Cinda Asset Management Co., Ltd.* (中國信達資產管理股份有限公司), China Pacific Life Insurance Co., Ltd.* (中國太平洋人壽保險股份有限公司), 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) (collectively "Counterparties") by issuance of ordinary A shares. The pricing benchmark date for the acquisition of assets by issuance of shares was the announcement date of the Board (namely the nineteenth meeting of the sixth session of the Board) resolution, on which the transaction was considered by the Company for the first time. The issue price shall be no less than 90% of the average transaction price of the shares during the 60 trading days prior to the date of announcement of the first Board resolution, being RMB6.00 per share.

On 7 February 2018, the Company received the Letter of Inquiry Regarding Information Disclosure of Issuance of Shares for Assets Acquisition and Related-Party Transaction Plan of Aluminum Corporation of China Limited* (Shang Zheng Gong Han [2018] No. 0161) (《關於對中國鋁業股份有限公司發行股份購買資產暨關聯交易預案信息披露的問詢函》(上證公函[2018]0161號)) from the Shanghai Stock Exchange. On 24 February 2018, the Company disclosed the Reply on 'Letter of Inquiry Regarding Information Disclosure of Issuance of Shares for Assets Acquisition and Related-Party Transaction Plan of Aluminum Corporation of China Limited*' from the Shanghai Stock Exchange by Aluminum Corporation of China Limited* and Informative Announcement on Resumption of Trading (《中國鋁業股份有限公司關於上海證券交易所〈關於對中國鋁業股份有限公司發行股份購買資產暨關聯交易預案信息披露的問詢函〉的回復及股票複牌提示性公告》). Upon application to the Shanghai Stock Exchange, the trading of A shares of the Company was resumed on 26 February 2018.

Significant Events (Continued)

On 30 July 2018, the Company convened the twenty-ninth meeting of the sixth session of the Board, at which the Resolution in relation to the 'Report on the Assets Acquisition by Issuance of Shares and Related-Party Transaction of Aluminum Corporation of China Limited* (Draft)' and its Summary (《關於<中國鋁業股份有限公司發行股份購買資產暨關聯交易報告書(草案)>及其摘要的議案》) and other resolutions in relation to acquisition of assets by issuance of shares were considered and approved. According to the valuation result of the Target Equity, the Company, upon calculation, determined to issue an additional 2,118,874,715 A shares to 8 Counterparties for acquisition of the Target Equity held by them. Set out below are details of the number of shares to be issued to each of the Counterparties:

Counterparties	Number of shares <i>(0'000 shares)</i>
Huarong Ruitong Equity Investment Management Co., Ltd.*	84,160.0264
China Life Insurance Company Limited*	67,188.2629
Shenzhen Zhaoping Chalco Investment Center LLP*	25,239.2929
China Cinda Asset Management Co., Ltd.*	8,420.3869
China Pacific Life Insurance Co., Ltd.*	8,398.3992
BOC Financial Asset Investment Co., Ltd.*	8,402.7974
ICBC Financial Asset Investment Co., Ltd.*	6,718.7440
ABC Financial Asset Investment Company Limited*	3,359.5618
Total	211,887.4715

On 14 September 2018, the Company received the Reply on Matters Related to Assets Restructuring of Aluminum Corporation of China Limited* (GZCQ [2018] No. 642) (《關於中國鋁業股份有限公司資產重組有關問題的批復》(國資產權[2018]642號)) from the SASAC, pursuant to which, the overall plan for the acquisition of assets by issuance of shares of the Company was in principle approved.

Significant Events (Continued)

On 17 September 2018, the Company convened the 2018 first extraordinary general meeting, the 2018 first A shareholders class meeting and the 2018 first H shareholders class meeting, at which, the Resolution in relation to the Assets Acquisition by Issuance of Shares by the Company and the Related-Party Transaction Plan (《關於公司發行股份購買資產暨關聯交易方案的議案》), the Resolution in relation to the 'Report on the Assets Acquisition by Issuance of Shares and Related-Party Transaction of Aluminum Corporation of China Limited* (Draft) and its Summary' (《關於<中國鋁業股份有限公司發行股份購買資產暨關聯交易報告書(草案)及其摘要>的議案》) and other resolutions in relation to acquisition of assets by issuance of shares were considered and approved.

On 28 September 2018, the Company received the CSRC's Acceptance Notice of the Application for Administrative Permission (No. 181502) (《中國證監會行政許可申請受理通知書》(181502號)) issued by CSRC, and CSRC decided to accept the application for the administrative permission in respect of the Application for Approval of Listed Company Assets Acquisition by Issuance of Shares of Aluminum Corporation of China Limited* (《中國鋁業股份有限公司上市公司發行股份購買資產核准》) submitted by the Company. On 25 October 2018, the Company received the Notice Regarding CSRC's First Feedback on the Review of Administrative Permission Items (No. 181502) (《中國證監會行政許可項目審查一次反饋意見通知書》(181502號)) (the "Feedback") issued by CSRC, in which the Company was required to provide written statements and explanations on the relevant issues. On 8 November 2018, the Company disclosed the Reply to the First Feedback on Acquisition of Assets by Issuance of Shares and Related-party Transaction by Aluminum Corporation of China Limited* (《中國鋁業股份有限公司關於發行股份購買資產暨關聯交易之一次反饋意見回復》) and submitted the reply materials in respect of the Feedback to CSRC. On 20 November 2018, the Listed Company Merger and Reorganization Vetting Committee of CSRC held the 59th working meeting of the Merger and Reorganization Vetting Committee for 2018, at which the acquisition of assets by issuance of shares and the related-party transaction of the Company was approved unconditionally and the trading of A shares of the Company was suspended on that day. On 18 December 2018, the Company received the Reply on Approving the Acquisition of Assets by Aluminum Corporation of China Limited* through 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 CSRC.

Significant Events (Continued)

On 20 February 2019, the transfer and the formalities concerning the industrial and commercial registration for the changes of the Target Equity were completed. On 25 February 2019, the procedures for the registration of the new shares for acquisition of assets by issuance of shares by the Company with Shanghai Branch of China Securities Depository and Clearing Corporation Limited were completed. Accordingly, the acquisition of assets by issuance of shares by the Company was completed.

For details of the aforesaid matters, please refer to the relevant announcements issued by the Company.

Investment in Boffa Bauxite Project in Guinea by the Company

On 17 May 2018, the Resolution in relation to the Proposed Investment in the Construction of Boffa Bauxite Project in Guinea by the Company and the Signing of 'the Boffa Project Mining Convention' (《關於公司擬投資建設幾內亞Boffa鋁土礦項目暨簽署<Boffa項目礦業協議>的議案》) was considered and approved at the twenty-third meeting of the sixth session of the Board of the Company, pursuant to which, the Board approved the Company to invest in the construction of Boffa bauxite project in Guinea through Chalco Hong Kong, its wholly-owned subsidiary. The total investment in the construction of the project is approximately US\$706 million. It is estimated that the total capital to be contributed by the Company in cash will be not more than US\$163.8 million. On 8 June 2018, Chalco Hong Kong and Chalco Guinea Company S.A. ("Mining Company") entered into the mining convention with conditions precedent with the Guinean Government. The aforesaid matter was considered and approved at the 2017 annual general meeting of the Company convened on 26 June 2018.

For details of the aforesaid matter, please refer to the announcement dated 17 May 2018, and the announcement and the supplemental circular dated 10 June 2018 of the Company.

Merger and Reorganization of Chalco Zunyi Alumina Co., Ltd. and Zunyi Aluminum Co., Ltd.

On 21 June 2018, the Resolution in Relation to the Proposed Merger and Reorganization of Chalco Zunyi Alumina Co., Ltd. and Zunyi Aluminum Co., Ltd. by the Company was considered and approved at the twenty-sixth meeting of the sixth session of the Board of the Company. To carry out the merger and reorganization, the Company would make a capital contribution with the appraised net assets of Chalco Zunyi Alumina Co., Ltd. (“Zunyi Alumina”) of approximately RMB2,311 million into Zunyi Aluminum. Upon the completion of capital contribution, the shareholding of the Company in Zunyi Aluminum was increased to 67.445%. On 29 June 2018, the Company entered into the joint venture contract with the other shareholders of Zunyi Aluminum.

For details of the aforesaid matter, please refer to the announcements of the Company dated 21 June 2018 and 29 June 2018, respectively.

Conversion of Lanzhou Branch of Aluminum Corporation of China Limited into a Subsidiary

On 17 September 2018, the Resolution in Relation to the Proposed Conversion of Lanzhou Branch of Aluminum Corporation of China Limited into a Subsidiary by the Company was considered and approved at the thirty-first meeting of the sixth session of the Board of the Company. To carry out the conversion, the Company would make a capital contribution with the appraised net assets of Lanzhou Branch of Aluminum Corporation of China Limited of RMB1,492,124,200 into Gansu Aluminum Electricity, a wholly-owned subsidiary of the Company.

For details of the aforesaid matter, please refer to the announcement of the Company dated 17 September 2018.

Significant Events (Continued)

Conversion of Liancheng Branch of Aluminum Corporation of China Limited into a Subsidiary

On 17 September 2018, the Resolution in Relation to the Proposed Conversion of Liancheng Branch of Aluminum Corporation of China Limited into a Subsidiary by the Company was considered and approved at the thirty-first meeting of the sixth session of the Board of the Company. The Company would contribute the appraised net assets of Liancheng Branch of Aluminum Corporation of China Limited of RMB1,490,619,400, to establish Gansu Liancheng, a wholly-owned subsidiary.

For details of the aforesaid matter, please refer to the announcement of the Company dated 17 September 2018.

Investment in Construction of the 2,000,000-Tonne Alumina Project in Fangchenggang, Guangxi

On 17 September 2019, the Resolutions in Relation to the Proposed Investment in Construction of 2,000,000-tonne Alumina Project and the Proposed Capital Contribution to Guangxi Huasheng New Materials Co., Ltd. by the Company were considered and approved at the thirty-first meeting of the sixth session of the Board of the Company. The Company would construct the 2,000,000-tonne alumina project in Fangchenggang, Guangxi with a construction investment of RMB5,805 million. Guangxi Huasheng New Materials Co., Ltd.* (廣西華昇新材料有限公司) was responsible for construction and operation of the project.

For details of the aforesaid matter, please refer to the announcement of the Company dated 17 September 2018.

Acquisition of 50% Equity Interests in Shanxi Huaxing Alumina Co., Ltd.* (山西華興鋁業有限公司) by the Company

On 20 November 2018, the Resolution in Relation to the Proposed Acquisition of 50% Equity Interests in Shanxi Huaxing Alumina Co., Ltd. by the Company was considered and approved at the thirty-fourth meeting of the sixth session of the Board of the Company, pursuant to which, the Board agreed the Company to participate in the bidding for 50% Equity Interests in Shanxi Huaxing Alumina Co., Ltd. (“Shanxi Huaxing”) which were offered for public tender by Baotou Transportation Investment Group Co., Ltd.* (包頭交通投資集團有限公司) (“Baotou Transportation Investment”). On 6 December 2018, the Company was affirmed as the final transferee of 50% Equity Interests in Shanxi Huaxing. On 11 December 2018, the Company entered into the equity transfer agreement with Baotou Transportation Investment.

For details of the aforesaid matters, please refer to the announcements of the Company dated 20 November 2018 and 11 December 2018, respectively.

Separation and Transfer of “Three Supplies and One Property (三供一業)” and Other Social Functions Undertaken by Enterprises by the Company and its Affiliated Enterprises

On 11 December 2018, the Resolution in Relation to the Proposed Separation and Transfer of “Three Supplies and One Property(三供一業)” and Other Social Functions Undertaken by the Company and its Affiliated Enterprises was considered and approved at the thirty-fifth meeting of the sixth session of the Board of the Company, pursuant to which, the Board agreed the Company and its affiliated enterprises to separate “Three Supplies and One Property (三供一業)” and other social functions undertaken by enterprises and transfer the same to local governments, other state-owned third party companies or carry out market-oriented reforms. The net book value involved in the separation and transfer was not more than RMB165,332,100. The Company will correspondingly write down related assets and equity interest in compliance with the relevant national stipulations. The expenses of the transfer and reforms undertaken by the Company and its affiliated enterprises in respect of the separation and transfer did not exceed RMB153,600,000, which would be charged into the profit or loss of the Company.

Significant Events (Continued)

In accordance with the requirements stated in the Notice of the Ministry of the Finance Regarding the Issue of Enterprises Separation to Carry Out Social Functions Related to Financial Management (《財政部關於企業分離辦社會職能有關財務管理問題的通知》), assets involved in the separation and transfer shall be deducted in the order of undistributed profit, surplus reserve and capital reserve under the Chinese Accounting Standards, and are recognized in profit or loss for the current period under the International Accounting Standards. The differences in the above accounting treatment resulted in a difference of RMB123,753,000 between the net profit attributable to shareholders of the Company and net assets under the Chinese Accounting Standards and the International Accounting Standards.

For details of the aforesaid matter, please refer to the announcement of the Company dated 11 December 2018.

Capital Contribution by Chinalco Environmental Protection and Energy Conservation Co., Ltd.* (中鋁環保節能集團有限公司) to Beijing Aluminum SPC Environment Protection Tech Co., Ltd.* (北京鋁能清新環境技術有限公司)

At the thirty-fifth meeting of the sixth session of the Board convened by the Company on 11 December 2018, the Resolution in Relation to the Proposed Capital Contribution by Chinalco Environmental Protection and Energy Conservation Co., Ltd. to Beijing Aluminum SPC Environment Protection Tech Co., Ltd. was considered and approved, pursuant to which, Chinalco Environmental Protection and Energy Conservation Co., Ltd. ("Chinalco Environmental Protection") (a subsidiary of Chinalco, the controlling shareholder of the Company) would make a capital contribution in cash to Beijing Aluminum SPC Environment Protection Tech Co., Ltd. ("Aluminum SPC"), a joint venture of the Company, for 38.30% equity interests in Aluminum SPC. Upon the capital contribution, the shareholding of the Company in Aluminum SPC was decreased to 24.68% from 40%. On 14 December 2018, the related parties entered into the capital contribution agreement.

For details of the aforesaid matter, please refer to the announcements published by the Company on 11 December 2018 and 14 December 2018, respectively.

Change of the Media Designated for Domestic Information Disclosure by the Company

The newspaper designated for domestic information disclosure of the Company has been changed from the Securities Times to the Securities Daily since 1 January 2019.

For details of the aforesaid matter, please refer to the announcement of the Company dated 28 December 2018.

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.

Connected Transactions

Details of significant related party transactions of the Group for the year ended 31 December 2018 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 2018. For the year ended 31 December 2018, the continuing connected transactions of the Group were calculated on an aggregated basis as follows:

	Aggregated consideration (for the year ended 31 December 2018) <i>(in RMB million)</i>	Percentage of turnover (for the year ended 31 December 2018)	Annual cap for the year 2018 <i>(in RMB million)</i>
Purchases of goods or services:			
(A) Comprehensive Social and Logistics Services Agreement (Counterparty: Aluminum Corporation of China)	312	0.17%	550
(B) General Agreement on Mutual Provision of Production Supplies and Ancillary Services (Counterparty: Aluminum Corporation of China)	4,495	2.49%	6,950
(C) Mineral Supply Agreement (Counterparty: Aluminum Corporation of China)	11	0.01%	360

Connected Transactions (Continued)

	Aggregated consideration (for the year ended 31 December 2018) <i>(in RMB million)</i>	Percentage of turnover (for the year ended 31 December 2018)	Annual cap for the year 2018 <i>(in RMB million)</i>
(D) Provision of Engineering, Construction and Supervisory Services Agreement (Counterparty: Aluminum Corporation of China)	1,993	1.11%	10,000
(E) Land Use Rights Leasing Agreement (Counterparty: Aluminum Corporation of China)	412	0.23%	1,200
(F) Fixed Assets Leases Framework Contract (Counterparty: Aluminum Corporation of China)	34	0.02%	110
(G) Financial Services Agreement (Counterparty: Chinalco Finance Co., Ltd.) Daily cap of deposit balance (including accrued interests)	9,102	5.05%	Daily cap of deposit balance 12,000
Daily cap of loan balance (including accrued interests)	3,775	2.08%	Daily cap of loan balance 15,000
Other financial services	–	0%	50
(H) Finance Lease Agreement (Counterparty: Chinalco Finance Lease Co., Ltd.)	1,088	0.60%	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))	1,000	0.55%	1,300
(K) 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))	2	0%	56

Connected Transactions (Continued)

	Aggregated consideration (for the year ended 31 December 2018) <i>(in RMB million)</i>	Percentage of turnover (for the year ended 31 December 2018)	Annual cap for the year 2018 <i>(in RMB million)</i>
Sales of goods or services:			
(B) General Agreement on Mutual Provision of Production Supplies and Ancillary Services (Counterparty: Aluminum Corporation of China)	11,867	6.58%	16,400
(F) Fixed Assets Leases Framework Agreement (Counterparty: Aluminum Corporation of China)	32	0.02%	100
(J) Labor Services and Engineering Services Agreement (Counterparty: Aluminum Corporation of China)	6	0%	500

1. The Company has adopted effective internal control policies to closely 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;
 - (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.

Connected Transactions (Continued)

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: 28 April 2015


Parties: Aluminum Corporation of China as provider (for itself and on behalf of its subsidiaries)

The Company as recipient (for itself and on behalf of its subsidiaries)

Connected Transactions (Continued)

Term:	Three years from 1 January 2016 to 31 December 2018
Nature of transaction:	<p>(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;</p> <p>(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</p>
Price determination:	The prices in respect of services are determined with reference to 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 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 28 April 2015 and 8 May 2015 of the Company.



Connected Transactions (Continued)

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

Date of initial agreement:	5 November 2001
Date of supplemental agreement:	28 April 2015
Parties:	Aluminum Corporation of China 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 2016 to 31 December 2018
Nature of transaction:	(a) Production supplies and ancillary services provided by Aluminum Corporation of China to the Company (i) Supplies: carbon ring, carbon products, cement, coal, oxygen, bottled water, steam, fire brick, aluminum fluoride, cryolite, lubricant, resin, clinker, aluminum profiles and other relevant or similar supplies and services; (ii) Storage and transportation services: vehicle transportation, loading, 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

Connected Transactions (Continued)


(b) Production supplies and ancillary services provided by the Company to Aluminum Corporation of China

- (i) Products: electrolytic aluminum products (aluminum ingots) and alumina products, primary aluminum, 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 Aluminum Corporation of China 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;
- (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. Such reasonable profit refers to a profit not more than 5% of such costs. Such profit margin is considered reasonable as determined with reference to the current market practice in relevant industries;



Connected Transactions (Continued)

(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. Such reasonable profit refers to a profit not more than 5% of such costs. Such profit margin is considered reasonable as determined with reference to the current market practice in relevant industries.

(2) Production supplies and ancillary services provided by the Company to Aluminum Corporation of China:

(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;

Connected Transactions (Continued)

- (iii) Other products: 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 products. Such price is equivalent to reasonable costs incurred in providing such products plus reasonable profit. Such reasonable profit refers to a profit not more than 5% of such costs. Such profit margin is considered reasonable as determined with reference to the current market practice in relevant industries.
- (b) Supporting services and ancillary production services:
 - (i) Electricity supply: the price is determined with reference to the government-prescribed price, which refers to the on-grid 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 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. Such reasonable profit refers to a profit not more than 5% of such costs. Such profit margin is considered reasonable as determined with reference to the current market practice in relevant industries;

Connected Transactions (Continued)

- (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.

Payment term: Cash on delivery

For more detailed information on this continuing connected transaction, please refer to the announcements dated 28 April 2015 and 8 May 2015 and the circular dated 2 June 2015 of the Company.

(C) Mineral Supply Agreement

Date of initial agreement : 5 November 2001

Date of supplemental agreement : 28 April 2015

Parties : Aluminum Corporation of China 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 2016 to 31 December 2018

Nature of transaction: Supply of bauxite and limestone to the Company by Aluminum Corporation of China; before meeting the Company's bauxite and limestone requirements, Aluminum Corporation of China is not entitled to provide bauxite and limestone to any third parties


Connected Transactions (Continued)

- Price determination :
- (i) For the supplies of bauxite and limestone from Aluminum Corporation of China own mining operations, at reasonable costs incurred in providing the same, plus not more than 5% of such reasonable costs (a buffer for surges in the price level and labor costs); and
 - (ii) For the supplies of bauxite and limestone from jointly operated mines, at contractual price paid by Aluminum Corporation of China to such third parties
- Payment term : Cash on delivery

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 28 April 2015.

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

- Date of initial agreement: 5 November 2001
- Date of supplemental agreement: 28 April 2015
- Parties: Aluminum Corporation of China 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 2016 to 31 December 2018



Connected Transactions (Continued)

Nature of Transaction:	Services provided by Aluminum Corporation of China to the Company include engineering design, construction and supervisory services as well as relevant research and development operations. Services provided by the Company to Aluminum Corporation of China include engineering design services
Price determination:	Services are provided according to government guidance price; and if there is none, the market price
Payment term:	10–20% before service; a maximum of 70% during provision of service; and 10 to 20% upon successful provision of service

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 28 April 2015 and the circular dated 2 June 2015.

(E) Land Use Rights Leasing Agreement

Date of initial agreement :	5 November 2001
Parties:	Aluminum Corporation of China as landlord (for itself and on behalf of its subsidiaries) The Company as tenant (for itself and on behalf of its subsidiaries)

Connected Transactions (Continued)

Term: 50 years expiring on 30 June 2051


As previously disclosed in the letter dated 27 December 2006 from Taifook Capital Limited (“Taifook Letter”), 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 consideration 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.

Properties: 470 pieces or parcels of land covering an aggregate area of approximately 61.22 million square meters, all of which are located in the PRC

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 28 April 2015.



Connected Transactions (Continued)

(F) Fixed Assets Lease Framework Agreement

Date of agreement:	28 April 2015
Parties:	Aluminum Corporation of China as landlord and tenant (for itself and on behalf of its subsidiaries) The Company as landlord and tenant (for itself and on behalf of its subsidiaries)
Term:	Three years from 1 January 2016 to 31 December 2018
Fixed assets:	Buildings, constructions, machinery, apparatus, transportation facilities 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
Payment term:	Monthly payment

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 28 April 2015.

Connected Transactions (Continued)

(G) Financial Services Agreement

Date of initial agreement : 26 August 2011

Date of renewed agreement : 26 October 2017^{Note}

Parties: The Company as recipient

Chinalco Finance Co., Ltd. ("Chinalco Finance") as provider, a subsidiary of Aluminum Corporation of China* (中國鋁業集團有限公司), the controlling shareholder of the Company

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 provisions and 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.

Connected Transactions (Continued)

Note: The Company and Chinalco Finance renewed the Financial Services Agreement (the “Original Agreement”) on 28 April 2015 for a term from 26 August 2015 to 25 August 2018. During the validity period of the Original Agreement, the maximum daily deposit balance (including accrued interests) of the Group on the settlement account in Chinalco Finance shall not exceed RMB8.0 billion; the maximum daily loan balance (including accrued interests) provided by Chinalco Finance to the Group shall not exceed RMB10.0 billion; the annual service fees charged by Chinalco Finance for other financial services provided to the Group shall not exceed RMB50 million and Chinalco Finance will provide the Company with settlement services for free. As the transaction caps of the Original Agreement failed to meet the current demand, as considered and resolved at the 16th meeting of the sixth session of the Board held on 26 October 2017 and the 2017 second extraordinary general meeting held on 20 December 2017 that the Company and Chinalco Finance re-entered into the Financial Services Agreement to increase the caps for deposit and loan transactions to RMB12.0 billion (including accrued interests) and RMB15.0 billion (including accrued interests), respectively. The transaction caps for the Company and Chinalco Finance would still be subject to the Original Agreement before approval of the new agreement at the general meeting on 20 December 2017.

(H) Finance Lease Agreement

Date of initial agreement: 27 August 2015

Date of renewed agreement: 13 November 2015

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 Aluminum Corporation of China* (中國鋁業集團有限公司), the controlling shareholder of the Company

Term: Three years from 1 January 2016 to 31 December 2018

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 2016 to 13 December 2018, the financing balance acquired by the Group from Chinalco Lease shall not exceed RMB10 billion


For more detailed information on this continuing connected transaction, please refer to the announcements of the Company dated 27 August 2015, 8 September 2015 and 13 November 2015 and the circular of the Company dated 14 December 2015, respectively.

Connected Transactions (Continued)

(I) Factoring Cooperation Agreement

Date of agreement:	27 September 2017
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 Aluminum Corporation of China* (中國鋁業集團有限公司), the controlling shareholder of the Company
Term:	From 27 September 2017 to 31 December 2018
Nature of Transaction:	Pursuant to the Factoring Cooperation Agreement, Chinalco Factoring shall provide factoring financing services to the Company and the cap for the transactions between the Company and Chinalco Factoring for both 2017 and 2018 is RMB1.3 billion within the term of the agreement
Price determination:	The financing costs for the services to be provided by Chinalco Factoring to the Company shall be determined based on fair and reasonable market prices and normal commercial terms, and shall not be higher than those charged by third-party factoring companies in the PRC for similar services.

For more detailed information on this continuing connected transaction, please refer to the announcements of the Company dated 17 August 2017 and 27 September 2017.



