ALUMINUM CORP OF CHINA LTD Form 20-F April 15, 2015

As filed with Securities and Exchange Commission on April 15, 2015

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### FORM 20-F

# [ ] REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2014

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

[ ] SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 001-15264

(Exact name of Registrant as specified in its charter)

#### ALUMINUM CORPORATION OF CHINA LIMITED

(Translation of Registrant's name into English)

People's Republic of China (Jurisdiction of incorporation or organization)

\_\_\_\_

No. 62 North Xizhimen Street, Haidian District, Beijing People's Republic of China (100082)

(Address of principal executive offices)

### Ge Honglin

No. 62 North Xizhimen Street, Haidian District, Beijing People's Republic of China (100082)

(86) 10 8229 8560

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class Name of each exchange on which registered

American Depositary Shares\*

New York Stock Exchange, Inc.

Class H Ordinary Shares\*\*

- Evidenced by American Depositary Receipts. Each American Depositary Share represents 25 H Shares.
- Not for trading, but only in connection with the listing of American Depositary Shares, pursuant to the requirements of the Securities and **Exchange Commission**

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2014:

9,580,521,924

Domestic Shares, par value RMB1.00 per share

H Shares, par value RMB1.00 per

3,943,965,968 share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes [X] No []

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes [] No [X]

Note-Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes [X] No []

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes [X] No []

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer [X] Accelerated filer [] Non-accelerated filer []

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP [ ] International Financial Reporting Standards as issued by the International Accounting Standards Board [X] Other [ ]

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 [] Item 18 []

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

# Yes [ ] No [X]

### TABLE OF CONTENTS

FORWARD-LOOKIN	NG STATEMENTS	4
CERTAIN TERMS A	ND CONVENTIONS	5
PART I		10
ITEM 1.	IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS	10
ITEM 2.	OFFER STATISTICS AND EXPECTED TIMETABLE	10
ITEM 3.	KEY INFORMATION	10
ITEM 4.	INFORMATION ON THE COMPANY	30
ITEM 4A.	UNRESOLVED STAFF COMMENTS	66
ITEM 5.	OPERATING AND FINANCIAL REVIEW AND PROSPECTS	66
ITEM 6.	DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES	93
ITEM 7.	MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS	103
ITEM 8.	FINANCIAL INFORMATION	111
ITEM 9.	THE OFFER AND LISTING	112
ITEM 10.	ADDITIONAL INFORMATION	112
ITEM 11.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	126
ITEM 12.	DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES	130
PART II		131
ITEM 13.	DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES	131
ITEM 14.	MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS	131
ITEM 15.	CONTROLS AND PROCEDURES	131
ITEM 16A.	AUDIT COMMITTEE FINANCIAL EXPERT	132
ITEM 16B.	CODE OF ETHICS	132
ITEM 16C.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	132
ITEM 16D.	EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES	133
ITEM 16E.	PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS	133
ITEM 16F.	CHANGE IN REGISTRANT'S CERTIFYING	133

	ACCOUNTANT	
ITEM 16G.	CORPORATE GOVERNANCE	133
ITEM 16H.	MINE SAFETY DISCLOSURE	134
PART III		134
ITEM 17.	FINANCIAL STATEMENTS	134
ITEM 18.	FINANCIAL STATEMENTS	134
ITEM 19.	EXHIBITS	134

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3

#### FORWARD-LOOKING STATEMENTS

Certain information contained in this annual report, which does not relate to historical financial information, may be deemed to constitute forward-looking statements. The words or phrases "will likely result", "are expected to", "will continue", "is anticipated", "estimate", "project", "believe" or similar expressions are intended to identify "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results and those presently anticipated or projected. You should not place undue reliance on any such forward-looking statements, which speak only as of the date made. These forward-looking statements include, without limitation, statements relating to:

- future general economic conditions;
- \* future conditions in the international and China capital markets;
- \* future conditions in the financial and credit markets;
- \* future prices and demand for our products;
- \* future PRC tariff levels for alumina and primary aluminum;
- \* sales of our products;
- \* the extent and nature of, and potential for, future development;
- \* production, consumption and demand forecasts of bauxite, coal, alumina and primary aluminum;
- \* expansion, consolidation or other trends in the primary aluminum industry;
- \* the effectiveness of our cost-saving measures;

\*

future expansion, investment and acquisition plans and capital expenditures;

- \* competition;
- \* changes in legislation, regulations and policies;
- \* estimates of proven and probable bauxite reserves;
- \* our research and development plans; and
- \* our dividend policy.

These statements are based on assumptions and analyses made by us in light of our experience and our perception of historical trends, current conditions and future developments, as well as other factors we believe are appropriate in particular circumstances. However, whether actual results and developments will meet our expectations and predictions depends on a number of risks and uncertainties, which could cause actual results to differ materially from our expectations. These risks are more fully described in the section headed "Item 3. Key Information - D. Risk Factors."

Consequently, all of the forward-looking statements made in this annual report are qualified by these cautionary statements. We cannot assure you that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected effect on us or our business or operations.

4

#### CERTAIN TERMS AND CONVENTIONS

"Chalco", "the Company", "the Group", "our company", "we", "our"

and "us" refer to Aluminum Corporation of China Limited and its subsidiaries and, where appropriate, to its predecessors;

"A Shares"

and "domestic shares" refer to our domestic ordinary shares, with a par value of RMB1.00 each, which are listed on the Shanghai Stock Exchange;

"alumina-to-silica ratio"

refers to the ratio of alumina to silica in bauxite by weight;

"aluminum fabrication"

refers to the process of converting primary aluminum or recycled aluminum materials into plates, strips, bars, tubes and other fabricated products;

"AUD"

or "Australian dollars" refers to the lawful currency of the Commonwealth of Australia;

"Baotou Aluminum"

refers to Baotou Aluminum Company Limited, our wholly-owned subsidiary established under the PRC law;

"Baotou Group"

refers to Baotou Aluminum (Group) Co., Ltd., one of our shareholders;

"bauxite"

refers to a mineral ore that is principally composed of aluminum;

"Bayer process"

refers to a refining process that employs a strong solution of caustic soda at an elevated temperature to extract alumina from ground bauxite;

"Board"

refers to our board of directors;

"CBEX"

refers to China Beijing Equity Exchange, an approved equity exchange for the transfer of state-owned assets;

"Chalco Energy"

refers to Chalco Energy Co., Ltd., our wholly-owned subsidiary established under the PRC law;

"Chalco Hong Kong"

refers to Chalco Hong Kong Limited, our wholly-owned subsidiary established under Hong Kong Law;

"Chalco Iron Ore"

refers to Chalco Iron Ore Holding Limited, our subsidiary until December 2013 when we disposed of 65% of its equity interest to Chinalco;

"Chalco Liupanshui"

refers to Chalco Liupanshui Hengtaihe Mining Co., Ltd., 49% of the equity interest of which is owned by us;

"Chalco Mining"

refers to Chalco Mining Co., Ltd., our wholly-owned subsidiary established under the PRC law;

"Chalco Nanhai"

refers to Chalco Nanhai Alloy Company, a wholly-owned subsidiary of our Group established under the PRC law;