Connected Transactions (Continued)

(J) Labor Services and Engineering Services Agreement

Date of initial agreement: 13 November 2015

Date of renewed agreement: 28 June 2016

Parties: The Company, as provider (for itself and on behalf of its subsidiaries)

Aluminum Corporation of China, as recipient (for itself and on behalf of its subsidiaries)

Term: Three years from 1 January 2016 to 31 December 2018

Nature of Transaction: The Company provided engineering services such as engineering design, engineering construction, and laboring services such as equipment repairs, logistics management services, etc. to Aluminum Corporation of China

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

Payment: Aluminum Corporation of China shall make payment within three months upon the rendering of services by the Company and the settlement thereof

For more detailed information on this continuing connected transaction, please refer to the announcement of the Company dated 28 June 2016.

Connected Transactions (Continued)

(K) Labor and Engineering Services Framework Agreement

Date of agreement:	17 September 2018
Parties:	<p>The Company as recipient (for itself and on behalf of its subsidiaries)</p> <p>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 Aluminum Corporation of China* (中國鋁業集團有限公司), the controlling shareholder of the Company</p>
Term:	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. The annual cap of transactions between the Group and Chalco Steering for the three years from 2018 to 2020 was RMB56 million, RMB100 million and RMB200 million, respectively
Price determination:	The price is determined based on the comparable local market prices, which means the prices arrived at with reference 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

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

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 Co., Ltd.* (中鋁山東有限公司), 36.8990% equity interests in Chalco Zhongzhou Aluminum Co., Ltd.* (中鋁中州鋁業有限公司), 25.6748% equity interests in Baotou Aluminum Co., Ltd.* (包頭鋁業有限公司) and 81.1361% equity interests in Chalco Mining Co., Ltd.* (中鋁礦業有限公司) jointly held by the above eight investors.

As China Life 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 by the issuance of consideration shares to China Life 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 certain contents of "Progress on the Acquisition of Assets by Issuance of Shares and the Related-Party Transaction of the Company" under "10. EXPLANATION OF OTHER SIGNIFICANT EVENTS" as set out in the section "Significant Events" in this report and the relevant announcement published by the Company.

Connected Transactions (Continued)


Acquisition of Carbon Assets and Equity Interests of Certain Affiliated Enterprises of Chinalco Assets Operation and Management Co., Ltd* (中鋁資產經營管理有限公司) by the Company

At the twenty-eighth meeting of the sixth session of the Board convened by the Company on 18 July 2018, the Resolution in Relation to the Proposed Acquisition of Carbon Assets and Equity Interests of Certain Affiliated Enterprises of Chinalco Assets Operation and Management Co., Ltd by the Company was considered and approved, pursuant to which, the Board approved certain affiliated enterprises of the Company to acquire carbon assets and equity interests of certain affiliated enterprises of Chinalco Assets Operation and Management Co., Ltd (“Chinalco Assets”) (a subsidiary of Chinalco, the controlling shareholder of the Company), at a transaction consideration of approximately RMB736 million. On 30 August 2018, certain affiliated enterprises of the Company entered into assets transfer agreements or equity transfer agreements with certain affiliated enterprises of Chinalco Assets, respectively.

For details of the aforesaid matter, please refer to the announcements published by the Company on 18 July 2018 and 30 August 2018, respectively.

Acquisition of 51% equity interests in Harbin Dongqing Longhua Logistics Company Limited* (哈爾濱東輕龍華物流有限公司) by Chalco Logistics Group Co., Ltd.* (中鋁物流集團有限公司)

At the thirty-first meeting of the sixth session of the Board convened by the Company on 17 September 2018, the Resolution in Relation to the Proposed Acquisition of 51% equity interests in Harbin Dongqing Longhua Logistics Company Limited by Chalco Logistics Group Co., Ltd. was considered and approved, pursuant to which, the Board approved Chalco Logistics Group Co., Ltd. (“Chalco Logistics”), a wholly-own subsidiary of the Company, to acquire 51% equity interests in Harbin Dongqing Longhua Logistics Company Limited (“Longhua Logistics”) (a subsidiary of Chinalco, the controlling shareholder of the Company), at a transaction consideration of RMB3,303,600. On the same day, Chalco Logistics entered into the equity transfer agreement with Longhua Logistics.



Connected Transactions (Continued)

For details of the aforesaid matter, please refer to the announcement published by the Company on 17 September 2018.

Acquisition of Certain Assets of China Great Wall Aluminum Corporation* (中國長城鋁業有限公司) and its Subsidiaries by Chalco Mining Co., Ltd.* (中鋁礦業有限公司)

At the thirty-fourth meeting of the sixth session of the Board convened by the Company on 20 November 2018, the Resolution in Relation to the Proposed Acquisition of Certain Assets of China Great Wall Aluminum Corporation and its Subsidiaries by Chalco Mining Co., Ltd. was considered and approved, pursuant to which, the Board approved Chalco Mining Co., Ltd.* (中鋁礦業有限公司) (“Chalco Mining”), a controlled subsidiary of the Company, to acquire certain assets of China Great Wall Aluminum Corporation* (中國長城鋁業有限公司) (“Great Wall Aluminum”) (a subsidiary of Chinalco, the controlling shareholder of the Company) and its subsidiaries, at a transaction consideration of RMB100,062,674. On the same day, Chalco Mining entered into the assets transfer agreement with Great Wall Aluminum and its subsidiaries. The Company has published relevant announcement in respect of the above matter.

For details of the aforesaid matter, please refer to the announcement published by the Company on 20 November 2018.

Establishment of Chinalco Overseas Development Co., Ltd.* (中鋁海外發展有限公司) through Joint Contribution by the Company and Aluminum Corporation of China

At the twenty-sixth meeting of the sixth session of the Board convened by the Company on 21 June 2018, the Resolution in Relation to the Proposed Establishment of Chinalco Overseas Development Co., Ltd. through Joint Contribution by the Company and Aluminum Corporation of China was considered and approved, pursuant to which, each of the Company and Aluminum Corporation of China would contribute RMB500 million in cash for 50% equity interests in Chinalco Overseas Development Co., Ltd., respectively. On the same day, the Company entered into the joint venture contract with Aluminum Corporation of China.

For details of the aforesaid matter, please refer to the announcement published by the Company on 21 June 2018.

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

Transfer of Certain Fixed Assets by Guizhou Branch of Aluminum Corporation of China Limited to Guizhou Aluminum Plant Co., Ltd.* (貴州鋁廠有限責任公司)

At the nineteenth meeting of the sixth session of the Board convened by the Company on 31 January 2018, the Resolution in Relation to the Proposed Transfer of Certain Fixed Assets of the Guizhou Branch of Aluminum Corporation of China Limited by the Company to Guizhou Aluminum Plant Co., Ltd. was considered and approved, pursuant to which, the Board approved the Company to transfer the aboveground constructions and structures and other fixed assets of the previous project engineering department under Guizhou Branch of Aluminum Corporation of China Limited (“Guizhou Branch”) to Guizhou Aluminum Plant Co., Ltd. (“Guizhou Aluminum Plant”), at a transaction consideration of RMB5,813,466. On the same day, Guizhou Branch entered into the assets transfer agreement with Guizhou Aluminum Plant.

For details of the aforesaid matter, please refer to the announcement published by the Company on 31 January 2018.

Independent Auditor's Report



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 164 to 428, which comprise the consolidated statement of financial position as at 31 December 2018, 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 2018, 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.

Independent Auditor's Report (Continued)

BASIS FOR OPINION

We conducted our auditing 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 MATTERS (CONTINUED)

Key audit matter

How our audit addressed the key audit matter

Impairment of property, plant and equipment

Included on the consolidated statement of financial position is property, plant and equipment ("PPE") balance of RMB106,193 million as of 31 December 2018.

We obtained an understanding, evaluated the design, and tested the operating effectiveness of management's key controls over the impairment assessment process.

The Group is required to review PPE for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. The management performed 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 provision of RMB7 million was made for the year ended 31 December 2018.

We compared the methodology used (recoverable amount calculations based on future discounted cash flows) by the Group to market and industry guidelines.

We also assessed the reasonableness of key assumptions used in the calculations, comprising future price of aluminium and alumina, production costs, operating expenses and discount rate. When assessing these key assumptions, we discussed them with management to understand and evaluate management's basis for determining the assumptions, and compared them to external industry outlook reports from a number of sources. We also involved our valuation experts to assist us in assessing the reasonableness of the discount rate used by management.

We focused on this area as the assessments made by management involved estimation of future cash flows which required significant estimates and judgments, including future price of aluminum and alumina, production costs, operating expenses and discount rate applied to these forecasted future cash flows. These estimates and judgments may be affected by unexpected changes in future market or economic conditions or discount rate applied.

We evaluated management's sensitivity analysis around the key assumptions, to ascertain that selected adverse changes to key assumptions, both individually and in aggregate, would not cause the carrying amount of PPE to exceed the recoverable amount of the CGU.

The Group's accounting policies and estimation of PPE impairment are disclosed in notes 2.12 and 3, and details of the Group's impairment testing of PPE are disclosed in note 6 to the consolidated financial statements.

We also assessed the adequacy of the Group's disclosures included in note 6 to the consolidated financial statements regarding the key assumptions of impairment testing.

Independent Auditor's Report (Continued)

KEY AUDIT MATTERS (CONTINUED)

Key audit matter

How our audit addressed the key audit matter

Impairment of goodwill

Included on the consolidated statement of financial position is a goodwill balance of RMB3,511 million as of 31 December 2018.

We obtained an understanding, evaluated the design, and tested the operating effectiveness of management's key controls over the impairment assessment process.

The Group is required to, at least annually, perform impairment assessments of goodwill. For the purpose of performing impairment assessments, goodwill has been allocated to CGUs. The impairment testing was performed by comparing the recoverable amount of the CGU and the carrying amount of the CGU. The determination of the recoverable amount of the underlying CGUs involved estimates and judgments, including future price of aluminum and alumina, production costs, operating expenses, the growth rate used to estimate future cash flows and discount rate 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 or discount rates applied.

We compared the methodology used (recoverable amount calculations based on future discounted cash flows) by the Group to market and industry guidelines.

We also assessed the reasonableness of key assumptions used in the calculations, comprising future price of aluminum and alumina, production costs, operating expenses, growth rate and discount rate. When assessing these key assumptions, we discussed them with management to understand and evaluate management's basis for determining the assumptions, and compared them to external industry outlook reports from a number of sources. We also involved our valuation experts to assist us in assessing the reasonableness of the discount rate used by management.

The Group's accounting policies and estimation of goodwill impairment are disclosed in notes 2.12 and 3, and details of the Group's impairment testing of goodwill are disclosed in note 5 to the consolidated financial statements.

We evaluated management's sensitivity analysis around the key assumptions, to ascertain that selected adverse changes to key assumptions, both individually and in aggregate, would not cause the carrying amount of the CGU to exceed the recoverable amount of CGU.

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.

Independent Auditor's Report (Continued)

KEY AUDIT MATTERS (CONTINUED)

Key audit matter

How our audit addressed the key audit matter

Recognition of deferred tax assets

As at 31 December 2018, the Group had deferred tax assets on deductible temporary differences and tax losses carried forward of RMB1,543 million. 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. The recognition of the deferred tax assets was significant to our audit because the amounts are material, and the estimation of future taxable profits is complex and judgmental and is based on assumptions that are affected by unexpected changes in future market or economic conditions.

The Group's accounting policies and estimations on deferred tax assets are disclosed in notes 2.25 and 3, and details of deferred tax assets are disclosed in note 11 to the consolidated financial statements.

We obtained an understanding, evaluated the design, and tested the operating effectiveness of management's key controls over the recognition and recoverability assessment of deferred tax assets.

We compared the key assumptions used in the forecast with the legal framework (in particular tax rates and the possible utilisation of loss carry forwards).

We evaluated management's assumptions in determining the future available taxable profits, specifically the future price of aluminum and alumina by comparing the forecast prices with the market trend forecasted by external industry analysts. We involved our tax specialists 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 11 to the consolidated financial statements regarding deferred tax assets.

Independent Auditor's Report (Continued)

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

28 March 2019

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

	Notes	31 December 2018	31 December 2017 (restated)
ASSETS			
Non-current assets			
Intangible assets	5	12,879,365	10,637,633
Property, plant and equipment	6	106,193,369	95,627,577
Investment properties	7	1,156,006	1,332,370
Land use rights	8	4,280,291	3,577,012
Investments in joint ventures	9 (a)	3,393,349	6,007,624
Investments in associates	9 (b)	6,363,462	6,935,030
Available-for-sale investments	10	–	1,928,201
Equity investments designated at fair value through other comprehensive income	10	1,729,825	–
Deferred tax assets	11	1,542,569	1,606,150
Other non-current assets	12	4,442,644	3,520,892
Total non-current assets		141,980,880	131,172,489
Current assets			
Inventories	13	20,459,668	20,547,556
Trade and notes receivables	14	8,100,532	8,008,937
Other current assets	15	9,022,953	10,074,225
Financial assets at fair value through profit or loss	36.1, 36.2	16,141	9,534
Restricted cash	16	2,165,288	2,168,192
Cash and cash equivalents	16	19,130,652	27,835,866
Total current assets		58,895,234	68,644,310
Total assets		200,876,114	199,816,799

31 December 2018
 (Amounts expressed in thousands of RMB
 unless otherwise stated)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

	Notes	31 December 2018	31 December 2017 (restated)
EQUITY AND LIABILITIES			
EQUITY			
Equity attributable to owners of the parent			
Share capital	17	14,903,798	14,903,798
Other reserves	18	40,327,573	28,116,602
Accumulated losses		(2,816,481)	(3,332,371)
		52,414,890	39,688,029
Non-controlling interests		15,254,312	26,054,567
Total equity		67,669,202	65,742,596
LIABILITIES			
Non-current liabilities			
Interest-bearing loans and borrowings	19	54,207,386	40,289,703
Other non-current liabilities	21	2,438,164	2,453,660
Deferred tax liabilities	11	1,812,805	993,742
Total non-current liabilities		58,458,355	43,737,105

CONSOLIDATED STATEMENT
OF FINANCIAL POSITION (CONTINUED)

31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

	Notes	31 December 2018	31 December 2017 (restated)
Current liabilities			
Trade and notes payables	23	14,007,600	12,360,441
Other payables and accrued liabilities	22	11,532,504	14,692,899
Contract liabilities		1,579,322	–
Financial liabilities at fair value through profit or loss	36.1, 36.2	1,766	89,426
Income tax payable		113,783	213,262
Interest-bearing loans and borrowings	19	47,513,582	62,981,070
Total current liabilities		74,748,557	90,337,098
Total liabilities		133,206,912	134,074,203
Total equity and liabilities		200,876,114	199,816,799
Net current liabilities		15,853,323	21,692,788
Total assets less current liabilities		126,127,557	109,479,701

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

Lu Dongliang
Director

Wang Jun
Chief Financial Officer

Year ended 31 December 2018
 (Amounts expressed in thousands of RMB
 unless otherwise stated)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	Notes	2018	2017 (restated)
Revenue	4	180,240,154	181,020,428
Cost of sales		(167,029,416)	(166,290,235)
Gross profit		13,210,738	14,730,193
Selling and distribution expenses		(2,496,933)	(2,372,966)
General and administrative expenses		(3,958,067)	(4,549,206)
Research and development expenses		(626,873)	(498,234)
Impairment losses on property, plant and equipment	6	(7,450)	(16,200)
Impairment losses on financial assets		(107,841)	–
Impairment losses on investments in joint ventures		(216,953)	–
Other income	26	135,367	89,873
Other gains, net	27	921,904	319,382
Finance income	28	492,232	706,690
Finance costs	28	(4,882,496)	(5,203,424)
Share of profits and losses of:			
Joint ventures	9 (a)	(199,452)	8,151
Associates	9 (b)	39,335	(165,249)
Profit before income tax	25	2,303,511	3,049,010
Income tax expense	31	(822,499)	(643,734)
Profit for the year		1,481,012	2,405,276
Profit attributable to:			
Owners of the parent		746,477	1,413,028
Non-controlling interests		734,535	992,248
		1,481,012	2,405,276
Basic and diluted earnings per share attributable to ordinary equity holders of the parent <i>(expressed in RMB per share)</i>	32	0.037	0.087

CONSOLIDATED STATEMENT
OF PROFIT OR LOSS AND OTHER
COMPREHENSIVE INCOME (CONTINUED)

Year ended 31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

	2018	2017 (restated)
Profit for the year	1,481,012	2,405,276
Other comprehensive income, net of tax:		
Other comprehensive income that may be reclassified to profit or loss in subsequent periods:		
Available-for-sale investments:		
Changes in fair value	–	(5,206)
Reclassification adjustments for gains included in profit or loss		
– Gain on disposal	–	(45,039)
Income tax effect	–	11,180
Exchange differences on translation of foreign operations	(120,756)	(634,793)
Net other comprehensive income that may be reclassified to profit or loss in subsequent periods	(120,756)	(673,858)
Other comprehensive income that will not be reclassified to profit or loss in subsequent periods		
Equity investments designated at fair value through other comprehensive income:		
Changes in fair value	(15,491)	–
Income tax effect	3,769	–
Net other comprehensive income that will not be reclassified to profit or loss in subsequent periods	(11,722)	–

Year ended 31 December 2018
 (Amounts expressed in thousands of RMB
 unless otherwise stated)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME (CONTINUED)

	2018	2017 (restated)
Total other comprehensive income, net of tax	(132,478)	(673,858)
Total comprehensive income for the year	1,348,534	1,731,418
Total comprehensive income for the year attributable to:		
Owners of the parent	614,638	739,170
Non-controlling interests	733,896	992,248
	1,348,534	1,731,418

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.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Year ended 31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

	Attributable to owners of the parent											Total equity
	Capital reserves				Special reserve	Gain on available-for-sale financial assets/fair value reserve	Other equity instruments	Foreign currency translation reserve	Accumulated losses	Total	Non-controlling interests	
Share capital (note 17)	Share premium	Other capital reserves	Statutory surplus reserve	Other equity								Foreign currency translation reserve
At 31 December 2017	14,903,798	18,616,551	952,878	5,867,557	144,361	6,836	2,019,288	335,276	(3,368,095)	39,478,450	26,035,429	65,513,879
Adjustment due to business combinations under common control (note 38)	-	171,282	-	-	2,573	-	-	-	35,724	209,579	19,138	228,717
Effect of adoption of IFRS 9 (note 2.2)	-	-	-	-	-	10,835	-	-	(133,346)	(122,511)	(16,925)	(139,436)
At 1 January 2018 (restated)	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
Profit for the year	-	-	-	-	-	-	-	-	746,477	746,477	734,535	1,481,012
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)	746,477	614,638	733,896	1,348,534

Year ended 31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

	Attributable to owners of the parent											
	Share capital (note 17)	Share premium	Other capital reserves	Statutory surplus reserve	Special reserve	Gain on available-for-sale financial assets/fair value reserve	Other equity instruments	Foreign currency translation reserve	Accumulated losses	Total	Non-controlling interests	Total equity
Business combinations under common control (note 38)	-	(443,582)	-	-	-	-	-	-	-	(443,582)	-	(443,582)
Capital injection from non-controlling shareholders	-	78,271	-	-	-	-	-	-	-	78,271	759,350	837,621
Capital injection from the parent company	-	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 18 (b))	-	-	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
Other equity instruments' distribution	-	-	-	-	-	-	(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 distributed by subsidiaries to non-controlling shareholders	-	-	-	-	-	-	-	-	-	-	(605,416)	(605,416)
Acquisition of subsidiaries	-	-	-	-	(11,166)	-	-	-	-	(11,166)	1,468,435	1,457,269
Repayment of senior perpetual securities by a subsidiary	-	-	-	-	-	-	-	-	-	-	(2,175,133)	(2,175,133)
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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

Year ended 31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

	Attributable to owners of the parent											
	Capital reserves					Gain on available- for-sale financial assets	Other equity instruments	Foreign currency translation reserve	Accumulated losses	Total	Non- controlling interests	Total equity
	Share capital (note 17)	Share premium	Other capital reserves	Statutory surplus reserve	Special reserve							
At 1 January 2017	14,903,798	17,913,827	952,878	5,867,557	131,510	45,901	2,019,288	970,069	(4,636,530)	38,168,298	17,618,510	55,786,808
Adjustment due to business combinations under common control (note 38)	-	169,242	-	-	692	-	-	-	1,911	171,845	10,535	182,380
At 1 January 2017 (restated)	14,903,798	18,083,069	952,878	5,867,557	132,202	45,901	2,019,288	970,069	(4,634,619)	38,340,143	17,629,045	55,969,188
Profit for the year	-	-	-	-	-	-	-	-	1,413,028	1,413,028	992,248	2,405,276
Other comprehensive income for the year												
Changes in fair value of available-for-sale financial assets, net of tax	-	-	-	-	-	(4,758)	-	-	-	(4,758)	-	(4,758)
Disposal of available-for-sale financial assets, net of tax	-	-	-	-	-	(34,307)	-	-	-	(34,307)	-	(34,307)
Exchange differences on translation of foreign operations	-	-	-	-	-	-	-	(634,793)	-	(634,793)	-	(634,793)
Total comprehensive income for the year	-	-	-	-	-	(39,065)	-	(634,793)	1,413,028	739,170	992,248	1,731,418
Business combinations under common control	-	(242,564)	-	-	-	-	-	-	-	(242,564)	-	(242,564)
Disposal of subsidiaries	-	-	-	-	(6,149)	-	-	-	-	(6,149)	6,929	780
Disposal of equity interest in subsidiaries without loss of control	-	38,189	-	-	-	-	-	-	-	38,189	(38,189)	-
Deemed disposal of a subsidiary	-	-	-	-	-	-	-	-	-	-	(96,568)	(96,568)
Capital injection from non-controlling shareholders	-	1,887,824	-	-	-	-	-	-	-	1,887,824	10,831,897	12,719,721
Capital injection from the parent company	-	2,040	-	-	-	-	-	-	-	2,040	-	2,040
Acquisition of non-controlling interests	-	(980,725)	-	-	-	-	-	-	-	(980,725)	(432,564)	(1,413,289)
Acquisition of a subsidiary	-	-	-	-	-	-	-	-	-	-	416,353	416,353
Other appropriations	-	-	-	-	24,577	-	-	-	-	24,577	34,166	58,743
Share of reserves of joint ventures and associates	-	-	-	-	(3,696)	-	-	-	-	(3,696)	-	(3,696)
Repayment of senior perpetual securities	-	-	-	-	-	-	-	-	-	-	(2,584,682)	(2,584,682)
Other equity instruments' distribution	-	-	-	-	-	-	-	-	(110,000)	(110,000)	(391,933)	(501,933)
Dividends distributed by subsidiaries to non- controlling shareholders	-	-	-	-	-	-	-	-	-	-	(312,135)	(312,135)
Dividends distribution before business under common control	-	-	-	-	-	-	-	-	(780)	(780)	-	(780)
At 31 December 2017	14,903,798	18,787,833	952,878	5,867,557	146,934	6,836	2,019,288	335,276	(3,332,371)	39,688,029	26,054,567	65,742,596

* These reserves accounts comprise the consolidated other reserves of RMB40,328 million (31 December 2017(restated): RMB28,117 million) in the consolidated statement of financial position.

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

Year ended 31 December 2018
 (Amounts expressed in thousands of RMB
 unless otherwise stated)

CONSOLIDATED STATEMENT OF CASH FLOW

	Notes	2018	2017 (restated)
Net cash flows from operating activities	34	13,018,176	13,205,572
Investing activities			
Purchases of intangible assets		(103,304)	(418,203)
Purchases of property, plant and equipment		(6,745,880)	(8,891,794)
Purchases of land use rights		(2,838)	(59,215)
Proceeds from disposal of property, plant and equipment		564,791	460,982
Proceeds from disposal of intangible assets		–	11,730
Proceeds from disposal of land use rights		–	5,824
Proceeds from disposal of an associate		30,816	–
Acquisition of subsidiaries	38	255,650	255,152
Proceeds from disposal and deemed disposal of subsidiaries and business, net of cash		6,558	5,631,298
Interest received from unpaid disposal proceeds		–	117,586
Interest received from loans and borrowings to others		–	118,015
Investments in joint ventures		(90,000)	(15,414)
Investments in associates		(266,300)	(857,317)
Return of investment from/(purchase of) equity investments	10	198,000	(1,848,000)
Proceeds from dividends and disposal of equity investments		109,914	124,536
Dividend received		327,983	44,960
Decrease in time deposits		–	72,700
Cash paid for settlement of futures, options and forward contracts		(13,288)	93,677
Loans to related parties	35	–	(1,600,000)
Loans repaid by related parties		32,215	1,010,169
Asset-related government grants received		167,314	145,825
Net cash flows used in investing activities		(5,528,369)	(5,597,489)

CONSOLIDATED STATEMENT OF CASH FLOW (CONTINUED)

Year ended 31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

	Notes	2018	2017 (restated)
Financing activities			
Proceeds from gold leasing arrangements		2,323,105	7,804,083
Repayments of gold leasing arrangements		(7,519,283)	(4,000,000)
Purchase of non-controlling interests		(3,765)	(1,413,289)
Proceeds from issuance of bonds and notes, net of issuance costs		13,185,034	3,478,550
Repayments of senior perpetual securities		(2,417,758)	(2,895,910)
Proceeds from issuance of perpetual securities, net of issuance costs		1,988,000	–
Repayments of bonds and notes		(21,815,000)	(16,300,000)
Senior perpetual securities' distribution paid		(410,548)	(501,933)
Drawdown of short-term and long-term loans		76,899,591	83,758,749
Repayments of short-term and long-term loans		(70,546,537)	(78,866,459)
Cash consideration paid for business combination under common control		(373,495)	(176,848)
Proceeds from sale and leaseback finance leases, net of deposit and transaction costs		1,204,843	1,000,036
Capital injection from the parent company to the entity acquired under common control		69,885	–
Finance lease installment paid		(3,915,404)	(2,462,250)
Capital injection from non-controlling shareholders		837,621	12,718,761
Dividends paid by subsidiaries to non-controlling shareholders		(327,645)	(309,465)
Interest paid		(5,445,120)	(5,233,019)
Net cash flows used in financing activities		(16,266,476)	(3,398,994)
Net (decrease)/increase in cash and cash equivalents			
		(8,776,669)	4,209,089
Cash and cash equivalents at beginning of year		27,835,866	23,848,344
Effect of foreign exchange rate changes, net		71,455	(221,567)
Cash and cash equivalents at 31 December	16	19,130,652	27,835,866

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 is domiciled and was established on 10 September 2001 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 the parent of the Company is Aluminum Corporation of China (“Chinalco”) (中國鋁業集團有限公司), a company incorporated and domiciled in the PRC and wholly owned by the State-owned Assets Supervision and Administration Commission of the State Council.

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	74.33%	–
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%	–
Shanxi Huasheng Aluminum Co., Ltd. ("Shanxi Huasheng") (山西華聖鋁業有限公司)	PRC/Mainland China	1,000,000	Manufacture and distribution of primary aluminum, aluminum alloy and carbon-related products	51.00%	–
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%	–
Zunyi Aluminum Co., Ltd. (遵義鋁業股份有限公司)	PRC/Mainland China	3,204,899	Manufacture and distribution of primary aluminum and alumina	67.445%	–
Shandong Huayu Alloy Materials Co., Ltd. ("Shandong Huayu") (山東華宇合金材料有限公司)	PRC/Mainland China	1,627,697	Manufacture and distribution of aluminum alloy	55.00%	–
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 and carbon products	18.86%	–
Chalco Energy Co., Ltd. (中鋁能源有限公司)	PRC/Mainland China	819,993	Thermoelectric supply and investment management	100.00%	–

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
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%	–
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	3,808,995	Manufacture and distribution of alumina	69.20%	–
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	63.10%	–
China Aluminum Logistics Group Corporation Co., Ltd. (中鋁物流集團有限公司)	PRC/Mainland China	558,752	Logistic 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	270,000	Manufacture and distribution of primary aluminum	33.00%	33.00%
Chalco Shanghai Company Limited ("Chalco 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 Zhongrun") (山西中鋁華潤有限公司)	PRC/Mainland China	1,641,750	Manufacture and distribution of primary aluminum	40.00%	–
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%	–
China Aluminum International Trading Group Co. Ltd. (中鋁國際貿易集團有限公司)	PRC/Mainland China	1,030,000	Import and export activities	100.00%	–
Chalco Materials Co. Ltd. (中鋁物資有限公司)	PRC/Mainland China	1,000,000	Purchase materials	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 length.

The English names represent the best effort made by management of the Group in translating the subsidiaries' Chinese name as they do 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 under the historical cost convention, except for equity investments at fair value through other comprehensive income and financial assets and liabilities at fair value through profit or loss which have been measured at fair value.

These financial statements are presented in thousands of Chinese 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 2018, the Group's current liabilities exceeded its current assets by approximately RMB15,853 million (31 December 2017 (restated): RMB21,693 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 2019;
- Unutilised banking facilities of approximately RMB121,518 million as at 31 December 2018, of which amounts totalling RMB92,582 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 2018. 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 2018. 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. The financial statements of the subsidiaries are prepared for the same reporting period as the Company using consistent accounting policies. 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 or loss and other comprehensive income from the date the Group gains control or 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. 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.

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 combinations 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 the 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 profit or loss and other 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 which 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

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group, other than common control combinations. The considerations transferred for the acquisition of a subsidiary are the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability 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 their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree at the non-controlling interest's proportionate share of the recognised amounts of the acquiree's identifiable net assets. The excess of the consideration transferred, the amount recognised for non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill.

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 proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

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.

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 (Continued)

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.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

(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).

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.

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

2.1 Basis of preparation (Continued)

Consolidation (Continued)

(c) Subsidiaries (Continued)

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.

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 2	<i>Classification and Measurement of Share-based Payment Transactions</i>
Amendments to IFRS 4	<i>Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts</i>
IFRS 9	<i>Financial Instruments</i>
<i>IFRS 15</i>	<i>Revenue from Contracts with Customers</i>
<i>Amendments to IFRS 15</i>	<i>Clarifications to IFRS 15 Revenue from Contracts with Customers</i>
<i>Amendments to IAS 40</i>	<i>Transfers of Investment Property</i>
<i>IFRIC 22</i>	<i>Foreign Currency Transactions and Advance Consideration</i>
Annual Improvements 2014–2016 Cycle	<i>Amendments to IFRS 1 and IAS 28</i>

Except for the amendments to IFRS 4 and Annual Improvements 2014–2016 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:

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

2.2 Changes in accounting policies and disclosures (Continued)

- (a) Amendments to IFRS 2 address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding a certain amount in order to meet an employee's tax obligation associated with the share-based payment; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash-settled to equity-settled. The amendments clarify that the approach used to account for vesting conditions when measuring equity-settled share-based payments also applies to cash-settled share-based payments. The amendments introduce an exception so that a share-based payment transaction with net share settlement features for withholding a certain amount in order to meet the employee's tax obligation is classified in its entirety as an equity-settled share-based payment transaction when certain conditions are met. Furthermore, the amendments clarify that if the terms and conditions of a cash-settled share-based payment transaction are modified, with the result that it becomes an equity-settled share-based payment transaction, the transaction is accounted for as an equity-settled transaction from the date of the modification. The amendments have had no impact on the financial position or performance of the Group as the Group does not have any cash-settled share-based payment transactions and has no share-based payment transactions with net settlement features for withholding tax.
- (b) IFRS 9 Financial Instruments replaces IAS 39 Financial Instruments: Recognition and Measurement for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement, impairment and hedge accounting.

The Group has recognised the transition adjustments against the applicable opening balances in equity at 1 January 2018. Therefore, the comparative information was not restated and continues to be reported under IAS 39.

Classification and measurement

The following information sets out the impacts of adopting IFRS 9 on the consolidated statement of financial position, including the effect of replacing IAS 39's incurred credit loss calculations with IFRS 9's expected credit losses ("ECLs").

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

2.2 Changes in accounting policies and disclosures (Continued)

(b) (Continued)

Classification and measurement (continued)

A reconciliation between the carrying amounts under IAS 39 and the balances reported under IFRS 9 as at 1 January 2018 is as follows:

	Notes	IAS 39 measurement		Re- classification RMB'000	Fair value ECL adjustment RMB'000		IFRS 9 measurement	
		Category	Amount RMB'000		Amount RMB'000	Amount RMB'000	Category	
Assets								
Financial assets								
Trade and notes								
receivables		L&R	8,008,937	-	(112,407)	-	7,896,530	AC
Other current assets		L&R	6,487,548	-	(38,502)	-	6,449,046	AC
Other non-current assets		L&R	261,156	-	-	-	261,156	AC
Financial assets at fair value through profit and loss		FVPL	9,534	-	-	-	9,534	FVPL
Cash and cash equivalents		L&R	27,835,866	-	-	-	27,835,866	AC
Restricted cash		L&R	2,168,192	-	-	-	2,168,192	AC
Available-for-sale financial investments	(i)	AFS	1,928,201	(1,928,201)	-	-	-	N/A
Equity investments designated at fair value through other comprehensive income	(i)	N/A	-	1,928,201	-	15,114	1,943,315	FVOCI (Equity)

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

2.2 Changes in accounting policies and disclosures (Continued)

(b) (Continued)

Classification and measurement (continued)

	IAS 39 measurement		Re- classification	Fair value ECL adjustment	IFRS 9 measurement		
	Category	Amount			Amount	Category	
	<i>Notes</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>		
		46,699,434	-	(150,909)	15,114	46,563,639	-
Total assets		199,816,799	-	(150,909)	15,114	199,681,004	
Liabilities							
Other liabilities							
Deferred tax liabilities		993,742	-	-	3,641	997,383	
Total Liabilities		134,074,203	-	-	3,641	134,077,844	

L&R: Loans and receivables

AC: Financial assets or financial liabilities at amortised cost

FVPL: Financial assets at fair value through profit or loss

AFS: Available-for-sale investments

FVOCI: Financial assets at fair value through other comprehensive income

Notes:

The Group has elected the option to irrevocably designate certain of its previous available-for-sale equity investments as equity investments at fair value through other comprehensive income.

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

2.2 Changes in accounting policies and disclosures (Continued)

(b) (Continued)

Impairment

The following table reconciles the aggregate opening impairment allowances under IAS 39 to the ECL allowances under IFRS 9. Re-measurement equals to the effect of adoption of IFRS 9 in note 14 and note 15.

	Impairment allowances under IAS 39 at 31 December 2017 (restated) <i>RMB'000</i>	Re-measurement (note 14/note 15) <i>RMB'000</i>	ECL allowances under IFRS 9 at 1 January 2018 <i>RMB'000</i>
Trade receivables	546,102	112,407	658,509
Other current assets	1,673,122	38,502	1,711,624
	2,219,224	150,909	2,370,133

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

2.2 Changes in accounting policies and disclosures (Continued)

(b) (Continued)

Impact on reserves and accumulated losses

The impact of transition to IFRS 9 on reserves and accumulated losses is as follows:

	Reserves and accumulated losses <i>RMB'000</i>
<hr/>	
Fair value reserve under IFRS 9 (gain on available-for-sale financial assets under IAS 39)	
Balance as at 31 December 2017 under IAS 39	6,836
Remeasurement of equity investments designated at fair value through other comprehensive income previously measured at cost under IAS 39	14,263
Deferred tax in relation to the above	(3,428)
<hr/>	
Balance as at 1 January 2018 under IFRS 9	17,671
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Accumulated losses	
Balance as at 31 December 2017 under IAS 39	(3,368,095)
Adjustment due to business combinations under common control (note 38)	35,724
Recognition of expected credit losses for trade receivables under IFRS 9	(94,844)
Recognition of expected credit losses for current financial assets at amortised cost under IFRS 9	(38,502)
<hr/>	
Balance as at 1 January 2018 under IFRS 9	(3,465,717)
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2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.2 Changes in accounting policies and disclosures (Continued)

(b) (Continued)***Impact on reserves and accumulated losses (continued)***

	Reserves and accumulated losses <i>RMB'000</i>
<hr/>	
Non-controlling interests	
Balance as at 31 December 2017 under IAS 39	26,035,429
Adjustment due to business combinations under common control (note 38)	19,138
Remeasurement of equity investments designated at fair value through other comprehensive income previously measured at cost under IAS 39	851
Recognition of expected credit losses for trade receivables under IFRS 9	(17,563)
Deferred tax in relation to the above	(213)
<hr/>	
Balance as at 1 January 2018 under IFRS 9	<u>26,037,642</u>

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

2.2 Changes in accounting policies and disclosures (Continued)

- (c) IFRS 15 and its amendments replace IAS 11 Construction Contracts, IAS 18 Revenue and related interpretations and it applies, with limited exceptions, to all revenue arising from contracts with customers. IFRS 15 establishes a new five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The principles in IFRS 15 provide a more structured approach for measuring and recognising revenue. The standard also introduces extensive qualitative and quantitative disclosure requirements, including disaggregation of total revenue, information about performance obligations, changes in contract asset and liability account balances between periods and key judgements and estimates. The disclosures are included in note 4 to the financial statements. As a result of the application of IFRS 15, the Group has changed the accounting policy with respect to revenue recognition in note 2.27 to the financial statements.

The Group has adopted IFRS 15 using the modified retrospective method of adoption. The Group applied IFRS 15 to contracts that are initiated after the effective date and contracts that had remaining obligations as of the effective date. In respect of the prior periods, the Group retained prior period's figures as reported under the previous standards, recognising the cumulative effect of applying IFRS 15 as an adjustment to the opening balance of equity as at 1 January 2018. The Group concluded that the transitional adjustment to be made on 1 January 2018 to accumulated losses upon initial adoption of IFRS 15 is nil. It is because the Group recognises revenue upon the transfer of significant risks and rewards, which coincides with the fulfilment of performance obligations. Additionally, the Group's contracts with customers generally has only one performance obligation.

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

2.2 Changes in accounting policies and disclosures (Continued)

(c) (Continued)

The nature of the adjustments as at 1 January 2018 and the reasons for the significant changes in the consolidated statement of financial position as at 31 December 2018 are described below:

Consideration received from customers in advance

Before the adoption of IFRS 15, the Group recognised consideration received from customers in advance as other payables. Under IFRS 15, the amount is classified as contract liabilities.

Therefore, upon adoption of IFRS 15, the Group reclassified RMB1,372 million from other payables to contract liabilities as at 1 January 2018 in relation to the consideration received from customers in advance as at 1 January 2018.

As at 31 December 2018, under IFRS 15, RMB1,579 million was recorded as contract liabilities in relation to the consideration received from customers in advance for the sale of industrial products.

(d) **Voluntary change in accounting policies for government grants**

In 2018, the management of the Group performed an analysis on the nature of the Group's government grants. After reassessing the gross vs. net presentation policy, management considered that presenting government grants in the net method can provide reliable and more relevant information about the effects of transactions to the users of the financial statements. As such, the Company proposed a voluntary change in the accounting policy.

Up to the year of 2017, the Group recognised and measured government grants according to the gross method:

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

2.2 Changes in accounting policies and disclosures (Continued)

(d) Voluntary change in accounting policies for government grants (Continued)

Asset-related government grants are recognised when the government document designates that the government grants are used for constructing or forming long-term assets. Asset-related government grants are recognised as deferred income and are amortised evenly in profit or loss over the useful lives of the related assets. Income-related government grants that are used to compensate subsequent related expenses or losses of the Group are recognised as deferred income and recorded in profit or loss when the related expenses or losses are incurred. When the grants are used to compensate expenses or losses that were already incurred, they are directly recognised in profit or loss for the current period.

After the voluntary change in the accounting policy, the Group recognised government grants according to the net method. For asset related government grants, had the asset already existed upon receiving the government grant, the Group directly deducted the grant amount from the book value of the assets related to the government grant instead of recording the government grants as deferred income. For government grants related to expenses already incurred by the Group, which are specific to compensate certain cost and expenses, the Group would directly offset the grant amount against the related cost or expense.

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

2.2 Changes in accounting policies and disclosures (Continued)

(d) Voluntary change in accounting policies for government grants (Continued)

The main effects of retrospective adjustments caused by the above accounting policy change on financial statements are as follows:

Consolidated statement of financial position	Before change in accounting policy 31 December 2018	Reclassification on change in accounting policy	After change in accounting policy change 31 December 2018
Assets:			
Property, plant and equipment	107,066,073	(872,704)	106,193,369
Land use rights	4,484,055	(203,764)	4,280,291
Intangible assets	12,881,804	(2,439)	12,879,365
Other non-current assets	4,446,938	(4,294)	4,442,644
	128,878,870	(1,083,201)	127,795,669
Total assets	201,959,315	(1,083,201)	200,876,114
Liabilities:			
Other non-current liabilities	3,521,365	(1,083,201)	2,438,164
Total liabilities	134,290,113	(1,083,201)	133,206,912

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

2.2 Changes in accounting policies and disclosures (Continued)

(d) Voluntary change in accounting policies for government grants (Continued)

Consolidated statement of profit or loss and other comprehensive income	Before change in accounting policy 2018	Reclassification on change in accounting policy	After change in accounting policy 2018
Cost of sales	(167,254,868)	225,452	(167,029,416)
General and administration expenses	(4,540,590)	582,523	(3,958,067)
Research and development expenses	(630,815)	3,942	(626,873)
Selling and distribution expenses	(2,496,977)	44	(2,496,933)
Other income	947,328	(811,961)	135,367
	(173,975,922)	–	(173,975,922)
Profit before tax	2,303,511	–	2,303,511

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

2.2 Changes in accounting policies and disclosures (Continued)

(d) Voluntary change in accounting policies for government grants (Continued)

Consolidated statement of financial position	Before change in accounting policy 31 December 2017 (restated)	Reclassification on change in accounting policy	After change in accounting policy 31 December 2017 (restated)
Assets:			
Property, plant and equipment	96,430,815	(803,238)	95,627,577
Land use rights	3,746,602	(169,590)	3,577,012
Intangible asset	10,653,175	(15,542)	10,637,633
	110,830,592	(988,370)	109,842,222
Total assets	200,805,169	(988,370)	199,816,799
Liabilities:			
Other non-current liabilities	3,442,030	(988,370)	2,453,660
Total liabilities	135,062,573	(988,370)	134,074,203

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

2.2 Changes in accounting policies and disclosures (Continued)

(d) Voluntary change in accounting policies for government grants (Continued)

	Before change in accounting policy 2017 (restated)	Reclassification on change in accounting policy	After change in accounting policy 2017 (restated)
Consolidated statement of profit or loss and other comprehensive income			
Cost of sales	(166,494,842)	204,607	(166,290,235)
General and administration expenses	(4,604,055)	54,849	(4,549,206)
Other income	349,329	(259,456)	89,873
	(170,749,568)	–	(170,749,568)
Profit before tax	3,049,010	–	3,049,010

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

2.2 Changes in accounting policies and disclosures (Continued)

- (e)** Amendments to IAS 40 clarify when an entity should transfer property, including property under construction or development, into or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. A mere change in management's intentions for the use of a property does not provide evidence of a change in use. The amendments have had no impact on the financial position or performance of the Group.
- (f)** IFRIC 22 provides guidance on how to determine the date of the transaction when applying IAS 21 to the situation where an entity receives or pays advance consideration in a foreign currency and recognises a non-monetary asset or liability. The interpretation clarifies that the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) is the date on which an entity initially recognises the non-monetary asset (such as a prepayment) or non-monetary liability (such as deferred income) arising from the payment or receipt of the advance consideration. If there are multiple payments or receipts in advance of recognising the related item, the entity must determine the transaction date for each payment or receipt of the advance consideration. The interpretation has had no impact on the Group's financial statements as the Group's accounting policy for the determination of the exchange rate applied for initial recognition of non-monetary assets or non-monetary liabilities is consistent with the guidance provided in the interpretation.

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	<i>Definition of a Business²</i>
Amendments to IFRS 9	<i>Prepayment Features with Negative Compensation¹</i>
Amendments to IFRS 10 and IAS 28	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture⁴</i>
IFRS 16	<i>Leases¹</i>
IFRS 17	<i>Insurance Contracts³</i>
Amendments to IAS 1 and IAS 8	<i>Definition of Material²</i>
Amendments to IAS 19	<i>Plan Amendment, Curtailment or Settlement¹</i>
Amendments to IAS 28	<i>Long-term Interests in Associates and Joint Ventures¹</i>
IFRIC 23	<i>Uncertainty over Income Tax Treatments¹</i>
Annual Improvements 2015–2017 Cycle	<i>Amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23¹</i>

- 1 Effective for annual periods beginning on or after 1 January 2019
- 2 Effective for annual periods beginning on or after 1 January 2020
- 3 Effective for annual periods beginning on or after 1 January 2021
- 4 No mandatory effective date yet determined but available for adoption

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

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

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

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.

Amendments to IFRS 10 and IAS 28 address an inconsistency between the requirements in IFRS 10 and in IAS 28 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 previous mandatory effective date of amendments to IFRS 10 and IAS 28 was removed by the IASB in January 2016 and a new mandatory effective date will be determined after the completion of a broader review of accounting for associates and joint ventures. However, the amendments are available for adoption now.

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

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

IFRS 16 replaces IAS 17 *Leases*, IFRIC Interpretation 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 recognise assets and liabilities for most leases. The standard includes two elective recognition exemptions for lessees – leases of low-value assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments and an asset representing the right to use the underlying asset during the lease term. The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in IAS 40, or relates to a class of property, plant and equipment to which the revaluation model is applied. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. Lessor accounting under IFRS 16 is substantially unchanged from the accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between operating leases and finance leases. IFRS 16 requires lessees and lessors to make more extensive disclosures than under IAS 17. Lessees can choose to apply the standard using either a full retrospective or a modified

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

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

retrospective approach. The Group will adopt IFRS 16 from 1 January 2019. The Group plans to adopt the transitional provisions in IFRS 16 to recognise the cumulative effect of initial adoption as an adjustment to the opening balance of accumulated losses at 1 January 2019 and will not restate the comparatives. In addition, the Group plans to apply the new requirements to contracts that were previously identified as leases applying IAS 17 and measure the lease liability at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate at the date of initial application. The right-of-use asset will be 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 statement of financial position immediately before the date of initial application. The Group plans to use the exemptions allowed by the standard on lease contracts whose lease terms end within 12 months as of the date of initial application. During 2018, the Group has performed a detailed assessment on the impact of adoption of IFRS 16. The Group has preliminarily estimated that right-of-use assets of RMB6,929 million and lease liabilities of RMB6,929 million will be recognised at 1 January 2019.

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 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 expects to adopt the amendments on 1 January 2019 and will assess its business model for such long-term interests based on the facts and circumstances that exist on 1 January 2019 using the transitional requirements in the amendments. The Group also intends to apply the relief from restating comparative information for prior periods upon adoption of the amendments.

IFRIC-Int 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. The interpretation is to be applied retrospectively, either fully retrospectively without the use of hindsight or retrospectively with the cumulative effect of application as an adjustment to the opening equity at the date of initial application, without the restatement of comparative information. The Group expects to adopt the interpretation from 1 January 2019. The interpretation is 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 joint ventures and associates

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

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.

The Group's investments in associates and joint ventures are accounted for using the equity method, less any impairment losses.

Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment, and tested for impairment when any indicators of impairment are identified.

The consolidated statement of profit or loss and other comprehensive income includes the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. 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 the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown in the consolidated statement of profit or loss and other comprehensive income and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

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

2.4 Investments in joint ventures and associates (Continued)

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. 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 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 the 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. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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.

2.6 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

- (b) the party is an entity where any of the following conditions applies:
 - (i) the entity and the Group are members of the same group;
 - (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);
 - (iii) the entity and the Group are joint ventures of the same third party;
 - (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

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: (Continued)
 - (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
 - (vi) the entity is controlled or jointly controlled by a person identified in (a);
 - (vii) 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
 - (viii) 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.

2.7 Fair value measurement

The Group measures its futures, options and forward contracts and equity investments at fair value at the end of each reporting period. Also, the fair values of financial instruments measured at amortised cost are disclosed in note 36.

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.

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

2.7 Fair value measurement (Continued)

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.

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 directly or indirectly observable
- 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 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)

2.8 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 or 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)

2.9 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

The depreciation method, residual values and useful lives are reviewed and adjusted, if appropriate, at the end of each reporting period. 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.

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

2.9 Property, plant and equipment (Continued)

Construction in progress (“CIP”) represents buildings under construction, and plant and equipment pending for installation, and is stated at cost less any impairment losses. Cost comprises construction expenditures, other expenditures necessary for the purpose of preparing the CIP for its intended use and those borrowing costs incurred before the asset is ready for its intended use that is eligible for capitalisation. CIP is transferred to property, plant and equipment when the CIP is ready for its intended use.

2.10 Intangible assets

(a) Goodwill

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 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.

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

2.10 Intangible assets (Continued)

(a) Goodwill (Continued)

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. Impairment is determined by assessing the recoverable amount of the cash-generating unit to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period. Any impairment is recognised immediately as an expense and is not subsequently reversed.

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.

(b) Mining rights and mineral exploration rights

The Group's mineral exploration rights and mining rights relate to coal, bauxite and other mines.

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

2.10 Intangible assets (Continued)

(b) Mining rights and mineral exploration rights (Continued)

(i) Recognition

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.

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.

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

2.10 Intangible assets (Continued)

(b) Mining rights and mineral exploration rights (Continued)

(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)

2.10 Intangible assets (Continued)

(c) 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.

(d) Primary aluminium production quota

Primary aluminium production quota are initially recorded at purchased costs incurred to acquire the quota. Amortisation is calculated on the straight-line basis over the expected production period.

(e) 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.

(f) Periodic review of the useful lives and amortisation method

For intangible assets with finite useful lives, 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)

2.11 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)

2.12 Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, for example, goodwill or intangible assets with an 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 profit or loss in the period in which it arises.

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)

2.13 Investment properties

Investment properties are interests in land and buildings (including the leasehold interest under an operating lease for a property 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 model to measure all of its investment properties.

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. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.14 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)

2.15 Financial assets

Policies under IFRS 9 applicable from 1 January 2018

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 (applicable from 1 January 2018)" below.

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.

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

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

Initial recognition and measurement (Continued)

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.

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.

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

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

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

Financial assets at amortised cost (debt instruments)

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

- Financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows.
- Contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

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

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

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

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.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are 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, 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.

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

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at fair value through other comprehensive income, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

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

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

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

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 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.

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)

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

Impairment of financial assets

The Group recognises an allowance for ECLs for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

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)

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (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.

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

2.15 Financial assets (Continued)

Policies under IFRS 9 applicable from 1 January 2018 (Continued)

Impairment of financial assets (Continued)

General approach (Continued)

- 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

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 receivable, the Group chooses as its accounting policy to adopt the simplified approach in calculating ECLs with policies as described above.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018

Classification

The Group classifies its financial assets in the following categories: financial assets at fair value through profit or loss, loans and receivables and available-for-sale financial investments. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

(i) Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition as at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purposes of sale in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments as defined by IAS 39.