"Chalco Ruimin"

refers to Chalco Ruimin Company Limited, our subsidiary until June 2013 when we disposed of 93.30% of its equity interest to Chinalco;

"Chalco Southwest Aluminum"

refers to Chalco Southwest Aluminum Company Limited, our subsidiary until June 2013 when we disposed of 60% of its equity interest to Chinalco;

"Chalco Southwest Aluminum Cold Rolling"

refers to Chalco Southwest Aluminum Cold Rolling Company Limited, our wholly-owned subsidiary until June 2013 when we disposed of its entire equity interest to Chinalco;

"Chalco Trading"

or "CIT" refers to China Aluminum International Trading Co., Ltd., our wholly owned subsidiary established under the PRC law;

5

"Chalco Xing Xian"

refers to the Bayer process production system and ancillary facilities at Xing Xian, Lvliang City of Shanxi Province with production capacity of 800,000 tonnes of metallurgical grade alumina per year;

"China"

and the "PRC" refers to the People's Republic of China, excluding for purposes of this annual report, Hong Kong Special Administrative Region, Macao Special Administrative Region and Taiwan;

"China Nonferrous Metals Technology"

refers to China Nonferrous Metals Processing Technology Co., Ltd.;

"Chinalco"

and "Chinalco Group" refer to our controlling shareholder, Aluminum Corporation of China and its subsidiaries (other than Chalco and its subsidiaries) and, where appropriate, to its predecessors;

"Chinalco Finance" refers to Chinalco Finance Co., Ltd.; "CSRC" refers to China Securities Regulatory Commission; "C\$" refers to the legal currency of Canada; "Dongdong Coal" refers to Shaanxi Chengcheng Dongdong Coal Co., Ltd., 45% of the equity interest of which is owned by us; "Energy-Saving and Emission Reduction Goals" refers to the energy-saving and emission reduction goals set out in China's 12th Five-Year Plan for National Economic and Social Development laid out in 2011, by which China expects to cut its per unit GDP energy consumption by 16 percent compared with the 2010 level by the end of 2015; "Exchange Act" refers to the U.S. Securities Exchange Act of 1934, as amended; "Euros" or "EUR" refers to the lawful currency of the Euro zone; "Fushun Aluminum" refers to Fushun Aluminum Company Limited, our wholly-owned subsidiary established under the PRC law; "Gansu Hualu" refers to Gansu Hualu Aluminum Company Limited, 51% of the equity interest of which is owned by us; "Gansu Huayang" refers to Gansu Huayang Mining Development Company Limited, 70% of the equity interest of which is owned by us; "Guangxi Huayin" refers to Guangxi Huayin Aluminum Company Limited, 33% of the equity interest of which is owned by us; "Guangxi Investment" refers to Guangxi Investment (Group) Co., Ltd., formerly known as Guangxi Development and Investment Co., Ltd., a PRC state-owned enterprise and one of our promoters and shareholders;

"Guizhou Development"

refers to Guizhou Provincial Materials Development and Investment Corporation, a PRC state-owned enterprise and one of our promoters and shareholders;

"Guizhou Yuneng"

refers to Guizhou Yuneng Mining Co., Ltd., 25% of the equity interest of which is owned by us;

"H Shares"

refers to overseas listed foreign shares with a par value RMB1.00 each, which are listed on the Hong Kong Stock Exchange;

6

"Henan Aluminum"

refers to Chinalco Henan Aluminum Company Limited, our subsidiary until June 2013 when we disposed of 90.03% of its equity interest to Chinalco;

"HK\$"

and "HK dollars" refer to Hong Kong dollars, the lawful currency of the Hong Kong Special Administrative Region of the PRC;

"Hong Kong Stock Exchange"

refers to The Stock Exchange of Hong Kong Limited;

"Huaxi Aluminum"

refers to Huaxi Aluminum Company Limited, our subsidiary until June 2013 when we disposed of 56.86% of its equity interest to Chinalco;

"Bayer-sintering combined process"

and "Bayer-sintering series process" refer to the two methods of refining process developed in China which involve the combined application of the Bayer process and the sintering process to extract alumina from bauxite;

"Japanese Yen"

refers to the lawful currency of Japan;

"Jiaozuo Wanfang"

refers to Jiaozuo Wanfang Aluminum Manufacturing Co. Ltd., 17.246% of the equity interest of which was owned by us as of December 31, 2014. Jiaozuo Wanfang was our subsidiary from January 1, 2008 when we established de facto control over it to April 19, 2013 when it completed its private placement of A shares. On January 22 and 23, 2015, we disposed 0.396% total share capital of Jiaozuo Wanfangthrough the securities trading system of the Shenzhen Stock Exchange. On March 2, 2015, we entered into a share transfer agreement with Geo-Jade Petroleum Corporation, pursuant to which we agreed to transfer 100,000,000 unrestricted tradable shares, representing 8.3136% of the total ordinary shares of Jiaozuo Wanfang to Geo-Jade Petroleum Corporation. On March 25, 2015, the Company received the share transfer approval from SASAC;

"Ka"

refers to kiloamperes, a unit for measuring the strength of an electric current, with one kiloampere equaling to 1,000 amperes;

"kWh"

refers to kilowatt hours, a unit of electrical power, meaning one kilowatt of power for one hour;

"Lanzhou Aluminum"

refers to Lanzhou Aluminum Co., Ltd., a wholly-owned subsidiary of us since April 2007 and until July 2007 when it was divided into two wholly-owned entities: Lanzhou branch and Northwest Aluminum;

"Liancheng branch"

refers to our wholly-owned branch, which was formerly known as Lanzhou Liancheng Longxing Aluminum Company Limited, before we acquired 100% of its equity interest;

"Listing Rules"

and "Hong Kong Listing Rules" refers to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange, as amended;

"LME"

refers to the London Metal Exchange Limited;

"Longmen Aluminum"

refers to Shanxi Longmen Aluminum Co., Ltd., 55% of the equity interest of which is owned by us;

"Luxin Company"

refers to Jiexiu Luxin Coal Gasification Company Limited;

"MIIT"

refers to Ministry of Industry and Information Technology of the PRC;

"NDRC"

refers to China National Development and Reform Commission;

"Ningxia Energy"

refers to Chalco Ningxia Energy Group Co., Ltd. (formerly Ningxia Electric Power Group Co., Ltd.) and we acquired 70.82% of its equity interest in January 2013;

"Northwest Aluminum"

refers to Northwest Aluminum Fabrication Branch, our wholly-owned branch until June 2013 when we disposed of all its assets to a subsidiary of Chinalco;

"NYSE"

or "New York Stock Exchange" refers to the New York Stock Exchange Inc.;

"ore-dressing Bayer process"

refers to a refining process we developed to increase the alumina-to-silica ratio of bauxite;

"Qingdao Light Metal"

refers to Chalco Qingdao Light Metal Company Limited, our wholly-owned subsidiary until June 2013 when we disposed of its entire equity interest to Chinalco;

"Qinghai Energy"

refers to Qinghai Province Energy Development (Group) Co., Ltd., 21% of the equity interest of which is owned by us;

"refining"

refers to the chemical process used to produce alumina from bauxite;

"Research Institute"

refers to Zhengzhou Research Institute, our wholly-owned branch mainly providing research and development services;

"Rio Tinto"

refers to Rio Tinto plc, a company incorporated in England and Wales, the shares of which are listed on the London Stock Exchange and the New York Stock Exchange;

Edgar Filing: ALUMINUM CORP OF CHINA LTD - Form 20-F "RMB" or "Renminbi" refers to the lawful currency of the PRC; "SASAC" refers to State-owned Assets Supervision and Administration Commission of the State Council of China; "SEC" refers to the U.S. Securities and Exchange Commission; "Securities Act" refers to the U.S. Securities Act of 1933, as amended; "Shandong Aluminum" refers to Shandong Aluminum Industry Co., Limited, a wholly-owned subsidiary of Chinalco; "Shandong Huayu" refers to Shandong Huayu Aluminum and Power Company Limited, 55% of the equity interest of which is owned by "Shanxi Jiexiu" refers to Shanxi Jiexiu Xinyugou Coal Industry Co., Ltd., 34% of the equity interest of which is owned by us; "Shanxi Huasheng" refers to Shanxi Huasheng Aluminum Company Limited, 51% of the equity interest of which is owned by us; "Shanxi Huaxing" refers to Shanxi Huaxing Aluminum Co., Ltd., a wholly-owned subsidiary of our Group; "Shanxi Huaze" refers to Shanxi Huaze Aluminum and Power Co., Limited, 60% of the equity interest of which is owned by us; "Shanxi Other Mines" refers to the seven of mines, in which we entrusted other party to conduct mining activities, including Shangtan mine, Jindui mine, Shicao mine, Nanpo mine, Xishan mine, Niucaogou mine and Sunjiata mine in Shanxi Province that became the mining areas of our new own mine in 2010; "SHFE"

refers to the Shanghai Futures Exchange;

13

8

"Simandou Project"

refers to the project to develop and operate the Simandou iron ore mine located in Guinea in West Africa as further described in the Simandou joint development agreement dated July 29, 2010 entered into amongst Rio Tinto, Rio Tinto Iron Ore Atlantic Limited and us for the purpose of development of the Simandou Project;

"sintering process"

refers to a refining process employed to extract alumina from bauxite by mixing ground bauxite with supplemental materials and burning the mixture in a coal-fired kiln;

"smelting"

refers to the electrolytic process used to produce molten aluminum from alumina;

"tonne"

refers to the metric ton, a unit of weight, that is equivalent to 1,000 kilograms or 2,204.6 pounds;

"US\$", "dollars"

or "U.S. dollars" refers to the legal currency of the United States;

"Xinan Aluminum"

refers to Xinan Aluminum (Group) Company Limited;

"Zhangze Electric Power"

refers to Shanxi Zhangze Electric Power Co., Ltd.;

"Zunyi Alumina"

refers to Chalco Zunyi Alumina Co., Ltd., 73.28% of the equity interest of which is owned by us; and

"Zunyi Aluminum"

refers to Zunyi Aluminum Co., Ltd., 62.1% of the equity interest of which is owned by us.

Translations of amounts in this annual report from Renminbi to U.S. dollars and vice versa have been made at the rate of RMB6.2046 to US\$1.00, the exchange rate as set forth in the H.10 statistical release of the Federal Reserve Board for December 31, 2014. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, the rates stated below, or at all. See "Item 3. Key Information - Selected Financial Data - Exchange Rate Information" for historical exchange rates between the Renminbi and the U.S. dollar.

Any discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

9

#### PART I

# ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

#### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

#### ITEM 3. KEY INFORMATION

#### A. SELECTED FINANCIAL DATA

#### Historical Financial Information

Our consolidated financial statements as of December 31, 2013 and 2014 and for the years ended December 31, 2012, 2013 and 2014 included in this annual report on Form 20-F have been prepared in accordance with International Financial Reporting Standards, or IFRSs, which includes all International Accounting Standards and Interpretations, as issued by the International Accounting Standards Board, or the IASB. We disposed of substantially all of our aluminum fabrication operations to Chinalco in June 2013. As a result, the operating results of our aluminum fabrication segment were presented as a discontinued operation in our consolidated statement of comprehensive income for the year ended December 31, 2013. Our consolidated statements of comprehensive income for the year ended December 31, 2012 as presented in this annual report are revised to reflect the reclassification between continuing operations and discontinued operation accordingly. We make an explicit and unreserved statement of compliance with IFRSs with respect to our consolidated financial statements as of December 31, 2013 and 2014 and for the years ended December 31, 2012, 2013 and 2014 included in this annual report. Ernst & Young, our independent registered public accounting firm, has issued an unqualified auditor's report on our consolidated statements of financial position as of December 31, 2013 and 2014, and the related consolidated

statements of comprehensive income, statements of changes in equity and statements of cash flows for the years ended December 31, 2012, 2013 and 2014.

The following tables present selected comprehensive income data and cash flows data for the years ended December 31, 2010, 2011, 2012, 2013 and 2014 and selected statements of financial position data as of December 31, 2010, 2011, 2012, 2013 and 2014 that were prepared under IFRSs. As the operating results of the aluminum fabrication segment have been presented as a discontinued operation in our consolidated statement of comprehensive income for the year ended December 31, 2013, the comparative figures for our consolidated statements of comprehensive income for the years ended December 31, 2010, 2011 and 2012 are revised to reflect the reclassification between continuing operations and discontinued operation accordingly. The selected financial information for the years ended and as of December 2012, 2013 and 2014 has been derived from, and should be read in conjunction with, the audited consolidated financial statements and their notes included elsewhere in this annual report.

#### Year Ended December 31,

2010	2011	2012	2013	2014	2014		
RMB	RMB	RMB	RMB	RMB	US\$		
(in thousands, except per share and per ADS data)							

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME DATA

Continuing Operations						
Revenue	113,060,949	138,205,723	143,436,995	169,431,235	141,772,292	22,849,546
Cost of sales	(105,647,804)	30,835,875)	43,425,940)	66,679,7981	41,138,806)(	22,747,447)
			-	· ·		
Gross profit	7,413,145	7,369,848	11,055	2,751,437	633,486	102,099
Selling and distribution expenses	(1,448,100)	(1,487,996)	(1,833,983)	(1,859,220)	(1,753,234)	(282,570)
General and administrative expenses	(2,449,996)	(2,553,358)	(2,750,222)	(2,946,879)	(4,832,156)	(778,802)
Research and development expenses	(162,021)	(206,430)	(184,683)	(193,620)	(293,766)	(47,346)
Impairment loss on property, plant and equipment	(701,781)	(279,750)	(19,903)	(501,159)	(5,679,521)	(915,373)
equipment						