Financial assets at fair value through profit or loss are carried in the consolidated statement of financial position at fair value with positive net changes in fair value presented as other income and gains and negative net changes in fair value presented as finance costs in profit or loss. These net fair value changes do not include any dividends or interest earned on these financial assets, which are recognised in accordance with the policies set out for "Revenue recognition" (applicable before 1 January 2018) below.

Financial assets designated upon initial recognition as at fair value through profit or loss are designated at the date of initial recognition and only if the criteria in IAS 39 are satisfied.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018 (Continued)

Classification (Continued)

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

Derivatives embedded in host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated as at fair value through profit or loss. These 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.

(ii) *Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such assets are subsequently measured at amortised cost using the effective interest rate method less any allowance for impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and includes fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in other income and gains in profit or loss. The loss arising from impairment is recognised in profit or loss in finance costs for loans and in impairment losses of financial assets for receivables.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018 (Continued)

Classification (Continued)

(iii) Available-for-sale financial investments

Available-for-sale financial investments are non-derivative financial assets in listed and unlisted equity investments and debt securities. Equity investments classified as available for sale are those which are neither classified as held for trading nor designated as at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity or in response to changes in market conditions.

After initial recognition, available-for-sale financial investments are subsequently measured at fair value, with unrealised gains or losses recognised as other comprehensive income in the available-for-sale investment revaluation reserve until the investment is derecognised, at which time the cumulative gain or loss is recognised in profit or loss in other income, or until the investment is determined to be impaired, when the cumulative gain or loss is reclassified from the available-for-sale investment revaluation reserve to profit or loss in other gains. Interest and dividends earned whilst holding the available-for-sale financial investments are reported as interest income and dividend income, respectively and are recognised in profit or loss as other gains in accordance with the policies set out for "Interest income" and "Dividend income" below.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018 (Continued)

Classification (Continued)

(iii) Available-for-sale financial investments (Continued)

When the fair value of unlisted equity investments cannot be reliably measured because (a) the variability in the range of reasonable fair value estimates is significant for that investment or (b) the probabilities of the various estimates within the range cannot be reasonably assessed and used in estimating fair value, such investments are stated at cost less any impairment losses.

The Group evaluates whether the ability and intention to sell its available-for-sale financial assets in the near term are still appropriate. When, in rare circumstances, the Group is unable to trade these financial assets due to inactive markets, the Group may elect to reclassify these financial assets if management has the ability and intention to hold the assets for the foreseeable future or until maturity.

For a financial asset reclassified from the available-for-sale category, the fair value carrying amount at the date of reclassification becomes its new amortised cost and any previous gain or loss on that asset that has been recognised in equity is amortised to profit or loss over the remaining life of the investment using the effective interest rate. Any difference between the new amortised cost and the maturity amount is also amortised over the remaining life of the asset using the effective interest rate. If the asset is subsequently determined to be impaired, then the amount recorded in equity is reclassified to profit or loss.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018 (Continued)

Recognition and measurement

All regular 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. Investments are initially recognised at fair value plus transaction costs, except in the case of financial assets recorded at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognised at fair value and transaction costs are expensed in profit or loss. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Available-for-sale financial investments and financial assets at fair value through profit or loss are subsequently carried at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

Impairment of financial assets

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that occurred after the initial recognition of the asset have an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that a debtor or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018

Impairment of financial assets (Continued)

Financial assets carried at amortised cost

For financial assets carried at amortised cost, the Group assesses whether impairment exists individually for financial assets.

The amount of any impairment loss identified is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate (i.e., the effective interest rate computed at initial recognition).

The carrying amount of the asset is reduced through the use of an allowance account and the loss is recognised in profit or loss. Interest income continues to be accrued on the reduced carrying amount using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Loans and receivables together with any associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Group.

If, in a subsequent period, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognised, the previously recognised impairment loss is increased or reduced by adjusting the allowance account. If a write-off is later recovered, the recovery is credited to other gains in profit or loss.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018

Impairment of financial assets (Continued)

Available-for-sale financial investments

For available-for-sale financial investments, the Group assesses at the end of each reporting period whether there is objective evidence that an investment or a group of investments is impaired.

If an available-for-sale asset is impaired, an amount comprising the difference between its cost (net of any principal payment and amortisation) and its current fair value, less any impairment loss previously recognised in profit or loss, is removed from other comprehensive income and recognised in profit or loss.

In the case of equity investments classified as available-for-sale financial investments, a significant or prolonged decline in the fair value of the security below its cost is considered as an indicator that the securities are impaired. If any such evidence exists for available-for-sale financial investments, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in other comprehensive income – is removed from other comprehensive income and recognised in profit or loss. Impairment losses recognised in profit or loss on equity instruments are not reversed through profit or loss.

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

2.15 Financial assets (Continued)

Policies under IAS 39 applicable before 1 January 2018 (Continued)

Impairment of financial assets (Continued)

Available-for-sale financial investments (Continued)

The determination of what is “significant” or “prolonged” requires judgement. In making this judgement, the Group evaluates, among other factors, the duration or extent to which the fair value of an investment is less than its cost.

In the case of debt instruments classified as available for sale, impairment is assessed based on the same criteria as financial assets carried at amortised cost. However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortised cost and the current fair value, less any impairment loss on that investment previously recognised in profit or loss. Future interest income continues to be accrued based on the reduced carrying amount of the asset and is accrued using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. The interest income is recorded as part of finance income. Impairment losses on debt instruments are reversed through profit or loss if the subsequent increase in fair value of the instruments can be objectively related to an event occurring after the impairment loss was recognised in profit or loss.

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

2.15 Financial assets (Continued)

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018

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)

2.16 Financial liabilities

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018

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 financial liabilities at fair value through profit or loss, loans and borrowings, trade and notes payables and other financial liabilities.

Subsequent measurement

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

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 the consolidated statement of profit or loss and other comprehensive income 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.

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

2.16 Financial liabilities (Continued)

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018 (Continued)

Subsequent measurement (Continued)

Financial liabilities at fair value through profit or loss (policies under IFRS 9 applicable from 1 January 2018)

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.

Financial liabilities designated upon initial recognition as at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. Gains or losses on liabilities designated at fair value through profit or loss are recognised in profit or loss, except for the gains or losses arising from the Group's own credit risk which are presented in other comprehensive income with no subsequent reclassification to 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)

2.16 Financial liabilities (Continued)

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018 (Continued)

Subsequent measurement (Continued)

Financial liabilities at fair value through profit or loss (policies under IAS 39 applicable before 1 January 2018)

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 acquired for the purpose of repurchasing in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IAS 39. 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 into profit or loss does not include any interest charged on these financial liabilities.

Financial liabilities designated upon initial recognition as at fair value through profit or loss are designated at the date of initial recognition and only if the criteria in IAS 39 are satisfied.

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

2.16 Financial liabilities (Continued)

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018 (Continued)

Subsequent measurement (Continued)

Financial guarantee contracts (policies under IFRS 9 applicable from 1 January 2018)

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 (policies under IFRS 9 applicable from 1 January 2018)”; and (ii) the amount initially recognised less, when appropriate, the cumulative amount of income recognised.

Financial guarantee contracts (policies under IAS 39 applicable before 1 January 2018)

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 contract at the higher of (i) the amount of the best estimate of the expenditure required to settle the present obligation at the end of the reporting period; and (ii) the amount initially recognised less, when appropriate, cumulative amortisation.

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

2.16 Financial liabilities (Continued)

Derecognition of financial liabilities (policies under IFRS 9 applicable from 1 January 2018 and IAS 39 applicable before 1 January 2018)

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.

2.17 Offsetting financial instruments

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018

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. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.18 Derivative financial instruments

Policies under IFRS 9 from 1 January 2018 and policies under IAS 39 applicable before 1 January 2018

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.

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

2.20 Trade and notes receivables

Trade and notes receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business. If collection of these receivables is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets.

Trade and notes receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

2.21 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.

2.22 Government grants

Government grants are recognised when the Group fulfils the conditions attached to them and there is reasonable assurance that the grant will be received. When the government grant is in the form of monetary assets, it is measured at the actual amount received. When the government grant is in the form of non-monetary assets, the grant is recorded at the fair value of the non-monetary assets.

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

2.22 Government grants (Continued)

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.

As described in note 2.2 (d), the Group has voluntarily changed the accounting policy for government grants on the presentation in the consolidated statement of financial position and the consolidated statement of profit or loss and other comprehensive income. The revised accounting policies are as follows:

For asset-related government grants that are related to non-current assets that already exist at the time of recognising the government grant, the grant is deducted from the carrying amount of the asset. 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 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 deducted from the related expenses or costs when the related expenses or costs are incurred.

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

2.23 Trade and notes payables and other payables

Trade and notes payables and other payables are mainly obligations to pay for goods, equipment or services that have been acquired in the ordinary course of business from suppliers and service providers. These payables are classified as current liabilities if they are due within one year or less (or in the normal operating cycle of the business if longer).

2.24 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 2018, the Group made monthly contributions at the rate of 20% (2017: 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)

2.24 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 the 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 the 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)

2.25 Current and deferred 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.

Deferred tax assets are recognised for all deductible temporary differences, 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:

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

2.25 Current and deferred income tax (Continued)

- 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.

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. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 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.

2.27 Revenue recognition

Applicable from 1 January 2018

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.

(a) *Revenue from the sales (including sales of scrap and other materials)*

Revenue from the sale of industrial products or 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.

(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 recognized on a straight-line basis because the entity's inputs are expended evenly throughout the performance period.

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

2.28 Contract liabilities

Applicable from 1 January 2018

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received a consideration (or an amount of consideration that is due) from the customer. If a customer pays the consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

2.29 Interest income

Applicable from 1 January 2018

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.

2.30 Dividend income

Applicable from 1 January 2018

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)

2.31 Revenue recognition

Applicable before 1 January 2018

The Group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the Group and when specific criteria have been met for each of the Group's activities (see descriptions below).

(a) Sales of goods

Revenue from the sales of goods is recognised when the significant risks and rewards of ownership have been transferred to the buyer, provided that the Group maintains neither managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold.

(b) Rendering of services

The Group provides machinery processing, transportation and packaging services and other services to third party customers. These services are recognised in the period when the related services are provided.

2.32 Interest income

Applicable before 1 January 2018

Interest income is recognised using the effective interest method. When a loan or receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flows discounted at the original effective interest rate of the instrument, and continues unwinding the discount as interest income. Interest income on impaired loans and receivables is recognised using the original effective interest rate.

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

2.33 Dividend income

Applicable before 1 January 2018

Dividend income is recognised when the right to receive payment is established.

2.34 Leases

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 the statement of profit or loss and other comprehensive income 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.

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 the statement of profit or loss and other comprehensive income 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 the statement of profit or loss and other comprehensive income 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.

When the lease payments cannot be allocated reliably between the land and buildings elements, the entire lease payments are included in the cost of the land and buildings as a finance lease in property, plant and equipment.

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

2.35 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as 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 eligible for capitalisation.

All other borrowing costs are recognised in profit or loss 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.

2.36 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.

2.37 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.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as finance costs.

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

At 31 December 2018, 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 2018, the Group owned a 14.62% equity interest in China Rare Earth Co., Ltd. * ("China Rare Earth") (中國稀有稀土股份有限公司). The Group considers that it has significant influence over China Rare Earth 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 China Rare Earth.

At 31 December 2018, the Group owned 17.7% 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 2018, 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 2018, 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 2018, 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.

As disclosed in note 38, the Company holds 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)

As disclosed in note 38, the Company holds 40% 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 10, 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.

(d) Lease classification

As disclosed in note 20, the Group has entered into several sales and lease back agreements with third party leasing companies and related party leasing companies. The Group assessed the terms in the agreements and considered that the Group had substantially all the risks and rewards of ownership and treated them as finance leases.

* 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

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 (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 expected production and sales volumes, selling 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 net 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 – 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.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (continued)

(b) Property, plant and equipment and intangible assets – estimated useful lives and residual values (continued)

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.

(c) 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.

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 representative of the customer's actual default in the future. The information about the ECLs on the Group's trade receivables is disclosed in note 14 to the financial statements.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (continued)

(d) Estimated impairment of inventories

In accordance with the Group's accounting policy, the Group's management tests whether inventories suffered any impairment based on the 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 other inventories, management estimates the realisable future price based on the actual prices during the period from the end of the reporting period to the date that these financial statements were approved for issue by the board of directors of the Company and takes into account the nature and balance of inventories and future estimated price trends. 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)

(e) 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.

(f) 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 the 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.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (continued)

(f) Income tax (continued)

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 and 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 the likely timing and level of future taxable profits together with future tax planning strategies.

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 that 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.

3. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

Estimates and assumptions (continued)

(g) Goodwill – recoverable amount

In accordance with the Group's accounting policy, goodwill is allocated to the Group's cash generating units 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 by preparing a formal estimate of the recoverable amount. The recoverable amount is the higher of value in use and the fair value less costs of disposal. Similar considerations to those described above in respect of assessing the recoverable amount of property, plant and equipment also apply to goodwill.

(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

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.

4. REVENUE AND SEGMENT INFORMATION

(a) Revenue

Revenue recognised during the year is as follows:

	2018	2017 (restated)
Sales of goods (net of value-added tax)	179,784,444	180,704,153
Rendering of services	215,557	163,732
Rental income	240,153	152,543
	180,240,154	181,020,428

Other revenue primarily includes revenue from the sale of scrap and other materials, the supply of heat and water and the provision of machinery processing, transportation and packaging and other services.

Revenue from contracts with customers

(i) Disaggregated revenue information

	For the year ended 31 December 2018						Total
	Alumina segment	Primary Aluminum segment	Energy Segment	Trading	Corporate and other operating segments	Inter-segment elimination	
Type of goods or services							
Sales of goods	43,979,059	53,771,379	7,019,716	141,979,219	667,095	(67,632,024)	179,784,444
Rendering of services	-	-	215,557	-	-	-	215,557
Total revenue	43,979,059	53,771,379	7,235,273	141,979,219	667,095	(67,632,024)	180,000,001
Geographical markets							
Mainland China	43,979,059	53,771,379	7,235,273	132,762,660	667,095	(67,632,024)	170,783,442
Outside of mainland China	-	-	-	9,216,559	-	-	9,216,559
Total revenue	43,979,059	53,771,379	7,235,273	141,979,219	667,095	(67,632,024)	180,000,001

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(a) Revenue (continued)

(i) Disaggregated revenue information (continued)

	For the year ended 31 December 2018						Total
	Alumina segment	Primary Aluminum segment	Energy Segment	Trading	Corporate and other operating segments	Inter-segment elimination	
Timing of revenue recognition							
Goods transferred at a point in time	43,979,059	53,771,379	7,019,716	141,979,219	667,095	(67,632,024)	179,784,444
Services transferred over time	-	-	215,557	-	-	-	215,557
Total revenue	43,979,059	53,771,379	7,235,273	141,979,219	667,095	(67,632,024)	180,000,001
Revenue from contracts with customers							
External customers	14,586,564	41,313,516	7,036,936	116,608,916	454,069	-	180,000,001
Intersegment sales	29,392,495	12,457,863	198,337	25,370,303	213,026	-	67,632,024
	43,979,059	53,771,379	7,235,273	141,979,219	667,095	-	247,632,025
Intersegment adjustments and eliminations	(29,392,495)	(12,457,863)	(198,337)	(25,370,303)	(213,026)	-	(67,632,024)
Total revenue	14,586,564	41,313,516	7,036,936	116,608,916	454,069	-	180,000,001

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 and recognised from performance obligations satisfied in previous periods:

	2018
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:	
– Sales of goods	1,277,125
– Others	32,947
	1,310,072

(ii) Performance obligations

Information about the Group's performance obligations is summarised below:

Revenue from sales of products (including sales of and 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.

The transaction prices allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2018 are as follows:

Within one year	1,579,322
More than one year	132,844
	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.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

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.
- 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 the new energy-related equipment manufacturing business. Sales of coals are mainly made to the Group's internal and external coal consuming customers; electricity is sold to regional power grid corporations.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

- 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, 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.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

	Year ended 31 December 2018						
	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	142,016,561	667,235	(67,632,024)	180,240,154
Inter-segment revenue	(29,392,495)	(12,457,863)	(198,337)	(25,370,303)	(213,026)	67,632,024	-
Sales of self-produced products <i>(Note (ii))</i>				34,453,683			
Sales of products sourced from external suppliers and rental income				82,192,575			
Revenue from continuing operations	14,758,442	41,344,309	7,036,936	116,646,258	454,209	-	180,240,154
Segment profit/(loss) before income tax	3,496,381	(929,298)	26,020	779,451	(1,267,146)	198,103	2,303,511
Income tax expense							(822,499)
Profit for the year							1,481,012

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

	Year ended 31 December 2018						Total
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	
Other items							
Finance income	100,125	54,458	15,744	136,513	185,392	-	492,232
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)	(18,000)	-	-	(107,537)
Depreciation and amortisation (excluding the amortisation of land use rights)	(2,846,051)	(2,954,801)	(1,962,081)	(101,705)	(82,962)	-	(7,947,600)
Gain/(loss) on disposal of property, plant and equipment and land use rights	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
Impairment of property, plant and equipment	-	-	(7,450)	-	-	-	(7,450)
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

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

	Year ended 31 December 2018						Total
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter-segment eliminations	
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)	(84,807)	(9,621)	-	(107,841)
Dividends of equity investments at fair value through other comprehensive income	-	-	1,000	-	108,914	-	109,914
Loss on disposal of associates	-	-	(1,904)	-	-	-	(1,904)
Gain on previously held equity interest remeasured at 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

Note:

- (i) The sales of self-produced products include sales of self-produced alumina amounting to RMB 16,561 million (2017: RMB13,187 million), sales of self-produced primary aluminium amounting RMB13,517 million (2017: RMB6,680 million), and sales of self-produced other products amounting to RMB4,376 million (2017: RMB3,292 million).
- (ii) The additions to property, plant and equipment under sale and leaseback contracts (note 20) are not included.

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

	Year ended 31 December 2017 (restated)						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter- segment eliminations	Total
Total revenue	38,997,261	47,245,646	6,250,966	146,854,723	645,314	(58,973,482)	181,020,428
Inter-segment revenue	(24,431,939)	(10,693,678)	(517,269)	(23,159,115)	(171,481)	58,973,482	-
Sales of self-produced products <i>(Note (i))</i>				23,158,952			
Sales of products sourced from external suppliers				100,536,656			
Revenue from external customers	14,565,322	36,551,968	5,733,697	123,695,608	473,833	-	181,020,428
Segment profit/(loss) before income tax	3,290,945	826,632	(171,310)	733,731	(1,728,563)	97,575	3,049,010
Income tax expense							(643,734)
Profit for the year							2,405,276

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

	Year ended 31 December 2017 (restated)						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter- segment eliminations	Total
Other items							
Finance income	233,016	83,996	44,015	192,327	153,336	-	706,690
Finance costs	(708,655)	(1,212,249)	(1,000,767)	(467,090)	(1,814,663)	-	(5,203,424)
Share of profits and losses of joint ventures	82,619	-	(383,263)	1,885	306,910	-	8,151
Share of profits and losses of associates	-	(16,887)	(181,667)	9,463	23,842	-	(165,249)
Amortisation of land use rights	(42,768)	(25,120)	(15)	(6,376)	(17,300)	-	(91,579)
Depreciation and amortisation (excluding the amortisation of land use rights)	(2,781,350)	(2,516,058)	(1,510,218)	(78,724)	(86,200)	-	(6,972,550)
Gain on disposal of property, plant and equipment and land use rights	47,243	40,106	(12,826)	1,673	543	-	76,739
Realised gain/(loss) on futures, forward and option contracts, net	3,398	(47,730)	1,585	(24,953)	43,749	-	(23,951)
Impairment of property, plant and equipment	(568)	-	(15,632)	-	-	-	(16,200)
Unrealised gain/(loss) on futures, forward and option contracts, net	-	(17,033)	-	(92,719)	(21,321)	-	(131,073)
Gain on deemed disposal and disposal of subsidiaries	-	-	38,397	54,599	232,026	-	325,022

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

(b) Segment information (continued)

	Year ended 31 December 2017 (restated)						
	Alumina	Primary aluminum	Energy	Trading	Corporate and other operating segments	Inter- segment eliminations	Total
Changes for impairment of inventories	79,063	64,734	4,488	722	5,287	-	154,294
Reversal of/(provision for) impairment of receivables, net of bad debts recovered	(17,453)	269	(25,119)	(18,396)	-	-	(60,699)
Gain on disposal and dividends of available for sale	-	2,792	-	-	76,616	-	79,408
Gain on previously held equity interest remeasured at acquisition-date fair value	-	-	117,640	-	-	-	117,640
Investments in associates	90,875	296,357	2,170,178	184,149	4,193,471	-	6,935,030
Investments in joint ventures	2,809,758	-	878,196	28,865	2,290,805	-	6,007,624
Additions during the period:							
Intangible assets	-	197	284,509	372	89	-	285,167
Land use rights	-	-	27,956	25,199	6,060	-	59,215
Property, plant and equipment (<i>Note (iii)</i>)	2,642,350	5,533,168	1,268,051	64,005	256,093	-	9,763,667

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						
Segment assets	82,677,250	57,712,842	39,458,086	20,129,355	33,577,526	233,555,059
<i>Reconciliation:</i>						
Elimination of inter-segment receivables						(34,228,334)
Other eliminations						(155,283)
Corporate and other unallocated assets:						
Deferred tax assets						1,542,569
Prepaid income tax						162,103
Total assets						200,876,114
Segment liabilities	38,817,030	34,492,538	27,265,031	14,442,010	50,492,049	165,508,658
<i>Reconciliation:</i>						
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						133,206,912

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 2017						
(restated)						
Segment assets	69,810,387	51,736,716	40,113,747	18,586,406	48,264,166	228,511,422
<i>Reconciliation:</i>						
Elimination of inter-segment receivables						(30,170,567)
Other eliminations						(194,763)
Corporate and other unallocated assets:						
Deferred tax assets						1,606,150
Prepaid income tax						64,557
Total assets						199,816,799
Segment liabilities	33,037,329	29,552,176	27,368,026	13,067,384	60,012,851	163,037,766
<i>Reconciliation:</i>						
Elimination of inter-segment payables						(30,170,567)
Corporate and other unallocated liabilities:						
Deferred tax liabilities						993,742
Income tax payable						213,262
Total liabilities						134,074,203

4. REVENUE AND SEGMENT INFORMATION (CONTINUED)**(b) Segment information (continued)**

The Group mainly operates in Mainland China. Operating segment information by geographical location as follows:

	2018	2017 (restated)
Segment revenue from external customers		
– Mainland China	171,023,595	171,954,097
– Outside Mainland China	9,216,559	9,066,331
	180,240,154	181,020,428
	2018	2017 (restated)
Non-current assets (excluding financial assets and deferred tax assets)		
– Mainland China	137,857,441	126,992,893
– Outside Mainland China	646,327	384,089
	138,503,768	127,376,982

For the year ended 31 December 2018, revenues of approximately RMB32,852 million (2017: RMB39,759 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 2018 and 2017.

5. INTANGIBLE ASSETS

	Goodwill	Mining rights and others	Mineral exploration rights	Computer Software, production quota and others	Total
Year ended 31 December 2018					
Opening net carrying amount (restated)	2,345,930	7,066,428	1,111,586	113,689	10,637,633
Additions	–	98,995	–	4,309	103,304
Acquisition of subsidiaries	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

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(Amounts expressed in thousands of RMB
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5. INTANGIBLE ASSETS (CONTINUED)

(Restated)	Goodwill	Mining rights and others	Mineral exploration rights	Computer Software, production quota and others	Total
Year ended 31 December 2017					
Opening net carrying amount	2,346,853	6,981,217	1,123,639	140,540	10,592,249
Additions	–	280,340	–	4,827	285,167
Acquisition of a subsidiary	–	–	–	188	188
Disposals	–	–	–	(11,168)	(11,168)
Disposal of subsidiaries	–	–	–	(562)	(562)
Amortisation	–	(241,261)	–	(34,616)	(275,877)
Transfer from property, plant and equipment (note 6)	–	53,565	–	22,614	76,179
Impairment losses	–	–	–	(8,134)	(8,134)
Currency translation differences	(923)	(7,433)	(12,053)	–	(20,409)
Closing net carrying amount	2,345,930	7,066,428	1,111,586	113,689	10,637,633
As at 31 December 2017					
Cost	2,345,930	8,546,343	1,111,586	399,532	12,403,391
Accumulated amortisation and impairment	–	(1,479,915)	–	(285,843)	(1,765,758)
Net carrying amount	2,345,930	7,066,428	1,111,586	113,689	10,637,633

5. INTANGIBLE ASSETS (CONTINUED)

For the year ended 31 December 2018, the amortisation expenses of intangible assets recognised in profit or loss were analysed as follows:

	2018	2017 (restated)
Cost of sales	265,108	241,261
General and administrative expenses	30,793	34,616
	295,901	275,877

As at 31 December 2018, the Group has pledged intangible assets with a net carrying value amounting to RMB773 million (31 December 2017: RMB1,112 million) for bank and other borrowings as set out in note 24 to the financial statements.

As at 31 December 2018, the Group was in the process of applying for the certificates of mining rights with a carrying value amounting to RMB626 million (31 December 2017: RMB1,680 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 2018, the carrying value of these rights only represented approximately 0.31% of the total asset value of the Group (31 December 2017: approximately 0.84%). 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.

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 2018		31 December 2017	
	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")	15,739	–	14,985	–
Shanxi Huaxing	1,163,949	–	–	–
	1,369,107	2,141,526	204,404	2,141,526

The recoverable amount of a CGU is determined based on value-in-use calculations. These calculations 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% (2017: 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 the expected product price, demand for the products, product costs and related 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% (2017: 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.

The directors of the Company are of the view that, based on their assessment, there was no impairment of goodwill as at 31 December 2018 (31 December 2017: no impairment).

6. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery	Transportation facilities	Office and other equipment	Construction in progress	Total
Year ended 31 December 2018						
Opening net carrying amount (restated)	32,288,223	52,784,696	541,908	129,625	9,883,125	95,627,577
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 land use rights (note 8)	-	-	-	-	(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	8,025,615	10,335,155
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)	-	-	(389)	(7,450)
Currency translation differences	99	146	34	27	-	306
Closing net carrying amount	38,849,351	53,695,930	509,595	158,232	12,980,261	106,193,369
As at 31 December 2018						
Cost	56,620,994	103,608,492	2,538,835	603,593	13,092,648	176,464,562
Accumulated depreciation and impairment	(17,771,643)	(49,912,562)	(2,029,240)	(445,361)	(112,387)	(70,271,193)
Net carrying amount	38,849,351	53,695,930	509,595	158,232	12,980,261	106,193,369

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6. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(Restated)	Buildings	Machinery	Transportation facilities	Office and other equipment	Construction in progress	Total
Year ended 31 December 2017						
Opening net carrying amount	27,918,175	45,522,495	656,467	100,202	16,174,232	90,371,571
Reclassifications and internal transfers	5,334,951	9,722,364	9,064	11,439	(15,077,818)	-
Transfer to intangible assets (note 5)	-	-	-	-	(76,179)	(76,179)
Transfer to land use rights (note 8)	-	-	-	-	(396,398)	(396,398)
Transfer to investment properties (note 7)	(157,150)	-	-	-	-	(157,150)
Additions	8,941	1,068,129	36,667	47,804	9,602,162	10,763,703
Acquisition of subsidiaries	889,597	2,600,315	3,410	1,714	99,934	3,594,970
Disposal of subsidiaries	(86,945)	(62,814)	(5,269)	(2,114)	(108,479)	(265,621)
Disposals	(37,678)	(1,140,096)	(13,084)	(1,123)	(334,329)	(1,526,310)
Government grants	(3,585)	(105,979)	-	-	-	(109,564)
Depreciation	(1,577,363)	(4,803,886)	(145,287)	(28,239)	-	(6,554,775)
Impairment losses	(564)	(15,636)	-	-	-	(16,200)
Currency translation differences	(156)	(196)	(60)	(58)	-	(470)
Closing net carrying amount	32,288,223	52,784,696	541,908	129,625	9,883,125	95,627,577
As at 31 December 2017						
Cost	48,990,555	101,005,277	2,873,825	561,597	9,995,123	163,426,377
Accumulated depreciation and impairment	(16,702,332)	(48,220,581)	(2,331,917)	(431,972)	(111,998)	(67,798,800)
Net carrying amount	32,288,223	52,784,696	541,908	129,625	9,883,125	95,627,577

6. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

For the year ended 31 December 2018, depreciation expenses recognised in profit or loss are analysed as follows:

	2018	2017 (restated)
Cost of sales	7,291,380	6,387,773
General and administrative expenses	201,337	160,076
Selling and distribution expenses	6,605	6,926
	7,499,322	6,554,775

As at 31 December 2018, the Group was in the process of applying for the ownership certificates of buildings with a net carrying value of RMB5,639 million (31 December 2017: RMB6,942 million). There have 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 2018, the carrying value of these buildings only represented approximately 2.81% of the Group's total asset value (31 December 2017: 3.47%). 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 buildings, and that there is no material adverse impact on the overall financial position of the Group.

For the year ended 31 December 2018, interest expenses of RMB518 million (2017: RMB344 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 4.54% to 7.00% (2017: 4.41% to 8.00%) (note 28), and were included in additions to property, plant and equipment.

As at 31 December 2018, the Group has pledged property, plant and equipment at a net carrying value amounting to RMB4,168 million (31 December 2017: RMB5,799 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 2018, the carrying value of temporarily idle property, plant and equipment of the Group was RMB675 million (31 December 2017: RMB2,530 million).

The cost of the Group's fixed assets held under finance leases included in the total amounts of the machinery and construction in progress at 31 December 2018 were RMB10,678 million (2017: RMB9,955 million) and RMB112 million (2017: RMB100 million), respectively. The accumulated depreciation of the Group's fixed assets held under finance leases amounted to RMB2,011 million (2017: RMB1,908 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 expected product price, demand for the products, product cost and related 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% (2017: 10.16%) that reflects specific risks related to the CGUs as discount rates. The assumptions above are used in analysing the recoverable amounts of the CGUs within operating segments.

For the CGUs with indicators of impairment identified, the assets were not further impaired during the current year based on the impairment testing (2017: 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 about to be disposed or abandoned, and impairment losses of RMB7 million were provided during the year ended 31 December 2018 (2017: RMB16 million).

7. INVESTMENT PROPERTIES

	Buildings	Land use rights	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

7. INVESTMENT PROPERTIES (CONTINUED)

	Buildings	Land use right	Total
Year ended 31 December 2017			
Opening net carrying amount	99,655	1,156,120	1,255,775
Transfer from property, plant and equipment and land use rights (note 6) (note 8)	157,150	6,896	164,046
Disposal	–	(73,346)	(73,346)
Depreciation	(2,744)	(11,361)	(14,105)
Closing net carrying amount	254,061	1,078,309	1,332,370
As at 31 December 2017			
Cost	263,066	1,107,411	1,370,477
Accumulated depreciation	(9,005)	(29,102)	(38,107)
Net carrying amount	254,061	1,078,309	1,332,370

The Group's investment properties consist of land use rights held for capital appreciation and buildings leased to third parties under operating leases.

As at 31 December 2018, the Group was in the process of applying for the ownership certificates of investment properties with a net carrying value of RMB68 million (31 December 2017: RMB147 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 2018, the carrying value of these investment properties only represented approximately 0.03% of the total asset value of the Group (31 December 2017: 0.07%). 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.

As at 31 December 2018, the fair value of the buildings was approximately RMB781 million (31 December 2017: RMB1,208 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 RMB1,287 million (31 December 2017: RMB1,182 million), which was determined based on the transaction prices for similar lands nearby.

8. LAND USE RIGHTS

Details of land use rights are as follows:

	31 December 2018	31 December 2017 (restated)
Operating leases:		
In the Mainland China, held on:		
Leases less than 10 years	768,153	127,516
Leases between 10 and 50 years	3,393,547	3,331,557
Leases over 50 years	118,591	117,939
	4,280,291	3,577,012

8. LAND USE RIGHTS (CONTINUED)

Operating lease prepayments

	2018	2017 (restated)
As at 1 January	3,577,012	3,198,047
Additions	2,838	59,215
Acquisition of subsidiaries	460,638	31,833
Transfer from property, plant and equipment (note 6)	382,242	396,398
Disposals	–	(6,712)
Government grants	(34,174)	–
Disposal of subsidiaries	(728)	(3,294)
Transfer to investment properties	–	(6,896)
Amortisation	(107,537)	(91,579)
As at 31 December	4,280,291	3,577,012

As at 31 December 2018, the Group was in the process of applying for the certificates of land use rights with a carrying amount of RMB687 million (31 December 2017: RMB516 million). There have 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 2018, the carrying value of these land parcels only represented approximately 0.34% of the total asset value of the Group (31 December 2017: 0.26%). 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.

For the year ended 31 December 2018, the amortisation expenses of land use rights were recognised in “general and administrative expenses” in profit or loss amounting to RMB108 million (31 December 2017: RMB92 million (restated)).

As at 31 December 2018, the Group has pledged land use rights at a net carrying value amounting to RMB328 million (31 December 2017: RMB177 million) for bank and other borrowings as set out in note 24 to the financial statements.

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

(a) Investments in joint ventures

Movements in investments in joint ventures are as follows:

	2018	2017
As at 1 January	6,007,624	6,240,200
Capital injections	90,000	201,864
A joint venture changed into a subsidiary (note 38 (c))	(2,048,780)	(315,706)
A subsidiary changed into a joint venture	–	11,980
Share of profits and losses for the year	(199,452)	8,151
Share of changes in reserves	(2,837)	(6,105)
Cash dividends declared	(236,253)	(132,760)
Impairment	(216,953)	–
As at 31 December	3,393,349	6,007,624

As at 31 December 2018, all joint ventures of the Group were unlisted.

No joint venture was individually material to the Group.

9. 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:

	2018	2017
Share of the joint ventures' profits and losses for the year	(199,452)	8,151
Share of the joint ventures' total comprehensive income	(199,452)	8,151
Aggregate carrying amount of the Group's investments in joint ventures	3,393,349	6,007,624

As at 31 December 2018, there were no proportionate interests of the Group in the joint ventures' capital commitments (31 December 2017: Nil).

There were no material contingent liabilities relating to the Group's interests in the joint ventures and the joint ventures themselves.

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(b) Investments in associates

Movements in investments in associates are as follows:

	2018	2017
As at 1 January	6,935,030	5,926,533
Capital injections	315,300	857,317
Deemed disposal of a subsidiary	–	100,092
A subsidiary changed into an associate	–	240,258
Associates changed into subsidiaries	(862,214)	–
Disposal	(32,720)	–
Share of profits and losses for the year	39,335	(165,249)
Cash dividends declared	(36,157)	(26,330)
Share of changes in reserves	4,888	2,409
As at 31 December	6,363,462	6,935,030

As at 31 December 2018, all associates of the Group were unlisted.

No associate was individually material to the Group.

As at 31 December 2018, the Group has pledged investment in an associate amounting to RMB536 million (31 December 2017:nil) for bank and other borrowings as set out in note 24 to the financial statements.

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

(b) Investments in associates (continued)

The following table illustrates the aggregate financial information of the Group's associates that are not individually material:

	2018	2017
Share of the associates' profits and losses	39,335	(165,249)
Share of the associates' total comprehensive income	39,335	(165,249)
Aggregate carrying amount of the Group's investments in the associates	6,363,462	6,935,030

There were no material contingent liabilities relating to the Group's interests in the associates and the associates themselves.

10. EQUITY INVESTMENTS DESIGNATED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME/AVAILABLE-FOR-SALE INVESTMENTS

	31 December 2018	31 December 2017
Equity investments designated at fair value through other comprehensive income		
Stated at fair value		
Listed equity investments	6,441	–
Unlisted investments (<i>Note</i>)	1,723,384	–
	1,729,825	–
Available-for-sale investments		
Non current portion		
Stated at fair value		
Listed equity investments	–	9,701
Unlisted investments (<i>Note</i>)	–	1,848,000
	–	1,857,701
Stated at cost		
Unlisted equity investments	–	73,211
Less: provision for impairment	–	(2,711)
	–	70,500
	1,729,825	1,928,201

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.

10. EQUITY INVESTMENTS DESIGNATED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME/AVAILABLE-FOR-SALE INVESTMENTS (CONTINUED)

Note:

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 Size Industry Investment Fund. 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 of 31 December 2017, the Company has made investment of RMB1,848 million to the fund.

As at 31 December 2018, Size Industry Investment Fund made four investments in three of the Company's subsidiaries and one of the Company's joint venture 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.

11. 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 2018 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 1 January 2017						
(restated)	553,716	207,651	636,197	169,113	120,830	1,687,507
(Charged)/credited to profit or loss	(28,334)	59,664	(94,978)	(3,070)	47,817	(18,901)
Disposal of subsidiaries	-	(3,106)	(1,320)	-	-	(4,426)
As at 31 December 2017						
(restated)	525,382	264,209	539,899	166,043	168,647	1,664,180
As at 1 January 2018						
(restated)	525,382	264,209	539,899	166,043	168,647	1,664,180
Acquisition of subsidiaries	360	-	-	-	7,734	8,094
(Charged)/credited to profit or loss	(139,985)	(21,839)	76,338	3,833	5,989	(75,664)
As at 31 December 2018	385,757	242,370	616,237	169,876	182,370	1,596,610

11. 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	Investment in a subsidiary	Investment in an associate	Total
As at 1 January 2017	61,166	14,925	7,474	977,342	183,232	-	1,244,139
Exchange realignment	-	-	-	(1,830)	-	-	(1,830)
Credited to other comprehensive income	-	(11,180)	-	-	-	-	(11,180)
Acquisition of subsidiaries	-	-	-	40,706	-	-	40,706
(Credited)/charged to profit or loss	(8,232)	(1,414)	185	(27,370)	(183,232)	-	(220,063)
As at 31 December 2017	52,934	2,331	7,659	988,848	-	-	1,051,772
Changes in accounting policies	-	3,641	-	-	-	-	3,641
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

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 2018	31 December 2017 (restated)
Net deferred tax assets	1,542,569	1,606,150
Net deferred tax liabilities	1,812,805	993,742

11. DEFERRED TAX (CONTINUED)

As at 31 December 2018, the Group has not recognised deferred tax assets of RMB2,634 million (31 December 2017: RMB4,337 million) in respect of accumulated tax losses amounting to RMB11,387 million (31 December 2017: RMB18,214 million) arising in Mainland China and deferred tax assets of RMB1,660 million (31 December 2017: RMB1,434 million) in respect of deductible temporary differences amounting to RMB7,992 million (31 December 2017: RMB6,235 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.

As at 31 December 2018, the expiry profile of these unprovided tax losses was analysed as follows:

	31 December 2018	31 December 2017
Expiring in		
2018	–	7,689,663
2019	6,753,096	7,650,084
2020	711,878	711,878
2021	975,081	975,081
2022	1,211,002	1,186,914
2023	1,736,412	–
	11,387,469	18,213,620

12. OTHER NON-CURRENT ASSETS

	31 December 2018	31 December 2017
Financial assets		
– Other long-term receivables	204,718	261,156
Prepayment for mining rights	808,736	801,657
Long-term prepaid expenses	667,772	484,536
Deferred losses for sale and leaseback transactions (<i>Note</i>)	1,164,782	1,234,376
Others	1,596,636	739,167
	4,237,926	3,259,736
	4,442,644	3,520,892

Note: As disclosed in note 20, the Group entered into several sale and leaseback agreements which constitute finance leases during the year. 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 2018 and 31 December 2017, all amounts were denominated in RMB.

As at 31 December 2018 and 31 December 2017, all amounts in other non-current assets were non-interest-bearing.

13. INVENTORIES

	31 December 2018	31 December 2017 (restated)
Raw materials	8,362,697	7,619,265
Work-in-progress	8,684,506	8,193,656
Finished goods	3,280,641	4,417,202
Spare parts	879,794	731,621
Packaging materials and others	63,227	43,064
	21,270,865	21,004,808
Less: provision for impairment of inventories	(811,197)	(457,252)
	20,459,668	20,547,556

Movements in the provision for impairment of inventories are as follows:

	2018	2017 (restated)
As at 1 January	457,252	719,560
Provision for impairment of inventories	2,413,098	194,588
Reversal arising from increase in net realisable value	(165,510)	(89,318)
Written off upon sales of inventories	(1,893,643)	(259,564)
Disposal of subsidiaries	–	(108,014)
As at 31 December	811,197	457,252

As at 31 December 2018 and 31 December 2017, the Group had not pledged inventories for bank and other borrowings.

14. TRADE AND NOTES RECEIVABLES

	31 December 2018	31 December 2017 (restated)
Trade receivables	5,865,311	4,832,177
Less: impairment	(659,261)	(546,102)
	5,206,050	4,286,075
Notes receivable	2,894,482	3,722,862
	8,100,532	8,008,937

As at 31 December 2018, except for trade and notes receivables of the Group amounting to RMB1,403 million (31 December 2017: RMB1,094 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 RMB820 million (31 December 2017: RMB591 million) and RMB7 million (31 December 2017: RMB97 million), respectively, which are repayable on credit terms similar to those offered to the major customers of the Group.

As at 31 December 2018, the Group had pledged notes receivable amounting to RMB934 million (31 December 2017: trade receivables amounting to RMB22 million and notes receivable amounting to RMB82 million) as set out in note 24 to the financial statements.

14. TRADE AND NOTES RECEIVABLES (CONTINUED)

Trade receivables 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 2018, the ageing analysis of trade and notes receivables was as follows:

	31 December 2018	31 December 2017 (restated)
Within 1 year	6,212,537	6,289,931
Between 1 and 2 years	906,302	516,359
Between 2 and 3 years	158,162	338,334
Over 3 years	1,482,792	1,410,415
	8,759,793	8,555,039
Less: loss allowance for impairment	(659,261)	(546,102)
	8,100,532	8,008,937

14. TRADE AND NOTES RECEIVABLES (CONTINUED)

Impairment under IFRS 9 for the year ended 31 December 2018

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.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

	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	1.69
Between 2 and 3 years	74	3	4.05
Over 3 years	19,422	3,787	19.50
	496,795	4,522	/

14. TRADE AND NOTES RECEIVABLES (CONTINUED)

Impairment under IFRS 9 for the year ended 31 December 2018 (continued)

	31 December 2018		
	Gross carrying amount	Expected credit losses	Expected credit loss rate(%)
Energy			
Within 1 year	88,462	3,388	3.83
Between 1 and 2 years	3,217	685	21.29
Between 2 and 3 years	15,417	3,688	23.92
Over 3 years	12,710	6,216	48.91
	119,806	13,977	/
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	/
Individually assessed trade receivables	4,246,067	212,964	
	5,865,311	659,261	

14. TRADE AND NOTES RECEIVABLES (CONTINUED)Impairment under IAS 39 for the year ended 31 December
2017

The ageing analysis of the trade receivables as at 31 December 2017 that were not individually nor collectively considered to be impaired under IAS 39 is as follows:

	31 December 2017 (restated)
Past due for 1 year	470,008
Past due for 1 to 2 years	298,008
Past due for over 2 years	781,832
	1,549,848
Not past due	2,384,268
	3,934,116

The credit quality of trade and notes receivables that are neither past due nor impaired was assessed by reference to the counterparties' default history.

14. TRADE AND NOTES RECEIVABLES (CONTINUED)

Impairment under IAS 39 for the year ended 31 December 2017 (continued)

As at 31 December 2017, trade and notes receivables of RMB898 million of the Group were impaired and provisions of RMB546 million were made. The individually impaired receivables mainly relate to customers which are in unexpected difficult economic situations and it was expected that only a portion of these receivables would be recovered. The ageing analysis of these trade receivables is as follows:

	31 December 2017 (restated)
Within 1 year	182,801
Between 1 and 2 years	46,351
Between 2 and 3 years	40,325
Over 3 years	628,584
	898,061
Loss allowance for impairment	(546,102)
	351,959

14. TRADE AND NOTES RECEIVABLES (CONTINUED)

Impairment under IAS 39 for the year ended 31 December 2017 (continued)

Movements in the loss allowance for impairment of trade and notes receivables are as follows:

	2018	2017 (restated)
At beginning of year	546,102	507,593
Effect of adoption of IFRS 9	112,407	–
At beginning of year (restated)	658,509	507,593
Impairment loss	64,544	47,953
Written off	(33,469)	(15,341)
Reversal	(20,466)	(7,206)
Others	(9,857)	13,103
As at 31 December	659,261	546,102

As at 31 December 2018, the Group has derecognised notes receivable that have been discounted or endorsed but not yet due with a carrying amount in aggregate of RMB29,273 million (31 December 2017: RMB24,474 million). In addition, as at 31 December 2018, the Group has not derecognised notes receivable that have been discounted or endorsed but not yet due with a carrying amount of RMB444 million (31 December 2017: RMB227 million).

14. TRADE AND NOTES RECEIVABLES (CONTINUED)

Impairment under IAS 39 for the year ended 31 December 2017 (continued)

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 2018, 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.

Notes to Financial Statements (Continued)

31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

15. OTHER CURRENT ASSETS

	31 December 2018	31 December 2017 (restated)
Financial assets		
– Deposits paid to suppliers	317,946	756,748
– Dividends receivable	47,167	267,331
– Receivables from other revenue	693,039	575,650
– Entrusted loans and loans receivable from third parties	1,645,205	1,615,429
– Entrusted loans and loans receivable from related parties	1,297,892	2,459,883
– Receivables from disposal of properties	1,881,513	1,320,488
– Interest receivables	40,936	144,473
– Recoverable reimbursement for freight charges	185,866	13,944
– Other financial assets	530,029	1,006,723
	6,639,593	8,160,669
Less: impairment allowance	(1,764,068)	(1,673,122)
	4,875,525	6,487,547
Receivable of governments grants	58,455	–
Receivable of value-added tax refund	–	1,063
Advances to employees	23,744	46,890
Deductible input value added tax receivables	2,187,202	2,411,495
Prepaid income tax	162,103	64,557
Prepayments to related parties for purchases	586,312	62,724
Prepayments to suppliers for purchases and others	963,870	890,958
Others	169,881	113,146
	4,151,567	3,590,833
Less: impairment allowance	(4,139)	(4,155)
	4,147,428	3,586,678
Total other current assets	9,022,953	10,074,225

15. OTHER CURRENT ASSETS (CONTINUED)

As at 31 December 2018, except for an amount included in other receivables amounting to RMB48 million and RMB 0.10 million, which were denominated in USD and HKD, respectively (31 December 2017: other receivables amounting to RMB161 million denominated in USD), amounts in other current assets were denominated in RMB.

As at 31 December 2018, except for entrusted loans and loans receivable (31 December 2017: except for entrusted loans and loans receivable) which were interest-bearing assets, all amounts in other current assets were non-interest-bearing (31 December 2017: all non-interest-bearing).

As at 31 December 2018, the ageing analysis of financial assets included in other current assets was as follows:

	31 December 2018	31 December 2017 (restated)
Within 1 year	1,114,811	2,582,172
Between 1 and 2 years	1,653,822	1,016,290
Between 2 and 3 years	449,003	1,689,050
Over 3 years	3,421,957	2,873,157
	6,639,593	8,160,669
Less: provision for impairment	(1,764,068)	(1,673,122)
	4,875,525	6,487,547

15. OTHER CURRENT ASSETS (CONTINUED)

Movements in the provision for impairment of other current assets are as follows:

	31 December 2018	31 December 2017 (restated)
At beginning of year	1,677,277	1,672,316
Effect of adoption of IFRS 9	38,502	–
At beginning of year (restated)	1,715,779	1,672,316
Impairment loss	65,494	29,483
Write off	(6,117)	(10,926)
Reversal	(1,731)	(9,531)
Others	(5,218)	(4,065)
As at 31 December	1,768,207	1,677,277

15. OTHER CURRENT ASSETS (CONTINUED)

Impairment under IFRS 9 for the year ended 31 December 2018

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 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. OTHER CURRENT ASSETS (CONTINUED)

Impairment under IAS 39 for the year ended 31 December 2017

As at 31 December 2017, the ageing analysis of financial assets that are not impaired and included in other current assets was as follows:

	31 December 2017 (restated)
Past due for 1 year	1,214,515
Past due for 1 to 2 years	364,953
Past due for over 2 years	1,073,261
	<hr/> 2,652,729
Not past due	3,695,813
	<hr/> 6,348,542

The credit quality of other current assets that are neither past due nor impaired is assessed by reference to the counterparties' default history. As at 31 December 2017, there was no history of default of these customers.

The credit quality of other current assets that were not impaired is assessed by reference to the counterparties' default history. Based on past experience, the directors of the Company are of the opinion that no provision for impairment is necessary in respect of these balances as there has not been a significant change in credit quality and the balances are still considered recoverable.

Included in the Group's financial assets that are past due but not impaired are amounts due from the Group's related parties of RMB1,545 million on 31 December 2017.

16. CASH AND CASH EQUIVALENTS AND RESTRICTED CASH

	31 December 2018	31 December 2017 (restated)
Restricted cash	2,165,288	2,168,192
Cash and cash equivalents	19,130,652	27,835,866
	21,295,940	30,004,058

Restricted cash mainly represented deposits held for use in issued notes payable and letters of credit.

As at 31 December 2018, bank balances and cash on hand of the Group were denominated in the following currencies:

	31 December 2018	31 December 2017 (restated)
RMB	18,026,082	26,949,057
USD	3,256,625	3,045,228
HKD	8,321	7,029
EUR	371	56
AUD	2,552	2,688
IDR	1,989	–
	21,295,940	30,004,058

Cash at banks earns interest at floating rates based on daily bank deposit rates. The bank balances and restricted cash are deposited with creditworthy banks with no recent history of default.

17. SHARE CAPITAL

As at 31 December 2017 and 2018, all issued shares were registered and fully paid. Both A shares and H shares rank pari passu with each other.

The number of the Company's authorised ordinary shares was 14,903,798,236 at par value of RMB1.00 per share as at 31 December 2017 and 2018. There were 14,903,798,236 ordinary shares issued and outstanding as at 31 December 2017 and 2018, respectively.

18. OTHER 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.

- (a) As disclosed in note 38(d), note 38(e), note 38(f) and note 38(g), the acquisitions of the carbon business of Shandong Aluminum Co., Ltd. ("Shandong Aluminum") (山東鋁業有限公司), the carbon business of Pingguo Aluminum Co., Ltd. ("Pingguo Aluminum") (平果鋁業有限公司), a 77.65% equity interest of Chibi Great Wall Carbon Co., Ltd. ("Chibi Great Wall Carbon") (赤壁長城碳素有限公司) and a 51% equity interest of Harbin Dongqing Longhua Logistics Co., Ltd. ("Longhua Logistics") (哈爾濱東輕龍華物流有限公司) were considered to be business combinations under common control, which resulted in the decrease of share premium amounting to RMB444 million in total.