10

Other gains/(losses), net Operating profit/(loss) from continuing	471,281 3,439,280	502,462 3,504,550(4		7,399,252 5,455,693	356,935 (10,744,270)(	57,528 (1,731,662)
operations Finance costs, net	(2,190,355)(	2,916,791)(4	,060,624)(	(5,233,070)	(5,670,338)	(913,892)
Operating profit/(loss) from continuing		<b>-</b> 0	400 405)	222 (22)	(15.111.500)	(0 61 <b>2 22</b> 1)
operations less finance costs	1,248,925	587,759(8	,120,497)	222,623	(16,414,608)(	(2,645,554)
Share of profits of joint ventures	233,784	122,262	37,040	148,749	89,510	14,426
Share of profits of associates	239,458	400,706	256,081	511,869	350,575	56,502
Profit/(loss) before income tax						
from continuing operations Income tax	1,722,167	1,110,727(7	,827,376)	883,241	(15,974,523)(	(2,574,626)
(expense)/benefit from continuing operations	(398,739)	(121,175)	371,092	(339,551)	(1,074,910)	(173,244)
Profit/(loss) for the year from continuing operations	1,323,428	989,552(7	,456,284)	543,690(	(17,049,433)(	(2,747,870)
Profit/(loss) per share from continuing operations Discontinued operation (Loss) /profit for the	0.08	0.04	(0.52)	0.05	(1.20)	(0.19)
from discontinued operation	(354,290)	(299,048)(1	,187,299)	207,144		
Profit/(loss) for the year	969,138	690,504(8	,643,583)	750,834	(17,049,433)(	(2,747,870)
Profit/(loss) Attributable to: Owners of the parent Non-controlling interests	778,008 191,130	237,974(8 452,530		975,246( (224,412)	(16,216,880) (832,553)	(2,613,687) (134,183)

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Dividends	154,179				_	_
Basic and diluted	0.06	0.02	(0.61)	0.07	(1.20)	(0.19)
earnings/(loss) per share						
Earnings/(loss) per ADS	1.44	0.44	(15.22)	1.80	(29.98)	(4.83)
Dividends (expressed in RMB and						
US\$ per share and per ADS)						
Final dividends per	-	0.0114	-	-	-	-
share Final dividends per ADS	-	0.2850	-	-	-	-
Proposed dividends per share	0.0114	-	-	-	-	-
Proposed dividends per ADS	0.2850	-	-	-	-	-

11

Year Ended December 31,

	2010	2011	2012	2013	2014	2014
	RMB	RMB	RMB (in thou	RMB sands)	RMB	US\$
CONSOLIDATED ST	FATEMENTS 1	OF FINANC	CIAL POSITIO	ON DATA		
Total current assets Total non-current assets			49,016,016 126,000,866			10,230,213 20,816,425
Total assets	141,322,039	157,134,157	175,016,882	199,507,054	192,631,971	31,046,638
Total current liabilities	55,733,547	62,360,398	83,853,411	96,737,581	104,235,566	16,799,724
Total non-current liabilities	28,401,637	36,619,073	37,392,321	49,067,354	48,767,563	7,859,904
Total liabilities	84,135,184	98,979,471	121,245,732	145,804,935	153,003,129	24,659,628

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Net assets	57,186,855	58,154,686	53,771,150	53,702,119	39,628,842	6,387,010		
Long-term interest bearing loans and borrowings (excluding current portion)	27,723,867	35,968,526	36,635,652	46,294,828	44,769,211	7,215,487		
Capital stock	13,524,488	13,524,488	13,524,488	13,524,488	13,524,488	2,179,752		
	Year Ended December 31,							
	2010	2011	2012	2013	2014	2014		
	RMB	RMB	RMB (in thousa	RMB	RMB	US\$		
OTHER FINANCIA DATA	AL							
Net cash flows general from operating activities		2,489,756	1,122,352	8,251,338 13	3,773,049 2,2	19,813		
Net cash flows used in investing activities	, , , ,	(9,714,547)	(23,153,090)(	7,686,069)(4	,921,338) (79	3,177)		
Net cash flows general from/(used in) financing activities		8,842,453	20,428,953	1,758,409 (3,	,970,741) (63	9,967)		
Net increase/(decrease in cash		1 (18 (22	(1 (01 707)	2 222 (75	4 000 050 -	06.660		
and cash equivalent	s 1,561,095	1,617,662	(1,601,785)	2,323,678	1,880,970 7	86,669		

12

# **Exchange Rate Information**

The following table sets forth information concerning exchange rates between the Chinese Renminbi and the U.S. dollar for the periods indicated. These rates are provided solely for your convenience and are not necessarily the exchange rates that we used in this annual report or will

use in the preparation of our periodic reports or any other information to be provided to you. The source of these rates is the Federal Reserve H.10 Statistical Release. On April 1, 2015, the exchange rate for Renminbi was US\$1.00 = RMB6.1976.

Period	Period End	Average <sup>(1)</sup> (RMB per US\$1.00)	High	Low
2010	6.6000	6.7603	6.8330	6.6000
2011	6.2939	6.4475	6.6364	6.2939
2012	6.2301	6.2990	6.3879	6.2221
2013	6.0537	6.1412	6.2438	6.0537
2014	6.2046	6.1704	6.2591	6.0402
September	6.1380	6.1382	6.1495	6.1266
October	6.1124	6.1251	6.1385	6.1107
November	6.1429	6.1249	6.1429	6.1117
December	6.2046	6.1886	6.2256	6.1490
2015				
January	6.2495	6.2181	6.2535	6.1870
February	6.2695	6.2518	6.2695	6.2399
March	6.2103	6.2422	6.2741	6.1955
April (through April 1, 2015)	6.1976	6.1976	6.1976	6.1976

(1) Annual average are calculated by averaging the rates on the last business day of each month during the annual period. Monthly averages are calculated by averaging the rates on each business day during the month.

#### B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

# C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

#### D. RISK FACTORS

Our business and financial condition and results of operations are subject to various changing business, competitive, economic, political and social conditions in China and worldwide. In addition to the factors discussed elsewhere in this annual report, the following are some of the important

factors that could cause our actual results to differ materially from those projected in any forward-looking statements.

Our business is vulnerable to downturns in the general economy and industries in which we operate or which we serve. A reduction in demand could materially and adversely affect our business, financial condition and results of operations.

13

Demand for our products depends on the general economy and level of activity and growth in the industries where we operate or serve. Development of the relevant industries is subject to various factors, including but not limited to market fluctuations of prices of commodities, general political or economic conditions, technology development, government investment plans and regulations, fluctuation in global production capacity and global and regional weather conditions, many of which are beyond our control. Unfavorable and volatile financial or economic conditions, such as those caused by the global financial and economic crisis since 2008, including the sovereign-debt crisis in the European Union in 2011 to 2012 and the continued weakness and uncertainty regarding the durability of the emerging economic recovery, have adversely affected the global economy and resulted in a significant decrease in our sales volumes. If a global recession recurs, demand for our products may continue to decline. In addition, concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, unemployment, consumer confidence, declining asset values, capital market volatility and liquidity issues have created difficult operating conditions for us in the past and may continue to do so in the future. Furthermore, the PRC Government has, from time to time, adjusted its monetary, fiscal and other policies and measures to manage the rate of growth of the economy or the overheating and overcapacity in certain industries or markets. As a result, the general economy in the PRC or the world or any particular industry in which we operate or which we serve may grow at a lower-than-expected rate or even experience a downturn. Uncertainty about future economic conditions makes it challenging for us to forecast our results of operations, make business decisions and identify risks that may affect our business. If we are not able to timely and appropriately adapt to changes resulting from the difficult macroeconomic environment, our business, financial condition and results of operations may be materially and adversely affected.