18. RESERVES (CONTINUED)

- (b) 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, Zhongzhou Aluminum, Baotou Aluminum and Chalco Mining (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.

On 25 February 2019, the Company has completed the issuance of ordinary shares to these Transferors, and the total number of shares issued was 2,118,874,715.

19. INTEREST-BEARING LOANS AND BORROWINGS

	31 December 2018	31 December 2017 (restated)
Long-term loans and borrowings		
Finance lease payables (note 20)	4,081,270	5,607,570
Bank and other loans (Note (a))		
– Secured (Note (f))	12,608,727	14,716,175
– Guaranteed (Note (e))	3,040,400	3,191,277
– Unsecured	30,491,613	22,597,382
	46,140,740	40,504,834
Medium-term notes and bonds and private placement notes (Note (b))		
– Unsecured	10,094,861	15,696,961
Total long-term loans and borrowings	60,316,871	61,809,365
Current portion of finance lease payables (note 20)	(2,328,358)	(2,115,644)
Current portion of medium-term bonds and long-term bonds	(396,727)	(12,492,378)
Current portion of long-term bank and other loans	(3,384,400)	(6,911,640)
Non-current portion of long-term loans and borrowings	54,207,386	40,289,703

19. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

	31 December 2018	31 December 2017 (restated)
Short-term loans and borrowings		
Bank and other loans (<i>Note (c)</i>)		
– Secured (<i>Note (f)</i>)	1,220,680	1,362,000
– Guaranteed (<i>Note (e)</i>)	240,000	150,000
– Unsecured	37,835,512	29,529,442
	39,296,192	31,041,442
Short-term bonds, unsecured (<i>Note (d)</i>)	500,000	3,601,573
Gold leasing arrangements (<i>Note (g)</i>)	1,607,905	6,818,393
Current portion of finance lease payables (note 20)	2,328,358	2,115,644
Current portion of medium-term notes	396,727	12,492,378
Current portion of long-term bank and other loans	3,384,400	6,911,640
Total short-term borrowings and current portion of long-term loans and borrowings	47,513,582	62,981,070

As at 31 December 2018, except for loans and borrowings of the Group amounting to RMB19 million (31 December 2017: RMB21 million) and RMB3,984 million (31 December 2017: RMB1,860 million), which were denominated in JPY and USD, respectively, all loans and borrowings were denominated in RMB.

As at 31 December 2018, included in the Group's interest-bearing loans and borrowings are due to subsidiaries of Chinalco of RMB4,373 million (31 December 2017: RMB3,330 million are due to subsidiaries of Chinalco and RMB190 million are due to a joint venture), as set out in note 35(b).

19. 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 2018	31 December 2017 (restated)	31 December 2018	31 December 2017	31 December 2018	31 December 2017 (restated)
Within 1 year	3,382,325	6,905,000	2,075	6,640	3,384,400	6,911,640
Between 1 and 2 years	7,375,557	5,171,738	2,399	2,277	7,377,956	5,174,015
Between 2 and 5 years	16,586,390	8,666,967	7,197	6,827	16,593,587	8,673,794
Over 5 years	18,777,275	19,736,283	7,522	9,102	18,784,797	19,745,385
	46,121,547	40,479,988	19,193	24,846	46,140,740	40,504,834

(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 2018 was 4.78% (2017: 4.97%).

(b) Medium-term notes and bonds and long-term bonds and private placement notes

Outstanding medium-term bonds & private placement notes of the Group as at 31 December 2018 are summarised as follows:

	Face value (RMB)/maturity	Effective interest rate	31 December 2018	31 December 2017
2015 medium-term notes	3,000,000/2018	5.53%	–	2,999,030
2015 medium-term notes	1,500,000/2018	5.01%	–	1,496,503
2013 medium-term bonds	3,000,000/2018	5.99%	–	2,999,211
2015 medium-term bonds	3,000,000/2018	6.11%	–	2,999,359
2015 medium-term bonds	2,000,000/2018	6.08%	–	1,998,275
2016 private placement notes	3,215,000/2019	5.12%	396,727	3,204,583
2018 medium-term notes	2,000,000/2021	5.84%	1,986,418	–
2018 medium-term bonds	1,100,000/2021	4.66%	1,097,003	–
2018 medium-term bonds	900,000/2023	5.06%	897,820	–
2018 medium-term bonds	1,400,000/2021	4.30%	1,395,970	–
2018 medium-term bonds	1,600,000/2023	4.57%	1,595,311	–
2018 US dollar medium-term bonds	2,785,840/2021	5.25%	2,725,612	–
			10,094,861	15,696,961

19. 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 2018 was 4.52% (2017: 4.43%).

(d) Short-term bonds

Outstanding short-term bonds as at 31 December 2018 are summarised as follows:

	Face value/ maturity	Effective interest rate	31 December 2018	31 December 2017
2017 short-term bonds	3,000,000/2018	4.30%	–	3,101,573
2017 short-term bonds	500,000/2018	4.90%	–	500,000
2018 Ningxia short-term bonds	500,000/2019	5.00%	500,000	–
			500,000	3,601,573

All the above short-term bonds were issued for working capital needs.

**19. 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 2018	31 December 2017 (restated)
Long-term loans		
Lanzhou Aluminum Factory*(蘭州鋁廠) (Note (ii))	–	4,000
Ningxia Energy (Note (iii))	892,400	1,020,400
Yinxing Energy (Note (iii))	70,000	91,000
Baotou Aluminum and Baotou Communications Investment Group Limited Company* (“Baotou Communications Investment”) (包頭交通投資集團有限公司) (Note (iii))	1,600,000	1,600,000
The Company and Hangzhou Jinjiang (Note (iv))	246,000	475,877
Qingzhen Industrial Investment Co., Ltd.* (“Qingzhen Investment”) (清鎮市工業投資有限公司) (Note (v))	116,000	–
Guizhou Industrial Investment Group Co., Ltd.* (“Guizhou Investment”) (貴州產業投資(集團)有限責任公司) (Note (v))	116,000	–
	3,040,400	3,191,277
Short-term loans		
Ningxia Energy (Note (iii))	–	70,000
Chalco Shandong (Note (iii))	–	80,000
China Great Wall Aluminum Co., Ltd.* (“China Great Wall Aluminum”) (中國長城鋁業有限公司) (Note(ii))	40,000	–
Hangzhou Jinjiang, Qingzhen Investment and Guizhou Investment	200,000	–
	240,000	150,000

Note:

- (i) The guarantor is a subsidiary of Chinalco.
- (ii) The guarantor is a subsidiary of the Group.
- (iii) The guarantors are a subsidiary of the Company and a third party respectively.
- (iv) The guarantors are the Company and a third party respectively.
- (v) The guarantor is a third party.

* 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.

19. INTEREST-BEARING LOANS AND BORROWINGS (CONTINUED)

Note: (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 2017 and 2018, 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 4.10% to 4.50%. In 2018, the Company entrusted the Banks to sell all leased gold and received cash of RMB2,323 million from the sale (2017: RMB7,804 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 4.10% to 4.50%), net of the Banks' charges.

20. FINANCE LEASE PAYABLES

As disclosed in note 6, the Group leased certain machineries and construction in progress under finance leases with lease terms ranging from one to six years. At 31 December 2018, the total future minimum lease payments under finance leases and their present values are as follows:

	Minimum lease payments		Present value of minimum lease payments	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Amounts payable:				
Within one year	2,518,653	2,371,917	2,328,358	2,115,644
In the second year	1,161,490	1,762,618	1,075,050	1,606,571
In the third to fifth years, inclusive	707,716	1,890,329	664,889	1,817,506
After five years	13,238	73,603	12,973	67,849
Total minimum finance lease payments	4,401,097	6,098,467	4,081,270	5,607,570
Future finance charges	(319,827)	(490,897)		
Total net finance lease payables (note 19)	4,081,270	5,607,570		
Portion classified as current liabilities (note 19)	(2,328,358)	(2,115,644)		
Non-current portion	1,752,912	3,491,926		

20. FINANCE LEASE PAYABLES (CONTINUED)

During the year ended 31 December 2018 and 2017, 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 six years and the lease rentals are payable by installments which bear interest at prevailing lending rates.

During the year ended 31 December 2018, the Group entered into sales and leaseback arrangements and incurred losses of RMB254 million (2017: RMB102 million), which were amortised over their respective useful lives of the assets. The Group entered into sales and leaseback arrangements and incurred a gain of RMB115 million (2017: Nil). The internal rate of return (IRR) of the sales and finance leaseback arrangements range from 4.35% to 9.74% (2017: from 4.35% to 6.20%).

- * The English names represent the best effort made by the management of the Group in translating the Chinese name of the companies as they do not have any official English names.

21. OTHER NON-CURRENT LIABILITIES

	31 December 2018	31 December 2017 (restated)
Financial liabilities		
– Long-term payables for mining rights	788,133	749,761
– Other financial liabilities	52,926	19,300
	841,059	769,061
Obligations in relation to early retirement schemes <i>(Note (i))</i>	777,305	900,924
Deferred government grants <i>(Note (ii))</i>	314,045	373,447
Deferred gain relating to sales and leaseback agreements	240,661	176,774
Contract liabilities	132,844	–
Provision for rehabilitation	121,033	113,672
Others	11,217	119,782
	1,597,105	1,684,599
	2,438,164	2,453,660

21. OTHER NON-CURRENT LIABILITIES (CONTINUED)

Notes:

(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 retired 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 discounted by the treasury bond rate of 31 December 2018. As at 31 December 2018, the current portion of the Payments within one year was reclassified to "Other payables and accrued liabilities".

As at 31 December 2018, obligations in relation to retirement benefits under the Group's early retirement schemes are as follows:

	2018	2017
As at 1 January	1,438,440	996,598
Provision made during the year (note 29)	447,660	767,632
Interest costs	62,801	17,618
Payment during the year	(655,060)	(343,408)
As at 31 December	1,293,841	1,438,440
Non-current	777,305	900,924
Current (note 22)	516,536	537,516
	1,293,841	1,438,440

- (ii) As described on note 2.2 (d), in order to provide more reliable and more relevant information about the government grants, from 1 January 2018, the Group voluntarily changed the accounting policy in relation to government grants. For an asset-related government grant, had the asset already existed upon receiving the government grant, the Group directly deducted the grant amount from the book value of the asset related to the government grant instead of recording the government grant as deferred income. For a government grants related to income and expenses already incurred by the Group, which are specific to compensate certain cost and expenses, the Group would directly offset the grant amount against the related cost or expense. Government grants for assets yet to be acquired and expenses yet to be incurred are included in deferred government grants and other income.

Notes to Financial Statements (Continued)

31 December 2018
(Amounts expressed in thousands of RMB
unless otherwise stated)

22. OTHER PAYABLES AND ACCRUED LIABILITIES

	31 December 2018	31 December 2017 (restated)
Financial liabilities		
– Payable for capital expenditures	5,694,632	6,283,484
– Accrued interest	396,286	827,367
– Payables withheld as guarantees and deposits	1,101,456	1,494,367
– Dividends payable by subsidiaries to non-controlling shareholders	543,207	223,942
– Consideration payable for investment projects	280,856	170,494
– Current portion of payables for mining rights	210,325	300,970
– Others	1,025,163	2,062,612
	9,251,925	11,363,236
Sales and other deposits from customers (note 2.2(c))	–	1,605,374
Taxes other than income taxes payable (<i>Note</i>)	831,040	818,979
Accrued payroll and bonus	220,851	76,683
Staff welfare payables	391,824	262,077
Current portion of obligations in relation to early retirement schemes (note 21)	516,536	537,516
Contribution payable for pension insurance	30,145	27,248
Output value-added tax to be realised	252,691	–
Others	37,492	1,786
	2,280,579	3,329,663
	11,532,504	14,692,899

Note: Taxes other than income taxes payable mainly comprise accruals for value-added tax, resource tax, city construction tax and education surcharge.

22. OTHER PAYABLES AND ACCRUED LIABILITIES (CONTINUED)

As at 31 December 2018, except for other payables and accrued liabilities of the Group amounting to RMB240 million and RMB0.27 million, which were denominated in USD and HKD, respectively (31 December 2017: RMB331 million and RMB0.32 million which were denominated in USD and HKD, respectively), all payables and accrued liabilities were denominated in RMB.

23. TRADE AND NOTES PAYABLES

	31 December 2018	31 December 2018 (restated)
Trade payables	8,568,438	7,767,482
Notes payable	5,439,162	4,592,959
	14,007,600	12,360,441

As at 31 December 2018, except for trade and notes payables of the Group amounting to RMB213 million (31 December 2017: RMB56 million) which were denominated in USD, all trade and notes payables were denominated in RMB.

23. TRADE AND NOTES PAYABLES (CONTINUED)

The ageing analysis of trade and notes payables is as follows:

	31 December 2018	31 December 2017 (restated)
Within 1 year	13,598,040	11,748,228
Between 1 and 2 years	140,517	199,889
Between 2 and 3 years	47,111	200,191
Over 3 years	221,932	212,133
	14,007,600	12,360,441

The trade and notes payables are non-interest-bearing and are normally settled within one year.

24. PLEDGE OF ASSETS

The Group has pledged various assets as collateral against certain secured borrowings as set out in note 19. As at 31 December 2018, a summary of these pledged assets was as follows:

	31 December 2018	31 December 2017
Property, plant and equipment (note 6)	4,168,239	5,799,013
Land use rights (note 8)	328,116	176,914
Intangible assets (note 5)	772,597	1,111,705
Notes receivable (note 14)	933,551	82,125
Trade receivables (note 14)	–	22,000
Investments in associates	535,610	–
	6,738,113	7,191,757

As at 31 December 2018, 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 RMB1,354 million and the non-current portion of long-term loans and borrowings amounting to RMB10,155 million were secured by the contractual right to charge users for electricity generated in the future (31 December 2017: the current portion of long-term loans and borrowings amounting to RMB1,007 million and the non-current portion of long-term loans and borrowings amounting to RMB12,582 million were secured by the contractual right to charge users for electricity generated in the future and 70.82% equity interests in a subsidiary of the Company, Ningxia Energy).

25. PROFIT BEFORE INCOME TAX

An analysis of profit before income tax is as follows:

	2018	2017 (restated)
Purchase of inventories in relation to trading activities	85,443,397	98,282,714
Raw materials and consumables used, and changes in work-in-progress and finished goods	43,197,855	34,550,042
Power and utilities	17,650,214	17,274,948
Depreciation and amortisation	8,055,137	7,064,129
Employee benefit expenses (note 29)	7,433,027	6,975,281
Repairs and maintenance	1,750,194	1,716,940
Transportation expenses	1,893,659	1,768,604
Logistic cost	2,794,733	1,894,061
Taxes other than income tax expense (Note (i))	936,546	858,344
Rental expenses for land use rights and buildings	649,640	497,356
Packaging expenses	261,626	267,547
Research and development expenses	626,873	498,234
Auditors' remuneration expense (Note (ii))	30,847	31,815

Note:

- (i) Taxes other than income tax expense mainly comprise surcharges, land use tax, property tax and stamp duties.
- (ii) During the year ended 31 December 2018, auditors' remuneration included audit and non-audit services provided by Ernst & Young, including Ernst & Young, Hong Kong and Ernst & Young Hua Ming LLP, amounting to RMB26.7 million (2017: RMB23.1 million), and services provided by other auditors.

26. OTHER INCOME

For the year ended 31 December 2018, government grants amounting to RMB135 million (2017: RMB90 million (restated)) were recognised as income for the year to facilitate the Group's development. There are no unfulfilled conditions or contingencies attached to the grants.

27. OTHER GAINS, NET

	2018	2017 (restated)
Gain on deemed disposal and disposal of subsidiaries	3,517	325,022
Gain on disposal and dividends of equity investments	109,914	79,408
Realised gains/(losses) on futures, forward and option contracts, net (<i>Note</i>)	40,492	(23,951)
Unrealised gains/(losses) on futures, forward and option contracts, net (<i>Note</i>)	100,967	(131,073)
Gain on disposal of property, plant and equipment and land use rights, net	101,098	76,739
Gain on previously held equity interests remeasured at acquisition-date fair value	748,086	117,640
Loss on disposal of investments in an associate	(1,904)	-
Others	(180,266)	(124,403)
	921,904	319,382

Note: None of these futures, forward and option contracts was designated for hedge accounting.

28. FINANCE INCOME/FINANCE COSTS

An analysis of finance income/finance costs is as follows:

	2018	2017 (restated)
Finance income – interest income	(492,232)	(706,690)
Interest expense	5,202,639	5,175,156
Less: interest expense capitalised in property, plant and equipment (note 6)	(517,589)	(344,452)
Interest expense, net of capitalised interest	4,685,050	4,830,704
Amortisation of unrecognised finance expenses	205,335	241,099
Exchange (gains)/losses, net	(7,889)	131,621
Finance costs	4,882,496	5,203,424
Capitalisation rate during the year (note 6)	4.54% to 7.00%	4.41% to 8.00%

29. EMPLOYEE BENEFIT EXPENSES

An analysis of employee benefit expenses is as follows:

	2018	2017 (restated)
Salaries and bonuses	4,636,972	4,205,361
Housing fund	414,440	395,489
Staff welfare and other expenses (<i>Note</i>)	1,896,365	1,576,552
Employment expense in relation to early retirement schemes (note 21)	447,660	767,632
Employment expenses in relation to termination benefits	37,590	30,247
	7,433,027	6,975,281

Note: Staff welfare and other expenses include staff welfare, staff union expenses, staff education expenses, unemployment insurance expenses, pension insurance expenses, etc.

Employee benefit expenses include remuneration payables to directors, supervisors and senior management as set out in note 30.

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:

	2018	2017
Fees	756	768
Basic salaries, housing fund, other allowances and benefits in kind	1,849	1,370
Pension costs	234	166
	2,839	2,304

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 (<i>Note (i)</i>)	-	-	-	-	-
Lu Dongliang (<i>Note (i)</i>)	-	-	-	-	-
Jiang Yinggang	-	762	-	90	852
Zhu Runzhou	-	438	-	54	492
	-	1,200	-	144	1,344
Non-executive Directors:					
Ao Hong	-	-	-	-	-
Wang Jun (<i>Note (ii)</i>)	150	-	-	-	150
Chen Lijie	202	-	-	-	202
Lie-A-Cheong Tai-Chong, David	202	-	-	-	202
Hu Shihai	202	-	-	-	202
	756	-	-	-	756
Supervisors:					
Ye Guohua	-	-	-	-	-
Wang Jun	-	-	-	-	-
Wu Zuoming	-	649	-	90	739
	-	649	-	90	739
Total	756	1,849	-	234	2,839

Note:

- (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.

**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 2017 is set out below:

Names of directors and supervisors	Fees	Salaries	Discretionary bonuses	Pension costs	total
Executive Directors:					
Yu Dehui	–	–	–	–	–
Lu Dongliang	–	–	–	–	–
Jiang Yinggang	–	822	–	83	905
	–	822	–	83	905
Non-executive Directors:					
Ao Hong	–	–	–	–	–
Liu Caiming	–	–	–	–	–
Wang Jun	150	–	–	–	150
Chen Lijie	206	–	–	–	206
Lie-A-Cheong Tai- Chong, David	206	–	–	–	206
Hu Shihai	206	–	–	–	206
	768	–	–	–	768
Supervisors:					
Liu Xiangmin	–	–	–	–	–
Wang Jun	–	–	–	–	–
Wu Zuoming	–	548	–	83	631
	–	548	–	83	631
Total	768	1,370	–	166	2,304

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	
	2018	2017
Nil to RMB1,000,000	12	12

During the year, no options were granted to the directors or the supervisors of the Company (2017: 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 (2017: Nil).

No directors or supervisors of the Company waived any remuneration during the years 2018 and 2017.

**30. DIRECTORS' AND SUPERVISORS' REMUNERATION
(CONTINUED)****(b) Five highest paid individuals**

During the year ended 31 December 2018, the five highest paid employees of the Group include two director and one supervisor (2017: one director and one supervisor) whose remuneration is reflected in the analysis presented above. The remuneration payable to the remaining two individuals during 2018 (2017: three) is as follows:

	2018	2017
Basic salaries, housing fund, other allowances and benefits in kind	1,305	2,460
Discretionary bonuses	–	–
Pension costs	165	249
	1,470	2,709

The number of the remaining two highest paid individuals during 2018 (2017: three) whose remuneration fell within the following band is as follows:

	Number of individuals	
	2018	2017
Nil to RMB1,000,000	2	3

31. INCOME TAX EXPENSE

	2018	2017 (restated)
Current income tax expense:		
– PRC corporate income tax	755,215	844,896
Deferred tax expense/(benefit)	67,284	(201,162)
	822,499	643,734

In general, the Group's PRC entities are subject to PRC corporate income tax at the standard rate of 25% (2017: 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% (2017: 15%).

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:

	2018	2017 (restated)
Profit before income tax	2,303,511	3,049,010
Tax expense calculated at the statutory tax rate of 25% (2017: 25%)	575,878	762,253
Tax effects of:		
Preferential income tax rates applicable to certain branches and subsidiaries	(268,665)	(287,081)
Impact of change in income tax rate	23,425	98,150
Tax losses with no deferred tax assets recognised	434,103	296,728
Deductible temporary differences with no deferred tax assets recognised	382,503	308,657
Utilisation of previously unrecognised tax losses and deductible temporary differences	(52,962)	(212,240)
Tax incentive in relation to deduction of certain expenses	(62,172)	(43,846)
Non-taxable income	(254,337)	(126,101)
Expenses not deductible for tax purposes	46,758	10,290
Write-off of unrecoverable deferred tax assets previously recognised	183,195	49,808
Return on equity investments measured by the equity method	40,029	39,274
Recognition of deferred tax assets related to deductible temporary differences and tax losses previously not recognised	(233,940)	(274,726)
True-up adjustments in respect of prior year's annual income tax filings and others	8,684	22,568
Income tax expense	822,499	643,734
Effective tax rate	36%	21%

Share of income tax expense of associates and joint ventures of RMB106 million (2017: RMB86 million) and RMB48 million (2017: RMB11 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

(a) Basic

The basic earnings per share amount is calculated by dividing the earnings attributable to ordinary equity holders of the parent by the weighted average number of shares in issue during the year.

For the purpose of calculating basic earnings per share, the Group adjusted (i) the profit attributable to owners of the parent for the after-tax amounts of cumulative distribution reserved for the period of other equity instruments, which were issued by the Group and classified as equity instruments, and (ii) the weighted average effect of the shares to be issued as a consideration to acquire the non-controlling interests as disclosed in note 18(b).

	2018	2017 (restated)
Profit attributable to ordinary equity holders of the parent <i>(RMB)</i>	746,477,441	1,413,028,383
Other equity instruments' distribution reserved <i>(RMB)</i>	(129,282,192)	(110,000,000)
	617,195,249	1,303,028,383
Weighted average number of ordinary shares in issue	14,903,798,236	14,903,798,236
Effect of equity exchange arrangement (Note 18(b))	1,938,915,502	–
	16,842,713,738	14,903,798,236
Basic earnings per share <i>(RMB)</i>	0.037	<u>0.087</u>

32. EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

(b) Diluted

The diluted earnings per share amounts for the years ended 31 December 2018 and 2017 are the same as the basic earnings per share amounts as there were no dilutive potential shares during those years.

33. DIVIDENDS

According to the articles of association of the Company, the Company considers that 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 28 March 2019, the directors did not propose any final dividend for the year ended 31 December 2018, which is to be approved by the shareholders.

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of profit before taxation to cash generated from operations

	Notes	2018	2017 (restated)
Cash flows generated from operating activities			
Profit before income tax		2,303,511	3,049,010
Adjustments for:			
Share of profits and losses of joint ventures	9 (a)	199,452	(8,151)
Share of profits and losses of associates	9 (b)	(39,335)	165,249
Depreciation of property, plant and equipment	6	7,499,322	6,554,775
Depreciation of investment properties	7	22,229	14,105
Gain on disposal of other property, plant and equipment and land use rights, net	27	(101,098)	(76,739)
Impairment losses on property, plant and equipment	6	7,450	16,200
Impairment losses of intangible assets	5	–	8,134
Amortisation of intangible assets	5	295,629	275,877
Amortisation of land use rights	8	107,809	91,579
Amortisation of prepaid expenses included in other non-current assets		130,148	127,793

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of profit before taxation to cash generated from operations

	Notes	2018	2017 (restated)
Cash flows generated from operating activities (Continued)			
Realised and unrealised (gains)/losses on futures, option and forward contracts	27	(141,459)	155,024
Gain on previously held equity interest remeasured at acquisition-date fair value	27	(748,086)	(117,640)
Gain on disposals and deemed disposals of subsidiaries	27	(3,517)	(325,022)
Loss on disposal of investments in an associate	27	1,904	–
Gain on disposal of and dividends from equity investments	27	(109,914)	(79,408)
Receipt of government subsidies		(158,109)	(202,359)
Interest income		–	(183,015)
Finance costs	28	4,882,496	5,203,422
Change in special reserve		6,605	58,743
Others		75,380	(16,950)
		14,230,417	14,710,627

34. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

(a) Reconciliation of profit before taxation to cash generated from operations (continued)

	2018	2017 (restated)
Cash flows generated from operating activities (continued)		
Changes in working capital:		
Decrease/(increase) in inventories	1,194,454	(2,662,507)
Increase in trade and notes receivables	(2,486,201)	(1,961,968)
Decrease in other current assets	916,681	1,275,535
Decrease/(increase) in restricted cash	530,284	(137,745)
Decrease/(increase) in other non-current assets	425,768	(422,845)
(Decrease)/increase in trade and notes payables	(5,660)	1,599,294
(Decrease)/increase in other payables and accrued liabilities	(945,270)	1,672,658
Increase in other non-current liabilities	105,386	81,878
Cash generated from operations	13,965,859	14,154,927
PRC corporate income taxes paid	(947,683)	(949,355)
Net cash generated from operating activities	13,018,176	13,205,572
Non-cash transactions of investing activities and financing activities		
Capital injection to an associate and joint ventures by non-cash assets	–	186,450
Equity exchange arrangement (note 18(b))	10,735,214	–
Endorsement of notes receivables accepted from the sale of goods or services for purchase of property, plant and equipment	2,384,046	372,816
Acquisition of businesses at non-cash consideration	70,087	50,058
Finance lease	113,305	44,342

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 were, 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 2018 (Restated)	89,426	12,360,441	11,363,236	769,061	103,270,773	127,852,937
Net cash generated from operating activities	-	(5,660)	(669,353)	-	-	(675,013)
Net cash flows from/(used in) investing activities	(87,660)	1,646,299	(193,345)	-	7,197,213	8,562,507
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)

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
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)	-	(69,546,537)	(70,546,537)
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	-	-	(449,835)	(24,736)	(85,579)	(560,150)
Reclassification	-	-	(90,644)	90,644	-	-
Net cash (used in)/generated from financing activities	-	-	(1,262,708)	71,998	(8,747,935)	(9,938,645)
Net foreign exchange differences	-	6,520	14,095	-	917	21,532
As at 31 December 2018	1,766	14,007,600	9,251,925	841,059	101,720,968	125,823,318

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 non-current liabilities	Interest bearing loans and borrowings	Total
As at 1 January 2017 (Restated)	3,575	11,532,163	9,793,534	789,720	105,968,641	128,087,633
Net cash generated from operating activities	-	1,361,087	1,253,220	-	-	2,614,307
Net cash flows from/(used in) investing activities	85,851	(530,457)	640,157	(73,701)	2,400,464	2,522,314
Proceeds from gold leasing arrangement	-	-	-	-	7,804,083	7,804,083
Proceeds from issuance of short-term bonds and medium-term notes, net of issuance costs	-	-	-	-	3,478,550	3,478,550
Repayments of medium-term notes and short-term bonds	-	-	-	-	(16,300,000)	(16,300,000)
Repayments of gold leasing arrangement	-	-	-	-	(4,000,000)	(4,000,000)
Drawdown of short-term and long-term bank and other loans	-	-	-	-	83,758,749	83,758,749

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 non-current liabilities	Interest bearing loans and borrowings	Total
Repayments of short-term and long-term bank and other loans	-	-	-	-	(78,866,459)	(78,866,459)
Proceeds from finance lease, net of deposit and transaction costs	-	-	-	-	1,000,036	1,000,036
Capital elements of finance lease rental payment	-	-	-	-	(2,462,250)	(2,462,250)
Dividends paid by subsidiaries to non-controlling shareholders	-	-	2,446	-	-	2,446
Amortisation of unrecognised finance expenses and interest expense	-	-	-	16,352	398,371	414,723
Interest paid	-	-	(278,084)	-	-	(278,084)
Reclassification	-	-	(36,690)	36,690	-	-
Net cash (used in)/generated from financing activities	-	-	(312,328)	53,042	(5,188,920)	(5,448,206)
Net foreign exchange differences	-	(2,352)	(11,347)	-	90,588	76,889
As at 31 December 2017	89,426	12,360,441	11,363,236	769,061	103,270,773	127,852,937

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.

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions

	Notes	2018	2017 (restated)
Sales of goods and services rendered:			
Sales of materials and finished goods to:	(i)		
Chinalco and its subsidiaries	(ix)	11,248,625	10,658,507
Associates of Chinalco		897,642	682,992
Joint ventures		4,462,670	2,031,159
Associates		2,626,780	724,658
		19,235,717	14,097,316
Provision of engineering, construction and supervisory services to:	(iii)		
Chinalco and its subsidiaries	(ix)	5,981	77,095
Joint ventures		–	2,046
Associates		1,725	–
		7,706	79,141
Provision of utility services to:	(ii)		
Chinalco and its subsidiaries	(ix)	620,552	581,566
Associates of Chinalco		15,719	8,776
Joint ventures		186,672	118,280
Associates		24,309	1,122
		847,252	709,744

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (continued)

	Notes	2018	2017 (restated)
Sales of goods and services rendered: (continued)			
Rental revenue of land use rights and buildings from:			
Chinalco and its subsidiaries	(vi) (ix)	31,551	40,875
Joint ventures		1,545	426
Associates		1,511	–
		34,607	41,301
Purchases of goods and services:			
Purchases of engineering, construction and supervisory services from:			
Chinalco and its subsidiaries	(iii) (ix)	2,088,338	1,071,283
Joint ventures		2,100	–
Associates		405,993	134,072
		2,496,431	1,205,355
Purchases of key and auxiliary materials, equipment and finished goods from:			
Chinalco and its subsidiaries	(iv) (ix)	3,513,420	3,850,073
Associates of Chinalco		18,917	–
Joint ventures		8,182,251	6,516,087
Associates		2,108,072	1,175
		13,822,660	10,367,335

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (continued)

	Notes	2018	2017 (restated)
Purchases of goods and services: (continued)			
Provision of social services and logistics services by:	(v)		
Chinalco and its subsidiaries	(ix)	312,062	326,830
Provision of utility services by:	(ii)		
Chinalco and its subsidiaries	(ix)	992,827	1,412,722
Associates of Chinalco		96,510	–
Joint ventures		26,269	19,537
Associates		77,432	–
		1,193,038	1,432,259
Provision of other services by:			
A joint venture		226,280	269,204
Rental expenses for buildings and land use rights charged by:	(vi)		
Chinalco and its subsidiaries	(ix)	501,866	509,848

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (continued)

	Notes	2018	2017 (restated)
Other significant related party transactions:			
Borrowing from subsidiaries of Chinalco	(viii), (ix)	6,525,000	4,010,000
Interest expense on borrowings, discounted notes and factoring arrangement from subsidiaries of Chinalco		143,415	225,934
Entrusted loans and other borrowings to:			
Joint ventures		–	500,000
Associates		–	1,100,000
		–	1,600,000
Interest income on entrusted loans and other borrowings:			
Joint ventures		–	41,005
An associate		–	24,425
		–	65,430
Interest income from the unpaid disposal proceeds from:			
Chinalco and its subsidiaries		–	117,587

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(a) Significant related party transactions (continued)

	Notes	2018	2017 (restated)
Disposal of assets under a sale and leaseback contract to a subsidiary of Chinalco	(xi)	224,000	600,000
Finance lease under a sale and leaseback contract from a subsidiary of Chinalco	(xi), (ix)	224,000	600,036
Trade receivable factoring arrangement from a subsidiary of Chinalco	(ix)	470,101	1,570,000
Discounted notes receivable to a subsidiary of Chinalco	(viii)	756,000	523,253
Provision of financial guarantees to: A joint venture	(x)	12,450	18,350
Financial guarantees provided by: A subsidiary of Chinalco		–	4,000

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 ("the state-prescribed price") is adopted;
 - 2. If there is no state-prescribed price, the state-guidance price is adopted;
 - 3. If there is neither a 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 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 are conducted at prices and 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 Rights 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 rent based on the market rate for its lease of buildings owned by Chinalco.
- (vii) The pricing policy for product processing services is the same as that set out in (i) above.
- (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 are conducted at prices and 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 14A 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 2018, the outstanding amount of the guarantee was RMB12 million.
- (xi) As disclosed in note 20, the Group has entered into several sales and leaseback contracts with CFL.
- (xii) As disclosed in note 38 (f) and 38 (g), the Group acquired 57.69% and 19.96% equity interest in Chibi Great Wall Carbon from China Great Wall Aluminum and Henan Great Wall Zhongxin Industrial Co., Ltd. ("Henan Great Wall Zhongxin") (河南長城眾鑫) respectively; and acquired 51% equity interest in East Light Logistics from Northeast Light Alloy Co., Ltd. ("Northeast Light Alloy") (東北輕合金有限公司); which constituted related party transactions.
- (xiii) As disclosed in note 38 (d) and 38 (e), the Group acquired Shandong Aluminum Plant (山東鋁廠碳素廠) and Pingguo Aluminum Plant (平果鋁業碳素廠) from Pingguo Aluminum and Shandong Aluminum, which also constituted related party transactions.

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 2018	31 December 2017 (restated)
Cash and cash equivalents deposited with		
A subsidiary of Chinalco (<i>Note</i>)	9,101,541	7,679,806
Trade and notes receivables		
Chinalco and its subsidiaries	1,278,715	1,483,984
Associates of Chinalco	18,655	2,000
Joint ventures	819,878	591,488
Associates	6,615	96,574
	2,123,863	2,174,046
Provision for impairment of receivables	(77,657)	(78,388)
	2,046,206	2,095,658

Note: 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.

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(b) Balances with related parties (continued)

	31 December 2018	31 December 2017 (restated)
Other current assets		
Chinalco and its subsidiaries	830,615	623,254
Joint ventures	1,424,678	1,737,644
Associates	29,701	1,132,138
	2,284,994	3,493,036
Provision for impairment of other current assets	(40,830)	(48,166)
	2,244,164	3,444,870
Other non-current assets		
A joint venture	–	97,103
Associates	111,845	111,845
	111,845	208,948
Borrowings and finance lease payables		
Subsidiaries of Chinalco	4,373,033	3,329,807
A joint venture	–	190,000
	4,373,033	3,519,807
Trade and notes payables		
Chinalco and its subsidiaries	404,278	332,701
Joint ventures	631,570	413,533
Associates	13,033	7,222
Associates of Chinalco	4,012	–
	1,052,893	753,456

35. SIGNIFICANT RELATED PARTY BALANCES AND TRANSACTIONS (CONTINUED)

(c) Compensation of key management personnel

	2018	2017
Fees	756	768
Basic salaries, housing fund, other allowances and benefits in kind	3,953	3,830
Pension costs	482	415
	5,191	5,013

Details of directors' remuneration are included in note 30 to the financial statements.

(d) Commitments with related parties

As at 31 December 2018 and 2017, except for the other capital commitments disclosed in note 42(c) 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.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT

36.1 Financial risk management (Continued)

(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 14, 15, 16, 19, 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 2018, the Group only had significant exposure to USD.

As at 31 December 2018, if RMB had weakened/strengthened by 5% against USD with all other variables held constant, the total comprehensive income for the year would have been approximately RMB10 million higher/lower (2017: RMB21 million lower/higher), mainly as a result of foreign exchange gains and losses arising from the translation of USD-denominated borrowings, cash and receivables. Profit was more sensitive to the fluctuation in the RMB/USD exchange rates in 2018 than in 2017, mainly due to the increase in the USD denominated cash and receivables.

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 2018 and 2017.

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 2018, as the Group had no significant interest-bearing assets except for bank deposits (note 16) and entrusted loans (note 15), 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 2018 and 2017.

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 2018, if interest rates had been 100 basis points (31 December 2017: 100 basis points) higher/lower for bank and other loans borrowed at floating interest rates with all other variables held constant, the total comprehensive income for the year would have been RMB641 million lower/higher (2017: RMB537 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 is not exposed to any significant fair value interest rate risk for its fixed interest rate borrowings held as at 31 December 2018 and 2017.

(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 2018, the fair values of the outstanding futures contracts amounting to RMB16 million (31 December 2017: RMB10 million) and RMB2 million (31 December 2017: RMB89 million) were recognised in financial assets and financial liabilities at fair value through profit or loss, respectively. As at 31 December 2018, the Company did not hold any option contracts (31 December 2017: the Company did not hold any option contracts).

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 2018, if the commodity futures prices had increased/decreased by 3% (31 December 2017: 3%) and all other variables were held constant, the profit for the year would have changed by the amounts shown below:

	2018	2017
Primary aluminum	Decrease/increase RMB14 million	Decrease/increase RMB46 million
Copper	Increase/decrease RMB0.9 million	Increase/decrease RMB0.3 million
Zinc	Decrease/increase RMB1.0 million	Decrease/increase RMB7 million
Coal	Decrease/increase RMB2.7 million	Decrease/increase RMB0.2 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 2018.

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 2018

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 2018. The amounts presented are carrying amounts for financial assets and the exposure to credit risk for the financial guarantee contracts.

	12-month	Lifetime ECLs			Total
	ECLs	Stage 2	Stage 3	Simplified	
	Stage 1				
Trade receivables*	–	–	–	5,206,050	5,206,050
Financial assets in other current assets	1,098,455	3,655,638	121,432	–	4,875,525
Notes receivable	2,894,482	–	–	–	2,894,482
Restricted cash	2,165,288	–	–	–	2,165,288
Cash and cash equivalents	19,130,652	–	–	–	19,130,652
Financial assets in other non-current assets	204,718	–	–	–	204,718
Financial guarantees – not yet past due	12,450	–	–	–	12,450
Total	25,506,045	3,655,638	121,432	5,206,050	34,489,165

* For trade receivables to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in notes 14 to the consolidated financial statements.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.1 Financial risk management (continued)

(b) Credit risk (continued)

Maximum exposure as at 31 December 2017

The carrying amounts of short-term investments and these receivables included in notes 10, 12, 14, and 15 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 2018, revenues of approximately RMB32,852 million (2017: RMB39,759 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 2018 and 2017. 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 2018 and 2017.

(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 that 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 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 2018, the Group had total banking facilities of approximately RMB183,129 million of which the amounts totalling RMB61,611 million have been utilised as at 31 December 2018. Banking facilities of approximately RMB92,582 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 2018, the Group had credit facilities through its futures agent at the LME amounting to USD12 million (equivalent to RMB82 million) (31 December 2017: USD20 million (equivalent to RMB131 million)), of which USD1 million (equivalent to RMB7 million) (31 December 2017: USD2 million (equivalent to RMB13 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 the expected cash flows.

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 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	39,296,192	–	–	–	39,296,192
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	8,855,639	–	–	–	8,855,639
Financial liabilities included in other non-current liabilities (note)	–	108,896	333,354	420,258	862,508
Trade and notes payables	14,007,600	–	–	–	14,007,600
	75,421,123	11,251,093	31,617,861	20,117,079	138,407,156

Note: As disclosed in note 21, as at 31 December 2018, the carrying value of financial liabilities included in other non-current liabilities was RMB841 million (31 December 2017: RMB769 million).

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 2017 (restated)					
Finance lease payables, including current portion	2,371,917	1,762,618	1,890,329	73,603	6,098,467
Long-term bank and other loans, including current portion	6,911,640	5,174,015	8,673,794	19,745,385	40,504,834
Medium-term notes and bonds, including current portion	12,500,000	3,215,000	–	–	15,715,000
Short-term bonds	3,500,000	–	–	–	3,500,000
Gold leasing arrangement	6,818,393	–	–	–	6,818,393
Short-term bank and other loans	31,041,442	–	–	–	31,041,442
Interest payables for borrowings	5,502,360	2,123,149	4,106,037	1,048,728	12,780,274
Financial liabilities at fair value through profit or loss	89,426	–	–	–	89,426
Financial liabilities included in other payables and accrued liabilities, excluding accrued interest	10,535,869	–	–	–	10,535,869
Financial liabilities included in other non-current liabilities (Note)	–	107,785	108,896	587,668	804,349
Trade and notes payables	12,360,441	–	–	–	12,360,441
	91,631,488	12,382,567	14,779,056	21,455,384	140,248,495

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 2018				
	Financial assets at fair value through profit or loss		Financial assets at amortised cost	Equity investments designated at fair value through other comprehensive income	Total
	Designated as such upon initial recognition	Held for trading			
Current					
Trade and notes receivables	-	-	8,100,532	-	8,100,532
Financial assets at fair value through profit or loss	-	16,141	-	-	16,141
Restricted cash	-	-	2,165,288	-	2,165,288
Cash and cash equivalents	-	-	19,130,652	-	19,130,652
Financial assets included in other current assets	-	-	4,875,525	-	4,875,525
Subtotal	-	16,141	34,271,997	-	34,288,138
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	34,476,715	1,729,825	36,222,681

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (continued)

(a) Financial instruments by category (continued)

Financial liabilities

	Group 31 December 2018			
	Financial liabilities at fair value through profit or loss			Total
	Designated as such upon initial recognition	Held for trading	Financial liabilities at amortised cost	
Current				
Financial liabilities at fair value through profit or loss	-	1,766	-	1,766
Interest-bearing loans and borrowings	-	-	47,513,582	47,513,582
Financial liabilities included in other payables and accrued liabilities (note 22)	-	-	9,251,925	9,251,925
Trade and notes payables	-	-	14,007,600	14,007,600
Subtotal	-	1,766	70,773,107	70,774,873
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	125,821,552	125,823,318

**36. FINANCIAL AND CAPITAL RISK MANAGEMENT
(CONTINUED)**

36.2 Financial instruments (continued)

(a) Financial instruments by category (continued)**Financial assets**

	31 December 2017 (restated)			Total
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial investments	
Current				
Trade and notes receivables	-	8,008,937	-	8,008,937
Financial assets at fair value through profit or loss	9,534	-	-	9,534
Restricted cash	-	2,168,192	-	2,168,192
Cash and cash equivalents	-	27,835,866	-	27,835,866
Financial assets included in other current assets	-	6,487,547	-	6,487,547
Subtotal	9,534	44,500,542	-	44,510,076
Non-current				
Available-for-sale financial investments	-	-	1,928,201	1,928,201
Financial assets included in other non-current assets	-	261,156	-	261,156
Subtotal	-	261,156	1,928,201	2,189,357
Total	9,534	44,761,698	1,928,201	46,699,433

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.2 Financial instruments (continued)

(a) Financial instruments by category (continued)

Financial liabilities

	31 December 2017 (restated)		
	Financial liabilities at fair value through profit or loss	Financial liabilities at amortised cost	Total
Current			
Financial liabilities at fair value through profit or loss	89,426	–	89,426
Interest-bearing loans and borrowings	–	62,981,070	62,981,070
Financial liabilities included in other payables and accrued liabilities	–	11,363,236	11,363,236
Trade and notes payables	–	12,360,441	12,360,441
Subtotal	89,426	86,704,747	86,794,173
Non-current			
Financial liabilities included in other non-current liabilities	–	769,061	769,061
Interest-bearing loans and borrowings	–	40,289,703	40,289,703
Subtotal	–	41,058,764	41,058,764
Total	89,426	127,763,511	127,852,937

**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 2018	31 December 2017	31 December 2018	31 December 2017
Financial assets				
Other non-current assets (note 12)	204,718	261,156	182,132	242,567

	Carrying amounts		Fair values	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Financial liabilities				
Financial liabilities included in other non-current liabilities (note 21)	841,059	769,061	816,529	660,688
Long-term interest-bearing loans and borrowings (note 19)	54,207,386	40,289,703	53,207,052	39,475,392
	55,048,445	41,058,764	54,023,581	40,136,080

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, 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 following methods and assumptions were used to estimate the fair values:

- 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 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 2018 was assessed to be insignificant.

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 2018	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
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

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 2017	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Financial assets at fair value through profit or loss:				
Futures contracts	9,534	-	-	9,534
Available-for-sale financial investments:				
Listed equity investments	9,701	-	-	9,701
Other unlisted investment	-	-	1,848,000	1,848,000
	19,235	-	1,848,000	1,867,235

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 2018	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Financial liabilities at fair value through profit or loss:				
Futures contracts	1,766	-	-	1,766
	1,766	-	-	1,766

As at 31 December 2017	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Financial liabilities at fair value through profit or loss:				
Futures contracts	89,426	-	-	89,426
	89,426	-	-	89,426

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 2018	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Financial assets at amortised cost:				
Financial assets included in other non-current assets	-	182,132	-	182,132
<hr/>				
As at 31 December 2017	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Loans and receivables:				
Financial assets included in other non-current assets	-	242,567	-	242,567

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 2018	Fair value measurement using			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
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
As at 31 December 2017				
	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	-	660,688	-	660,688
Long-term interest-bearing loans and borrowings	-	39,475,392	-	39,475,392
	-	40,136,080	-	40,136,080

During the year ended 31 December 2018, 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 (2017 : Nil).

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)

Below is a summary of significant unobservable inputs to the valuation of financial instruments as at 31 December 2018 and 2017:

	Valuation Technique	Significant unobservable input	Range
Equity investments in Size Industry Investment Fund			
31 December 2018	Net Assets Method	Net Assets	5,000,000
31 December 2017	Net Assets Method	Net Assets	5,600,000

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.

36. FINANCIAL AND CAPITAL RISK MANAGEMENT (CONTINUED)

36.3 Capital risk management (continued)

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, 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.

The gearing ratio as at 31 December 2018 is as follows:

	31 December 2018	31 December 2017 (restated)
Total liabilities (excluding deferred tax liabilities, income tax payable and deferred government grants)	130,966,279	132,493,752
Less: restricted cash and cash and cash equivalents	(21,295,940)	(30,004,058)
Net debt	109,670,339	102,489,694
Total equity	67,669,202	65,742,596
Add: net debt	109,670,339	102,489,694
Less: non-controlling interests	(15,254,312)	(26,054,567)
Total capital attributable to owners of the parent	162,085,229	142,177,723
Gearing ratio	68%	72%

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:

	2018	2017
Percentage of equity interest held by non-controlling interests		
Ningxia Energy	29.18%	29.18%
Guizhou Huajin	40.00%	40.00%
Guizhou Huaren	60.00%	N/A
Inner Mongolia Huayun New Material Co., Ltd. ("Huayun") (Note)	50.00%	50.00%
Profit/(loss) for the year allocated to non-controlling interests		
Ningxia Energy	214,479	(5,670)
Guizhou Huajin	291,009	410,023
Guizhou Huaren	20,783	N/A
Huayun	186,945	72,903
Dividends distributed to non-controlling interests		
Ningxia Energy	351,979	3,264
Guizhou Huajin	200,000	-
Guizhou Huaren	-	-
Huayun	-	-
Accumulated balances of non-controlling interests at the reporting dates		
Ningxia Energy	4,757,014	4,914,902
Guizhou Huajin	782,176	695,251
Guizhou Huaren	820,675	N/A
Huayun	959,847	776,418

Note: the Group owned 51% of the voting right of Huayun.

**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:

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

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)

2017	Ningxia Energy
Revenue	5,624,059
Total expenses	5,691,240
Loss for the year	(67,181)
Total comprehensive income for the year	(67,181)
Current assets	4,538,735
Non-current assets	33,716,269
Current liabilities	7,944,491
Non-current liabilities	19,488,716
Net cash flows from operating activities	2,110,801
Net cash flows used in investing activities	(3,933,743)
Net cash flows from financing activities	1,350,275
Effect of foreign exchange rate changes, net	–
Net decrease in cash and cash equivalents	(472,667)

**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 Huajin
Revenue	4,018,682
Total expenses	3,291,160
Profit for the year	727,522
Total comprehensive income for the year	727,522
Current assets	1,495,922
Non-current assets	2,752,815
Current liabilities	1,875,227
Non-current liabilities	418,070
Net cash flows from operating activities	1,104,759
Net cash flows used in investing activities	(75,066)
Net cash flows used in financing activities	(1,075,311)
Effect of foreign exchange rate changes, net	-
Net decrease in cash and cash equivalents	(45,618)

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)

2017	Guizhou Huajin
Revenue	4,123,352
Total expenses	3,098,295
Profit for the year	1,025,057
Total comprehensive income for the year	1,025,057
Current assets	1,820,262
Non-current assets	2,841,975
Current liabilities	1,958,230
Non-current liabilities	965,880
Net cash flows from operating activities	1,162,069
Net cash flows used in investing activities	(7,437,104)
Net cash flows used in financing activities	(1,835,878)
Effect of foreign exchange rate changes, net	(221,567)
Net increase in cash and cash equivalents	(8,332,480)

**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	1,169,453
Non-current assets	3,038,875
Current liabilities	1,381,541
Non-current liabilities	1,458,995
Net cash flows from operating activities	134,781
Net cash flows used in investing activities	(510,243)
Net cash flows used in financing activities	(115,222)
Effect of foreign exchange rate changes, net	–
Net decrease in cash and cash equivalents	(490,684)

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	Huayun
Revenue	8,099,579
Total expenses	7,725,689
Profit for the year	373,890
Total comprehensive income for the year	373,890
Current assets	2,372,120
Non-current assets	8,338,220
Current liabilities	4,342,807
Non-current liabilities	3,947,839
Net cash flows from operating activities	1,448,853
Net cash flows used in investing activities	(2,097,536)
Net cash flows used in financing activities	614,418
Effect of foreign exchange rate changes, net	–
Net decrease in cash and cash equivalents	(34,265)

**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)

2017	Huayun
Revenue	3,085,361
Total expenses	2,939,556
Profit for the year	145,805
Total comprehensive income for the year	145,805
Current assets	2,151,021
Non-current assets	7,549,859
Current liabilities	3,525,808
Non-current liabilities	4,122,238
Net cash flows from operating activities	263,559
Net cash flows used in investing activities	(4,408,396)
Net cash flows used in financing activities	4,308,874
Effect of foreign exchange rate changes, net	-
Net increase in cash and cash equivalents	164,037

38. BUSINESS COMBINATIONS

(a) Acquisition of Guizhou Huaren

In May 2017, the Company, together with Hangzhou Jinjiang, Guizhou Investment and Qingzhen Investment jointly established Guizhou Huaren. The registered capital of Guizhou Huaren is RMB1,200 million, of which the Company holds 40% of equity interest in Guizhou Huaren, Hangzhou Jinjiang holds 30%, while each of the other two shareholders holds 15% equity interest, respectively. According to the article of association of Guizhou Huaren, the directors of the Company considered that the Company had significant influence over Guizhou Huaren, which was accounted for as an associate.