Volatility in the prices of alumina, primary aluminum, other non-ferrous metal and other commodities may adversely affect our business, financial condition and results of operations.

The prices of the products we produce and trade, including alumina,

primary aluminum, other non-ferrous metal and coal products, have historically fluctuated and are expected to continue fluctuating in response to general economic conditions, supply and demand and the level of global inventories, which are beyond our control.

We price our alumina and primary aluminum products by reference to international and domestic market prices, and domestic supply and demand, each of which may fluctuate beyond our control. Primarily as a result of the recovery of the global economy from the global financial crisis, the Australian FOB spot price of alumina and the international spot price of primary aluminum on the LME reached a high of US\$440 per tonne and US\$2,802 per tonne, respectively, in the first half of 2011, compared with US\$390 per tonne and US\$2,447 per tonne, respectively, in 2010. However, since the third quarter of 2011, demand for alumina and primary aluminum has been negatively affected by the European debt crisis. As a result, the Australian FOB spot price of alumina and the international spot price of primary aluminum on the LME have been generally decreasing and reached a low of US\$308 per tonne and US\$1,837 per tonne, respectively, in 2012. In 2013, demand for alumina and primary aluminum fluctuated. The Australian FOB spot price of alumina reached a high of US\$351.5 and a low of US\$312.5 per tonne and the international spot price of primary aluminum on the LME reached a high of US\$2,123.0 per tonne and a low of US\$1,694.5 per tonne in 2013. In 2014, the Australian FOB spot price of alumina and the international cash price of primary aluminum on the LME reached a high of US\$357 per tonne and a low of US\$307 per tonne and a high of US\$2,089 per tonne and a low of US\$1,634 per tonne, respectively. Our average external selling prices of self-produced alumina and primary aluminum were RMB2,470 per tonne and RMB13,551 per tonne respectively in 2014, which decreased by approximately 2.1% and 7.3%, respectively, from 2013 to 2014. Because most of our costs are fixed, we may not be able to respond promptly to a sudden decrease in alumina or primary aluminum prices. There is no assurance that there will be no further falls in prices of our key products, including alumina, primary aluminum and other non-ferrous metal, which may materially and adversely affect our business, financial condition and results of operations.

14

In addition, as the profit margin of trading is based on price fluctuations in the short term, we need to make the correct prediction of the price fluctuations of the non-ferrous metal products and coal products on the markets to ensure the profit margin. If the price fluctuations on the market do not match our prediction, we may incur substantial losses. In addition, as we generate profit from the differences between the purchasing and sales prices of the non-ferrous metal products we deal in, significant fluctuations in the prices of the commodities we deal in may cause the

value of the outsourced products in transit or in inventory to decline, and if the carrying value of our existing inventories exceeds the market price in the future periods, we may need to make additional provisions for our inventories' value. As a result, any significant fluctuation in international market prices could materially and adversely affect our business, financial condition and results of operations.

Our business requires substantial capital investments that we may be unable to fulfill.

Our plans to upgrade and expand our production capacity will require substantial capital expenditures. See "Item 4. Information on the Company - D. Property, Plants and Equipment - Our Expansion." We may also need additional funding for debt servicing, working capital, other investments, potential acquisitions and joint ventures and other corporate requirements. As a result, we expect to incur total capital expenditures of approximately RMB10 billion in 2015. We may seek external financing to satisfy our capital needs if cash generated from our operations is insufficient to fund our capital expenditures or if our actual capital expenditures and investments exceed our plans. Our ability to obtain external financing at reasonable costs and on acceptable terms is subject to a variety of uncertainties. Failure to obtain sufficient funding for our development plans could adversely affect our business and prospects.

We incurred losses in the past and may not achieve sustained profitability in the future.

Although we were profitable in 2013, we incurred a net loss of approximately RMB8.6 billion and RMB17.0 billion in 2012 and 2014, respectively. We may incur losses in the future and we cannot assure you that we will sustain profitability in the future.

In addition, we expect that we will continue relying on, in addition to our cash flows generated from operating activities, bank and other loans as well as proceeds from equity-linked notes and bond offerings, to fund our business operations and expansions. Our borrowing costs and access to the debt capital markets, and thus our liquidity, depend significantly on our public credit ratings. These ratings are assigned by rating agencies, which may reduce or withdraw their ratings or place us on "credit watch", which would have negative implications. A history of net losses may result in a deterioration of our credit ratings, which could increase our borrowing costs and limit our access to the capital markets, which in turn, could reduce our earnings and adversely affect our liquidity.

Our historical results may not be indicative of our future prospects.

We acquired an aggregate of 70.82% of the equity interest in Ningxia Energy on January 23, 2013. Ningxia Energy is an integrated power generation company with coal mines located in Ningxia Autonomous Region. Its principal business includes conventional coal-fire power generation and renewable energy generation. After the acquisition of

Ningxia Energy, we have established an energy segment in January 2013 to include (i) operations of Ningxia Energy and (ii) our other energy related operations that were formerly included in our corporate and other operating segment. In addition, in line with our development strategy to focus on the development of our core business of alumina and primary aluminum operations, where we have established leading market positions, and to reduce future capital expenditures on iron ore development, improve asset-to-debt ratio and generate expected cash flows, we disposed of 65% of the equity interest in Chalco Iron Ore to a wholly-owned subsidiary of Chinalco on December 26, 2013 pursuant to the approval of shareholders at the 2013 second extraordinary general meeting held on November 29, 2013. For details of the disposal of Chalco Iron Ore, please see "Item 4. Information on the Company - A. History and Development of the Company - Overseas Development." As a result, our historical results may not be indicative of our future prospects and result of operations.

15

Our failure to successfully manage our business expansion, including our expansion into new areas of business, would have a material adverse effect on our results of operations and prospects.

We have invested in business expansion in line with our development strategy through organic growth, acquisitions and joint ventures. In addition to continuing to expand our existing business lines, we may, from time to time and when we deem appropriate, expand into new industries which we believe have synergies with our existing operations. For example, we have successfully enhanced our energy-related operations through the acquisition of Ningxia Energy in 2013 and participation in joint ventures and strategic investments in coal mining since 2010.

Our expansion has created, and will continue to place, substantial demand on our resources. Managing our growth and integrating the acquired businesses will require us to, among other things:

- \* comply with the laws, regulations and policies applicable to the acquired businesses, including obtaining timely approval for the construction or expansion of production and mining facilities as required under the PRC law;
- \* maintain adequate control on our business expansion to prevent, among other things, project delays or cost overruns;
- \* gain market acceptance for new products and services and establish relationships with new customers and suppliers;

- \* achieve sufficient utilization of new production facilities to recover costs;
- \* manage relationships with employees, customers and business partners during the course of our business expansion and integration of new businesses;
- \* attract, train and motivate members of our management and qualified workforce to support successful business expansion;
- \* access debt, equity or other capital resources to fund our business expansion, which may divert financial resources otherwise available for other purposes;
- \* divert significant management attention and resources from our other businesses; and
- \* strengthen our operational, financial and management controls, particularly those of our newly acquired subsidiaries, to maintain the reliability of our reporting processes.

Any difficulty meeting the foregoing or similar requirements could significantly delay or otherwise constrain our ability to implement our expansion plans, or result in failure to achieve the expected benefits of the combination or acquisition or write-offs of acquired assets or investments, which in turn would limit our ability to increase operational efficiency, reduce marginal manufacturing costs or otherwise strengthen our market position. Failure to obtain the intended economic benefits from the business expansion could adversely affect our business, financial condition, results of operations and prospects. In addition, we may also experience mixed results from our expansion plans in the short term.

Furthermore, there is no assurance that we will be able to identify attractive acquisition targets, negotiate acquisitions on favorable terms, obtain necessary governmental approvals on investments, if applicable, accurately estimate the mineral resources and reserves of these acquisition targets or obtain the necessary funding to complete such acquisitions on commercially acceptable terms or at all. Acquisitions may result in the incurrence and inheritance of debts and other liabilities, assumption of potential legal liabilities in respect of the acquired businesses, and incurrence of impairment charges related to goodwill and other intangible assets, any of which could harm our businesses, financial condition and results of operations. In particular, if any of the acquired businesses fails to perform as we expect, we may be required to recognize a significant impairment charge, which may materially and adversely affect our businesses, financial condition and results of operations. As a result, there can be no assurance that we will be able to achieve the strategic purpose of any acquisition, the desired level of operational integration or our investment return target.

Our joint ventures and strategic investment may not be successful.

We may from time to time enter into joint venture arrangements to grow our business and operations. For example, since 2010, we have participated in joint ventures and strategic investment in coal mining, in line with our development strategy to diversify our product offering and partially offset our future energy costs, as well as supply a portion of the coal we consume in our operations. In addition, we acquired 70.82% of the equity interest in Ningxia Energy in January 2013, which had joint ventures or held minority interests in a number of power generation companies.

We have non-controlling interests in a number of joint ventures. Although we have not been materially constrained by the nature of our ownership interests, no assurance can be given that our joint venture partners will not exercise their power of veto or their controlling influence in any of our joint ventures in a way that will hinder our corporate objectives and reduce any anticipated cost savings or revenue enhancement resulting from these joint ventures. In addition, whether or not we hold majority interests or maintain operational control in such joint ventures, such arrangements necessarily involve special risks and our joint venture partners may:

- \* have economic or business interests or goals that are inconsistent with or opposed to ours;
- exercise veto rights so as to block actions that we believe to be in our or the joint venture's best interests;
- \* take action contrary to our policies or objectives with respect to the investments; or
- \* as a result of financial or other difficulties, be unable or unwilling to fulfill their obligations under the joint venture, other agreements, such as contributing capital to expansion or maintenance projects.

Failure to maintain optimal utilization of our production facilities will adversely affect our gross and operating margins.

During the past a few years, we expanded the production capacity by completing the construction, upgrading or remoulding of some of our alumina and primary aluminum production facilities. We expect our production capacity expansion in recent years to increase our costs of sales, in particular, depreciation and amortization costs. If we are able to maintain satisfactory facility utilization rates and increase our production

output, our production capacity expansion will enable us to reduce our unit costs through economies of scale, as fixed costs will be spread over a higher volume of output units. Conversely, underutilization of our existing and newly acquired or constructed production facilities may increase our marginal production costs and prevent us from realizing the intended economic benefits of our expansion. For example, as a result of the decrease in our procurement of imported bauxite from Indonesia in response to the change in Indonesian bauxite export policy, we suspended the operations of certain alumina production facilities in our Shandong branch, Henan branch and Zhongzhou branch with an aggregate annual designed production capacity of 170,000 tonnes in 2012, and due to large negative variation of mineral resource and the high costs of natural gas, our Chongqing branch suspended alumina production capacity of 800,000 tonnes in 2014, which adversely affected our results of operations and financial condition. Please see "- Our profitability and operations could be adversely affected if we are unable to obtain a steady supply of raw materials at competitive prices." In addition, considering the sustained weak primary aluminum pricing environment and deterioration in primary aluminum prices which could not be offset through decreases in our costs, we implemented flexible production arrangements for certain alumina and primary aluminum production facilities since 2013. In addition, we abandoned certain primary aluminum and alumina production facilities with an aggregate annual designed production capacity of 157,500 and 30,000 tonnes, respectively, in 2014. We also increased our external purchases of alumina and primary aluminum for trading purposes to capitalize on fluctuating market prices and to enhance resource planning to achieve cost savings in our production. The increase in our external purchases has reduced our utilization of certain production facilities, but has not resulted in a proportionate decrease in fixed costs such as leases and depreciation of plant, property and equipment. Given our high proportion of fixed costs, failure to maintain historical utilization rates may adversely affect our gross and operating margins.

17

Furthermore, our primary aluminum production may be adversely affected by the administrative policies and orders implemented by the local governments to fulfill China's Energy-Saving and Emission Reduction Goals. Please see "- We are subject to administrative policies and orders relating to China's Energy-Saving and Emission Reduction Goals that could adversely affect our production."

We may be required to record impairment charges in the future.

If business conditions deteriorate, long lived assets need to be reviewed for possible impairment. An impairment loss needs to be recognized to the extent that the carrying amount exceeds the recoverable amount. We recorded impairment loss on property, plant and equipment during the three years ended December 31, 2012, 2013 and 2014. In 2014, we recorded impairment loss for land use rights of RMB141 million for our Chongqing branch, impairment loss of property, plant and equipment of RMB5,680 million, impairment loss of mining rights of RMB35 million and impairment loss of computer software and other intangible assets of RMB73 million. We cannot guarantee that we will not incur increased impairment loss in the future, for various reasons including, but are not limited to, a sustained decline in our stock price, strategic decisions made in response to changes in economic and competitive conditions, the impact of the economic environment on our customer base or a material adverse change in our relationship with significant customers. If we record significant impairment charges, our results of operations may be materially and adversely affected.

Our operations consume substantial amounts of energy, and our profitability may decline if energy costs rise or if our energy supplies are interrupted.

Our operations consume substantial amounts of energy. Although we generally expect to meet the energy requirements for our alumina refineries and primary aluminum smelters from a combination of internal and external sources, our results of operations may be materially and adversely affected by the following:

- \* significant increases in electricity costs; or
- \* curtailment of the operation of one or more refineries or smelters due to our inability to extend energy supply contracts upon their expiration.

Cost of electricity is the principal production cost in our primary aluminum operations. Although our average electricity cost per kilowatt-hour, or kWh, of our primary aluminum smelters decreased by approximately 6.7% from 2013 to 2014, there is no assurance that demand for and prices of electricity will not increase in the future. If we are unable to pass on increases in energy costs to our customers, our operating margin, financial condition and results of operations could be materially and adversely affected.