In December 2017, the Company and Hangzhou Jinjiang entered into an acting-in-concert agreement which became effective on 1 January 2018. According to the acting-in-concert agreement, Hangzhou Jinjiang agreed to exercise the board members' and shareholder's vote in concert with the Company. Accordingly, the directors of the Company considered that the Company obtains control over Guizhou Huaren and has consolidated Guizhou Huaren's financial position and performance into the Group's consolidated financial statements since 1 January 2018.

38. BUSINESS COMBINATIONS (CONTINUED)**(a) Acquisition of Guizhou Huaren (continued)**

The fair value of identifiable assets and liabilities of Guizhou Huaren at the acquisition date are as follows:

	1 January 2018 Fair value
Assets	
Property, plant and equipment	2,194,095
Intangible assets	137
Land use rights	109,320
Other current assets	353,655
Inventories	220,718
Trade and notes receivables	250
Restricted cash	324,030
Cash and cash equivalents	673,587
Liabilities	
Deferred tax liabilities	(58,299)
Interest-bearing loans and borrowings	(1,680,000)
Contract liabilities	(2,562)
Other payables and accrued expenses	(345,562)
Trade and notes payables	(464,454)
Net assets	1,324,915
Non-controlling interests	794,949
Share of net assets acquired	529,966
Goodwill	–
Satisfied by:	
Cash	–
Fair value of previously held equity interest	529,966
	529,966

38. BUSINESS COMBINATIONS (CONTINUED)

(a) Acquisition of Guizhou Huaren (continued)

Details of the 40% equity interest held by the Company before the acquisition of Guizhou Huaren and the profit from the investment are as follows:

	1 January 2018
Initial investment cost	480,000
Share of loss accumulated under the equity method	(18,347)
Book value of the investment in 40% equity of Guizhou Huaren on the acquisition date	461,653
Fair value of the investment in 40% equity of Guizhou Huaren on the acquisition date <i>(Note)</i>	529,966
Gain on previously held equity interest remeasured at acquisition-date fair value	68,313

Note: The fair value was determined by the valuation report issued by an independent qualified valuer.

An analysis of the cash flows in respect of the acquisition of Guizhou Huaren is as follows:

	RMB'000
Cash consideration	–
Cash and bank balances acquired	673,587
Net inflow of cash and cash equivalents included in cash flows from investing activities	673,587

38. BUSINESS COMBINATIONS (CONTINUED)**(a) Acquisition of Guizhou Huaren (continued)**

The operating results and cash flows of Guizhou Huaren since the acquisition date to 31 December 2018 are as follows:

	RMB'000
Revenue	4,282,882
Profit for the period	34,639
Net cash out flows	(490,684)

(b) Acquisition of Shanxi Zhongrun

In February 2017, the Company entered into a capital injection and enlargement agreement on Shanxi Zhongrun with Huarun (Coal) Group Co., Ltd.* ("Huarun (Coal) Group") (華潤(煤業)集團有限公司), Shanxi Xishan Coal and Electricity Power Co., Ltd.* ("Xishan Coal Electricity") (山西西山煤電股份有限公司) and Jin Energy Power Group Co., Ltd.* ("Jin Energy Power") (晉能電力集團有限公司). After the capital contribution, the registered capital of Shanxi Zhongrun is RMB500 million, of which the Company holds 40% of equity interest in Shanxi Zhongrun while each of the other three shareholders holds a 20% equity interest, respectively. The Company can appoint two out of the five directors of the board of directors. According to the article of association of Shanxi Zhongrun and the agreement, the directors of the Company considered that the Company had significant influence over Shanxi Zhongrun, which was accounted for as an associate.

In December 2017, the Company and Huarun (Coal) Group entered into an acting-in-concert agreement which was effective on 1 January 2018. According to the acting-in-concert agreement, Huarun (Coal) Group agreed to exercise the board members' and shareholder's vote in concert with the Company. Accordingly, the directors of the Company considered that the Company obtains control over Shanxi Zhongrun and has consolidated Shanxi Zhongrun's financial position and performance into the Group's consolidated financial statements since 1 January 2018.

38. BUSINESS COMBINATIONS (CONTINUED)

(b) Acquisition of Shanxi Zhongrun (continued)

The fair value of identifiable assets and liabilities of Shanxi Zhongrun at the acquisition date are as follows:

	1 January 2018 Fair value
Assets	
Property, plant and equipment	2,292,483
Intangible assets	749
Other current assets	215,575
Inventories	15,473
Trade and notes receivables	4,135
Cash and cash equivalents	2,173,062
Liabilities	
Deferred tax liabilities	(41,581)
Interest-bearing loans and borrowings	(3,485,852)
Other payables and accrued expenses	(37,789)
Trade and notes payables	(13,778)
Net assets	1,122,477
Non-controlling interests	673,486
Share of net assets acquired	448,991
Goodwill	–
Satisfied by:	
Cash	–
Fair value of previously held equity interest	448,991
	448,991

38. BUSINESS COMBINATIONS (CONTINUED)**(b) Acquisition of Shanxi Zhongrun (continued)**

Details of the 40% equity interest held by the Company before the acquisition of Shanxi Zhongrun and the profit from the investment are as follows:

	1 January 2018
Initial investment cost	400,184
Share of loss accumulated under the equity method	(6,553)
Book value of the investment in 40% equity of Shanxi Zhongrun on the acquisition date	393,631
Fair value of the investment in 40% equity of Shanxi Zhongrun on the acquisition date <i>(Note)</i>	448,991
Gain on previously held equity interest remeasured at acquisition-date fair value	55,360

Note: The fair value was determined by the valuation report issued by an independent qualified valuer.

An analysis of the cash flows in respect of the acquisition of Shanxi Zhongrun is as follows:

	RMB'000
Cash consideration	–
Cash and bank balances acquired	2,173,062
Net inflow of cash and cash equivalents included in cash flows from investing activities	2,173,062

38. BUSINESS COMBINATIONS (CONTINUED)

(b) Acquisition of Shanxi Zhongrun (continued)

The operating results and cash flows of Shanxi Zhongrun since the acquisition date to 31 December 2018 are as follows:

	RMB'000
Revenue	645,214
Profit for the period	817
Net cash out flows	(2,137,166)

* The English names represent the best effort made by management of the Group in translating their Chinese names as the companies do not have any official English names.

(c) Acquisition of Shanxi Huaxing

On 31 December 2017, the Company, Chalco Hong Kong and Baotou Communication Investment held 10%, 40% and 50% of the shares of Shanxi Huaxing, respectively. According to the articles of association of Shanxi Huaxing, the Group can exercise joint control over Shanxi Huaxing and therefore, which was accounted for as a joint venture accordingly.

In December 2018, the Company entered into an equity transfer agreement with Baotou Communication Investment. According to the agreement, the Company acquired 50% of Shanxi Huaxing's equity with a consideration at RMB2,665 million in cash. Upon completion of the transaction, the Group held a total of 100% of Shanxi Huaxing's shares. The directors of the Company considered that the Company obtains control over Shanxi Huaxing and has consolidated Shanxi Huaxing's financial position and performance into the Group's consolidated financial statements since the acquisition date of 6 December 2018.

38. BUSINESS COMBINATIONS (CONTINUED)**(c) Acquisition of Shanxi Huaxing (Continued)**

The fair value of identifiable assets and liabilities of Shanxi Huaxing at the acquisition date are as follows:

	6 December 2018 Fair value
Assets	
Property, plant and equipment	7,327,807
Intangible assets	728,067
Land use right	348,901
Deferred tax assets	8,094
Other non-current assets	60,336
Other current assets	102,396
Inventories	865,418
Trade and notes receivables	44,706
Restricted cash	203,350
Cash and cash equivalents	81,344
Liabilities	
Deferred tax liabilities	(722,349)
Interest-bearing loans and borrowings	(1,743,036)
Other non-current liabilities	(239,998)
Contract liabilities	(617,827)
Other payables and accrued expenses	(686,024)
Trade and notes payables	(1,594,724)
Net assets	4,166,461
Non-controlling interests	–
Share of net assets acquired	4,166,461
Goodwill	1,163,949
Satisfied by:	
Cash	2,665,205
Fair value of previously held equity interest	2,665,205
	5,330,410

38. BUSINESS COMBINATIONS (CONTINUED)

(c) Acquisition of Shanxi Huaxing (Continued)

Details of the 50% equity interest held by the Group before the acquisition of Shanxi Huaxing and the profit from the investment are as follows:

	6 December 2018
Initial investment cost	2,351,479
Share of loss accumulated under the equity method	(77,309)
Share of changes in reserves under the equity method	11,166
Cash dividends declared	(236,556)
Book value of the investment in 50% equity of Shanxi Huaxing on the acquisition date	2,048,780
Fair value of the investment in 50% equity of Shanxi Huaxing on the acquisition date <i>(Note)</i>	2,665,205
Gain on previously held equity interest remeasured at acquisition-date fair value	616,425

Note: The fair value was determined by the valuation report issued by an independent qualified valuer.

An analysis of the cash flows in respect of the acquisition of Shanxi Huaxing is as follows:

	RMB'000
Cash consideration	(2,665,205)
Cash and bank balances acquired	81,344
Net outflow of cash and cash equivalents included in cash flows from investing activities	(2,583,861)

38. BUSINESS COMBINATIONS (CONTINUED)**(c) Acquisition of Shanxi Huaxing (Continued)**

The operating results and cash flows of Shanxi Huaxing since the acquisition date to 31 December 2018 are as follows:

	RMB'000
Revenue	415,509
Profit for the period	110,917
Net cash out flows	(434)

* The English names represent the best effort made by management of the Group in translating their Chinese names as the companies do not have any official English names.

(d) Acquisition of Shandong Aluminum Carbon Plant

On 31 August 2018, Chalco Shandong, a subsidiary of the Company, entered into an asset transfer agreement with Shandong Aluminum Plant, pursuant to which, Chalco Shandong acquired Shandong Aluminum Carbon Plant from Shandong Aluminum at a total consideration of RMB146 million. The consideration was determined based on the appraisal report issued by an independent qualified valuer. Chalco Shandong has paid all consideration as of 31 December 2018. In the opinion of the directors of the Company, Shandong Aluminum Carbon Plant constitutes a business. Before and after the acquisition, Chalco Shandong and Shandong Aluminum were controlled by Chinalco, and the control was not temporary. As such, the acquisition is considered to be a business combination under common control. The acquisition date was 31 August 2018, which is determined by the date of transfer of the assets.

38. BUSINESS COMBINATIONS (CONTINUED)

(d) Acquisition of Shandong Aluminum Carbon Plant (Continued)

The carrying amounts of the assets and liabilities of Shandong Aluminum Carbon Plant as at the transaction date and the comparative financial figures were as follows:

	31 August 2018	31 December 2017
Assets		
Property, plant and equipment	23,845	24,393
Inventories	46,150	51,104
Other current assets	411	418
Trade and notes receivables	44,522	23,052
Cash and cash equivalents	–	34,354
Liabilities		
Trade and notes payables	(24,011)	(12,235)
Contract liabilities	(1,432)	–
Other payables and accrued expensed	(1,542)	(38,415)
Net assets	87,943	82,671
Difference recognised in equity	58,319	
Total purchase consideration	146,262	

38. BUSINESS COMBINATIONS (CONTINUED)

(e) Acquisition of Pingguo Aluminum Carbon Plant

On 30 August 2018, Guangxi Branch of the Company entered into an asset transfer agreement with Pingguo Aluminum, pursuant to which, Guangxi Branch of the Company acquired Pingguo Aluminum Carbon Plant from Pingguo Aluminum at a total consideration of RMB92 million. The consideration was determined based on the appraisal report issued by an independent qualified valuer. Guangxi Branch of the Company has paid all consideration as of 31 December 2018. In the opinion of the directors of the Company, the Pingguo Aluminum Carbon Plant constitutes a business. Before and after the acquisition, Guangxi Branch and Pingguo Aluminum were controlled by Chinalco, and the control was not temporary. As such, the acquisition is considered to be a business combination under common control. The acquisition date was 30 August 2018, which is determined by the date of transfer of the assets.

38. BUSINESS COMBINATIONS (CONTINUED)

(e) Acquisition of Pingguo Aluminum Carbon Plant (Continued)

The carrying amounts of the assets and liabilities of Pingguo Aluminum Carbon Plant at the transaction date and the comparative financial figures were as follows:

	30 August 2018	31 December 2017
Assets		
Property, plant and equipment	127,315	35,201
Trade and notes receivables	–	12,143
Inventories	71,264	90,581
Liabilities		
Trade and notes payables	(117,749)	(69,521)
Net assets	80,830	68,404
Difference recognised in equity	11,218	
Total purchase consideration	92,048	

(f) Acquisition of Chibi Great Wall Carbon

On 30 August 2018, Chalco Mining, a subsidiary of the Company, entered into an equity transfer agreement with China Great Wall Aluminum and Henan Great Wall Zhongxin, pursuant to which, Chalco Mining acquired 57.69% and 19.96% equity interest in Red Chibi Great Wall from China Great Wall Aluminum and Henan Great Wall Zhongxin, respectively. The consideration for the acquisition was RMB202 million, which was determined based on the appraisal value of the 77.65% equity interest in Chibi Great Wall Carbon. As at 31 December 2018, Chalco Mining has paid the consideration in receivables amounting to RMB70 million and cash amounting to RMB132 million, respectively. The transaction date was 30 August 2018, which was the date that the Group obtained control of Chibi Great Wall Carbon. Before and after the acquisition, both Chibi Great Wall Carbon and Chalco Mining were controlled by Chinalco, and the control was not temporary. Thus, the acquisition of the 77.65% equity interest in Chibi Great Wall Carbon is considered to be a business combination under common control.

38. BUSINESS COMBINATIONS (CONTINUED)**(f) Acquisition of Chibi Great Wall Carbon (Continued)**

The carrying amounts of the assets and liabilities of Chibi Great Wall Carbon as at the transaction date and the comparative financial figures were as follows:

	30 August 2018	31 December 2017
Assets		
Property, plant and equipment	379,618	271,604
Land use rights	25,731	26,124
Deferred tax assets	3,325	3,325
Inventories	65,440	59,035
Other current assets	18,608	11,095
Trade and notes receivables	53,392	32,880
Restricted Cash	–	15,700
Cash and cash equivalents	16,258	50,545
Liabilities		
Interest-bearing loans and borrowings	(233,000)	(228,500)
Contract liabilities	(1,816)	–
Trade and notes payables	(56,970)	(46,702)
Other payables and accrued expenses	(52,114)	(51,595)
Income tax payable	–	(2,927)
Other non-current liabilities	(65,901)	(69,640)
Net assets	152,571	70,944
Non-controlling interests	(34,100)	(15,856)
Difference recognised in equity	83,497	
Total purchase consideration	201,968	

38. BUSINESS COMBINATIONS (CONTINUED)

(g) Acquisition of Longhua Logistics

On 17 September 2018, China Aluminum Logistics Group Corporation Co., Ltd.* (“China Aluminum Logistics Group”) (中鋁物流集團有限公司), a subsidiary of the Company, entered into an equity transfer agreement with Northeast Light Alloy, pursuant to which, Chalco Aluminum Logistics acquired a 51% equity interest in Longhua Logistics from Northeast Light Alloy. The consideration for the acquisition was RMB3 million, which was determined based on the appraisal value of the 51% equity interest in Longhua Logistics and China Aluminum Logistics Group has paid all consideration as of 31 December 2018. The transaction date was 17 September 2018, which was the date that the Group obtained control of Longhua Logistics. Before and after the acquisition, both Longhua Logistics and China Aluminum Logistics Group were controlled by Chinalco, and the control was not temporary. As such, the acquisition of the 51% equity interest in Longhua Logistics is considered to be a business combination under common control.

38. BUSINESS COMBINATIONS (CONTINUED)**(g) Acquisition of Longhua Logistics (Continued)**

The carrying amount of the assets and liabilities of Longhua Logistics as at the transaction date and the comparative financial figures were as follows:

	17 September 2018	31 December 2017
Assets		
Property, plant and equipment	3,839	2,901
Inventories	2,207	127
Other current assets	608	200
Trade and notes receivables	6,828	6,704
Cash and cash equivalents	403	281
Liabilities		
Trade and notes payables	(4,647)	(2,062)
Contract liabilities	(1,504)	–
Income tax payable	–	(130)
Other payables and accrued expenses	(2,065)	(1,323)
Net assets	5,669	6,698
Non-controlling interests	(2,778)	(3,281)
Net assets acquired	2,891	
Difference recognised in equity	413	
Total purchase consideration	3,304	

39. DISPOSAL OF BUSINESSES

(a) Bankruptcy liquidation of Shanxi Huatai Carbon Co., Ltd.

In March 2018, Shanxi Jiexiu People's Court accepted the liquidation petition filed by the Group's subsidiary, Shanxi Huatai Carbon Co., Ltd.* ("Huatai Carbon") (山西華泰碳素有限責任公司). Upon the liquidation, administrators took control over Huatai Carbon and the directors of the Company considered that the Company lost control over Huatai Carbon and therefore, ceased to consolidate Huatai Carbon since then. The Group recognised a loss of RMB2 million for lost control over Huatai Carbon.

(b) Bankruptcy liquidation of Hedong Carbon Co., Ltd.

In June 2018, Shanxi Hejin People's Court accepted the liquidation petition filed by the Group's subsidiary, Hedong Carbon Co., Ltd.* ("Hedong Carbon") (河東碳素有限責任公司). Upon the liquidation, administrators took control over Hedong Carbon and the directors of the Company considered that the Company lost control over Hedong Carbon and therefore, ceased to consolidate Hedong Carbon since then. The Group recognised a loss of RMB2 million for lost control over Hedong Carbon.

* 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.

40. OTHER EQUITY INSTRUMENTS

On 22 October 2013, a subsidiary of the Company, Chalco Hong Kong Investment Company Limited (“Chalco Hong Kong Investment”, or the “Issuer”) issued USD350 million senior perpetual securities at an initial distribution rate of 6.625% (the “2013 Senior Perpetual Securities”). The proceeds from the issuance of the 2013 Senior Perpetual Securities after the issuance costs amounted to USD347 million (equivalent to RMB2,123 million). The proceeds were on-lent to the Company and any of its subsidiaries for general corporate use. Coupon payments at 6.625% per annum on the 2013 Senior Perpetual Securities have been made semi-annually in arrears from 29 October 2013 and may be deferred at the discretion of the Group. The 2013 Senior Perpetual Securities have no fixed maturity dates and are callable only at the Group’s option on or after 29 October 2018 at their principal amounts together with any accrued, unpaid or deferred coupon distribution payments. After 29 October 2018, the coupon distribution rate will be reset to a percentage per annum equal to the sum of (a) the initial spread of 5.312 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 Company and 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.

On 31 October 2018, the Group redeemed the senior perpetual security, and paid \$373 million in principal and interest, approximately RMB2,592 million.

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 at 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.

40. OTHER EQUITY INSTRUMENTS (CONTINUED)

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 at 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 Company and 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.

On 19 October 2018, the Company issued RMB2,000 million Senior Perpetual Securities with an initial distribution rate at 5.10% (the “2018 Senior Perpetual Securities”). The proceeds from the issuance of the 2018 Senior Perpetual Securities 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 Senior Perpetual Securities have been made annually in arrears from 19 October 2018 and may be deferred at the discretion of the Company. The 2018 Senior Perpetual Securities 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 1.90 percent, (b) the China Treasury Rate, and (c) a margin of 500 Bps every three 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.

40. OTHER EQUITY INSTRUMENTS (CONTINUED)

Pursuant to the terms and conditions of the 2013 Senior Perpetual Securities, the 2015 Perpetual Medium-term Notes, the 2016 Senior Perpetual Securities and the 2018 Senior Perpetual Securities, 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

As at 31 December 2018 and 2017, the Group had no significant contingent liabilities.

42. COMMITMENTS

(a) Capital commitments on property, plant and equipment

	31 December 2018	31 December 2017
Contracted, but not provided for	3,942,933	2,967,541

(b) Commitments under operating leases

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	31 December 2017
Within one year	541,541	658,574
In the second to fifth years, inclusive	1,880,058	2,112,800
After five years	10,567,925	12,544,108
	12,989,524	15,315,482

42. COMMITMENTS (CONTINUED)

(c) Other capital commitments

As at 31 December 2018, the commitments to make capital contributions to the Group's joint ventures and associates were as follows:

	31 December 2018	31 December 2017
Associates	82,800	374,800
Joint ventures	460,000	–
	542,800	374,800

43. EVENTS AFTER THE REPORTING PERIOD

- (a) On 16 January 2019, 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 March 2019 for working capital needs. The fixed annual coupon interest rate of these bonds is 2.99%.
- (b) On 22 January 2019, the Group completed an issuance of corporate bonds with a total face value of RMB2 billion at par value of RMB100.00 per unit which will mature in January 2022 for working capital needs and repayment of bank borrowings. The fixed annual coupon interest rate of these bonds is 3.80%.
- (c) On 14 March 2019, 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 September 2019 for working capital needs. The fixed annual coupon interest rate of these bonds is 2.64%.
- (d) On 15 March 2019, 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 May 2019 for working capital needs. The fixed annual coupon interest rate of these bonds is 2.90%.

43. EVENTS AFTER THE REPORTING PERIOD (CONTINUED)

- (e) On 20 March 2019, the Group completed an issuance of short-term bonds with a total face value of RMB3 billion at par value of RMB100.00 per unit which will mature in September 2019 for working capital needs. The fixed annual coupon interest rate of these bonds is 2.98%.

44. COMPARATIVE AMOUNTS

Certain comparative amounts have been restated as a result of the business combinations under common control and voluntary changes in the accounting policy as disclosed in note 38 and note 2.2(d).

The comparative consolidated statement of cash flows for the year ended 31 December 2017 have been revised to reclassify the cash outflows for the purchase of non-controlling interests and business combination under common control from investing activities to financing activities in accordance with IAS 7. This change did not impact the consolidated statement of financial position or consolidated statement of profit or loss and other comprehensive income for the prior periods.

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 2018	31 December 2017 (restated)
ASSETS		
Non-current assets		
Intangible assets	2,847,450	2,897,881
Property, plant and equipment	17,376,731	19,458,175
Land use rights	550,005	542,107
Investments in subsidiaries	57,559,298	38,510,249
Investments in joint ventures	1,421,924	1,556,924
Investments in associates	3,436,268	4,169,770
Equity investments designed at fair value through other comprehensive income	1,665,441	–
Available-for-sale investments	–	1,862,701
Deferred tax assets	656,317	653,794
Other non-current assets	8,023,750	2,848,755
Total non-current assets	93,537,184	72,500,356
Current assets		
Inventories	3,062,042	3,728,568
Trade and notes receivables	1,098,718	1,257,867
Other current assets	15,417,130	19,518,022
Financial assets at fair value through profit or loss	–	6,581
Restricted cash	127,588	157,217
Cash and cash equivalents	4,357,656	16,320,277
Total current assets	24,063,134	40,988,532
Total assets	117,600,318	113,488,888

**45. STATEMENT OF FINANCIAL POSITION OF THE COMPANY
(CONTINUED)**

	31 December 2018	31 December 2017 (restated)
EQUITY AND LIABILITIES		
EQUITY		
Equity attributable to owners of the parent		
Share capital	14,903,798	14,903,798
Other reserves	42,680,053	27,973,226
Accumulated losses	(7,176,832)	(7,648,158)
Total equity	50,407,019	35,228,866
LIABILITIES		
Non-current liabilities		
Interest-bearing loans and borrowings	27,877,479	18,620,383
Other non-current liabilities	674,105	775,919
Total non-current liabilities	28,551,584	19,396,302

45. STATEMENT OF FINANCIAL POSITION OF THE COMPANY (CONTINUED)

	31 December 2018	31 December 2017 (restated)
EQUITY AND LIABILITIES		
LIABILITIES		
Current liabilities		
Interest-bearing loans and borrowings	27,801,492	46,936,113
Other payables and accrued liabilities	10,133,854	10,739,439
Contract liabilities	110,154	–
Trade and notes payables	596,215	1,188,168
Total current liabilities	38,641,715	58,863,720
Total liabilities	67,193,299	78,260,022
Total equity and liabilities	117,600,318	113,488,888
Net current liabilities	14,578,581	17,875,188
Total assets less current liabilities	78,958,603	54,625,168

Lu Dongliang
 Director

Wang Jun
 Chief Financial Officer

Notes to Financial Statements (Continued)

31 December 2018
(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	Available-for- sale reserve	Other equity instruments	Accumulated losses	Total
Balance at 1 January 2017	19,206,999	873,215	5,867,557	38,580	45,901	2,019,288	(8,682,802)	19,368,738
Profit for the year	-	-	-	-	-	-	1,144,644	1,144,644
Changes in fair value of available-for-sale financial assets, net of tax	-	-	-	-	(4,758)	-	-	(4,758)
Transfer out due to disposal of available-for-sale financial assets, net of tax	-	-	-	-	(34,307)	-	-	(34,307)
Other appropriation	-	-	-	(3,571)	-	-	-	(3,571)
Release of deferred government subsidies	-	-	-	(20,291)	-	-	-	(20,291)
Business combinations under common control	(15,387)	-	-	-	-	-	-	(15,387)
Other equity instruments' distribution	-	-	-	-	-	-	(110,000)	(110,000)
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
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

46. APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved and authorised for issue by the board of directors on 28 March 2019.



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