In addition, interruptions in the supply of power can result in costly production shutdowns, increased costs associated with restarting production and the waste of production in progress. A sudden loss of power, if prolonged, can cause damage to or the destruction of production equipment and facilities. In such an event, we may need to expend significant capital and resources to repair or replace the affected production equipment to restore our production capacity. In the past, various regions across China experienced shortages and disruptions in electrical power, especially during peak demand in the summer or during severe weather conditions. We cannot assure you that our operations will not suffer from shortages or disruptions in electrical power, any occurrence

of which could have a material and adverse impact on our business, financial condition and results of operations.

18

Our operations consume substantial amounts of coal, and our operations may be adversely affected if we are not able to procure sufficient coal or if coal prices rise significantly.

We rely heavily on coal as our energy and fuel source in our operations. As we increase our alumina refining capacity, our consumption of coal will increase accordingly. If we are not able to obtain the amount of coal needed for our production due to a shortage of coal, constraints on coal transportation or any other reason, we may be forced to reduce our production output or suspend our alumina refining operations, which could materially and adversely affect our financial condition and results of operations. Although we have acquired equity interest in a number of coal mines, we expect to continue to rely substantially on third-party coal suppliers for the supply of coal. In addition, although our average purchase price per unit tonne of thermal coal used in our alumina production decreased from 2013 to 2014, there is no assurance that the price of coal will not increase in the future. If we are unable to pass on increases in coal prices to our customers or offset price increases through productivity improvements, our operating margin, financial condition and results of operations could be adversely affected.

Our business and industry may be affected by the development of alternative energy sources and climate change.

Our operations consume substantial amounts of coal. Coal combustion generates significant greenhouse gas and other pollutants, and the effects of climate change resulting from global warming and increased pollution levels may provide incentives for governments to promote or invest in "green" energy technologies such as wind, solar, nuclear and biomass power plants, or to reduce their consumption of conventional energy sources such as coal. A number of governments or governmental bodies have introduced or are contemplating legislative and regulatory changes in response to the potential impacts of climate change. These regulatory mechanisms may impact our operations directly or indirectly through customers or our supply chain. We may have to increase our capital expenditures in order to comply with such revised or new legislation or regulations, and may realize changes to profit or loss arising from increased or decreased demand for our products and indirectly, from changes in costs of goods sold, which may adversely affect our results of operations and financial condition.

In addition, we have invested in coal mining operations. We are affected

by the growth of the PRC thermal power industry, which relies on coal as main source of fuel. The PRC thermal power industry may be affected by the development of alternative energy sources, climate change and global environmental factors. In particular, pursuant to China's 12th Five-Year Plan for Environmental Protection, the PRC government plans to continue to encourage the development of alternative energy sources, such as wind power, solar power, biomass and geothermal energy, from 2011 to 2015. As such, alternative energy industries may rapidly develop and gradually gain mainstream acceptance in the PRC and the rest of the world. If alternative energy technologies continue to develop and prove suitable for wide commercial application in the PRC and overseas, demand for conventional energy sources, such as coal, could be reduced, which could have a material and adverse effect on the coal mining industry and, consequently, our business, results of operations and financial condition.

We may be unable to continue competing successfully in the markets in which we operate.

We face competition from both domestic and international primary aluminum producers. Our principal competitors are domestic smelters, some of which are consolidating and expanding their production capacities. These smelters compete with our primary aluminum operations on the basis of cost, quality and pricing. In addition, we face increasing competition from international alumina and primary aluminum suppliers as a result of the elimination of tariffs on imports of primary aluminum and alumina into China. Increasing competition in our product markets may reduce our selling prices or sales volumes, which will have a material adverse effect on our financial condition and results of operations. If we are unable to price our products competitively, maintain or increase our current share of China's alumina and primary aluminum markets or otherwise maintain our competitiveness, our financial condition, results of operations and profitability could be materially and adversely affected.

19

Our overseas expansion exposes us to political and economic risks, commercial instability and events beyond our control in the countries in which we plan to operate.

We are currently undertaking a number of overseas projects, including the bauxite mining projects in Laos and Indonesia, which require significant capital investment. As we are new to these overseas markets, we cannot assure you that our overseas expansion or investments will be successful or that we will not suffer foreign exchange losses in connection with our overseas investment. For example, in 2007, we entered into a development agreement with the Queensland State Government of Australia

("Queensland State Government") to develop a bauxite and alumina project, the Aurukun Project. However, due to the change in market conditions of global aluminum industries, the Aurukun Project could no longer continue under the original framework. We engaged a series of negotiations with the Queensland State Government, but in June 2011, the Queensland State Government terminated the negotiation. As a result, we had a total impairment charge of RMB651 million of the carrying value of the capitalized development expenditures pertaining to the Aurukun Project in 2010 and 2011.

In addition, operations in the overseas markets also expose us to a number of risks including expropriation and nationalization of our assets in foreign countries, civil unrest, acts of terrorism, war, or other armed conflict; natural disasters; inflation; currency fluctuations, devaluations and conversion restrictions; confiscatory taxation or other adverse tax policies, governmental activities that limit or disrupt markets, restrict payments or limit the movement of funds, governmental activities that may result in the deprivation of contractual rights; lack of a well-developed legal system that makes it difficult to enforce our contractual rights; and governmental activities that may result in the inability to obtain or retain licenses required for operations.

Our profitability and operations could be adversely affected if we are unable to obtain a steady supply of raw materials at competitive prices.

Historically, the price for bauxite, our most important raw material for alumina production, has been volatile. We obtain bauxite for our operations from three major sources, including mines that we own or jointly operate and external suppliers. See "Item 4. Information on the Company - B. Business Overview - Raw Materials - Alumina - Supply." The extent to which we procure bauxite from each of these sources affect the security of our supply or cost of bauxite. The supply of bauxite could be affected by various factors, including geographic conditions of bauxite mines, government policies, market prices and competition, many of which are beyond our control. We rely on overseas suppliers to obtain a portion of bauxite we use for production, including Indonesia, a major source of imported bauxite of us. In May 2012, the Government of Indonesia imposed a ban on the exportation of 14 types of unprocessed minerals, including bauxite, with an exception for mining companies that plan to build local processing facilities. For mining companies with plans to build local processing facilities, the Government of Indonesia imposes a 20% export tariff on the exportation of these 14 types of minerals. In response to the change in Indonesian bauxite export policy, we reduced our procurement of bauxite from Indonesia, which resulted in a decrease in our total supply of imported bauxite. As a result, in 2012, we suspended the operations of certain alumina production facilities in our Shandong branch, Henan branch and Zhongzhou branch with an aggregate annual designed production capacity of 170,000 tonnes. In January 2014, the Government of Indonesia imposed an absolute ban on the exportation of unprocessed bauxite and nickel without any exception. Prices of imported bauxite may continue to increase as a result of such ban. In addition, as the

result of the ban, since January 2014, we were not able to export the bauxite produced by our bauxite mines in Indonesia for the use of our alumina refineries in China. If we exhaust our stockpiles and cannot find an alternative source of imported bauxite at competitive prices, our financial condition, results of operations and profitability could be adversely affected.

20

In addition, our results of operations are affected by increases in the cost of other raw materials and other key inputs such as energy. If we cannot obtain a steady supply of key raw materials at competitive prices, our financial condition and results of operations could be materially and adversely affected.

Any transportation interruption or any material increase in our transportation costs could have a material and adverse effect on our business, financial condition and results of operations.

Our operations require the reliable transportation of raw materials and supplies to our refining and smelting sites and finished products to our customers. Our alumina products are mainly transported by rail or trucks and our primary aluminum products are delivered to our customers primarily by rail. There is no assurance that we can always enjoy sufficient transportation capacity or we will not experience transportation interruption in the future. Furthermore, natural disasters may cause interruption to the transportation system, which could in turn affect the transportation of our products. In addition, any changes in fuel prices or fuel supply may be unpredictable and beyond our control. There is no assurance that shortage of fuel will not occur in the future. Any surge in fuel prices or shortage of fuel supply may lead to increases in our operation and transportation costs. If we are unable to make timely deliveries due to logistical and transportation disruptions, or transfer the increased costs to our customers, our production, reputation and results of operations may be adversely affected.

We may not successfully develop and implement new methods and processes.

A main objective of our research and development is to develop new methods and processes to improve the efficiency of our alumina refineries to increase our production yield from bauxite with low alumina-to-silica ratio. If the supply of high quality bauxite with a high alumina-to-silica ratio in China declines, our failure to develop such methods and processes and incorporate them into our production could impede our efforts to reduce unit costs and diminish our competiveness.

The bauxite reserve data in this annual report are only estimates, which may prove to be inaccurate.

The bauxite reserve data on which we base our production, revenue and expenditure plans are estimates that we have developed internally and may prove inaccurate. There are numerous uncertainties inherent in estimating quantities and qualities of reserves, including many factors beyond our control. If these estimates are inaccurate or the indicated tonnages are not recovered, our business, financial condition, and results of operations may be materially and adversely affected.

Our mining operations have limited mine lives and eventual closure of these operations will entail costs and risks regarding ongoing monitoring, rehabilitation and compliance with environmental standards.

Our existing mining operations in the PRC and overseas have limited mine lives and will eventually be depleted. We need to perform certain procedures to remedy and rehabilitate the environmental and social impact that our mining operations have had on local communities and the environment. Remediation, rehabilitation, closure and removal of our facilities will incur various costs and are subject to various risks. The key costs and risks for mine closures include, but are not limited to, (i) long-term management of permanent engineered structures and acid rock drainage; (ii) closure in accordance with local or international environmental standards; (iii) orderly retrenchment of employees and the third-party contractors; and (iv) relinquishment of the site with associated permanent structures and community development infrastructure and programmes to new owners. There is no assurance that such closure of mines will be successful and without delays or additional costs, in which case we may be subject to increased costs, penalties or other administrative actions, damages to reputation, even suspension and cancellation of mining permits, the occurrence of which would cause a material and adverse effect to our business, financial condition and results of operations.

21

Failure to discover new reserves or resources, maintain or enhance existing reserves or resources, develop new mining operations or expand our current mining operations could negatively affect our business, financial condition and results of operations.

Mining exploration is unpredictable in nature. The success of any mining exploration programme depends on various factors, many of which are beyond our control. Due to the unpredictable and speculative nature of the mining industry, there is no assurance that any exploration programme that

we are currently undertaking or may undertake in the future will result in the discovery of valuable reserves or resources. There is no assurance that reported resources can be converted into reserves. Furthermore, actual results upon production may differ from those anticipated at the time of discovery. To access additional reserves in explored areas, we will need to successfully complete development projects, including but not limited to extending existing mines and developing new mines. There are a number of uncertainties inherent in the development and construction of any new mine or an extension of an existing mine, including but not limited to (i) the availability and timing of necessary governmental approvals; (ii) the timing and cost necessary to construct mining and processing facilities; (iii) the availability and cost of labor, utilities, auxiliary materials and other supplies and the accessibility of transportation and other infrastructure; and (iv) the availability of funds to finance construction and production activities. There is no assurance that any future exploration activities or development projects will extend the life of our existing mining operations or result in any new economic mining operations and such failure may have a material adverse effect on our business, financial condition and results of operations.

Our significant indebtedness could adversely affect our business, financial condition and results of operations.

We are subject to a high degree of financial leverage. We have relied, and expect to continue to rely, on both short-term and long-term borrowings to fund a significant portion of our capital requirements. As of December 31, 2014, we had approximately RMB75.2 billion in outstanding short-term bonds and short-term bank borrowings (including the current portion of long-term bank and other borrowings) and RMB44.8 billion in outstanding long and medium-term bonds and long-term bank and other borrowings (excluding the current portion of these borrowings). Please see Note 20 to our audited consolidated financial statements for more detailed information about our borrowings. Primarily as a result of this, we had net current liabilities of RMB40.8 billion as of December 31, 2014. This level of debt could have significant consequences on our operations, including:

- \* making it more difficult for us to fulfill payment and other obligations under our outstanding debt, including repayment of our debt and credit facilities should we be unable to obtain extensions for any such debt or credit facilities before they mature. Please see "Item 5 Operating and Financial Review and Prospects B. Liquidity and Capital Resources" for maturities of our outstanding long-term borrowings;
- \* reducing the availability of cash flows to fund working capital, capital expenditures, acquisitions and other general corporate purposes;
- \* exposing us to interest rates fluctuations on our borrowings and the risk of being unable to rollover, extend or refinance our borrowings as necessary;

- \* potentially increasing the cost of additional financing and making it more difficult for us to conduct equity financings in the capital markets or obtain government approvals to seek additional financing;
  and
- \* putting pressure on our ADS price due to concerns of our ability to repay our debt.

22

Our ability to meet our payment and other obligations under our outstanding debt depends on our ability to generate cash flows in the future or to refinance such debt. We cannot assure you that our business will generate sufficient cash flows from operations to satisfy our obligations under our outstanding debt and to fund other liquidity needs. If we are not able to generate sufficient cash flows to meet such obligations, we may need to refinance or restructure our debt, reduce or delay capital investments, or seek additional equity or debt financing. The sale of additional equity securities could result in dilution to our ADS holders. A shortage of financing could in turn impose limitations on our ability to plan for, or react effectively to, changing market conditions or to expand through organic and acquisitive growth, thereby reducing our competitiveness. We cannot assure you that future financing will be available in amounts or on terms acceptable to us, if at all.

The instruments governing our senior debt contain certain financial and other covenants that restrict our ability to pay dividends, raise further debt and take other corporate actions which may adversely affect our business.

We completed the issuance of US\$350 million in aggregate principal amount of 6.625% senior perpetual capital securities and US\$400 million in aggregate principal amount of 6.25% senior perpetual capital securities (together, the "Securities") in October 2013 and April 2014, respectively, through Chalco Hong Kong Investment Company Limited (the "Issuer") with guarantees to the repayment obligations of the Securities provided by seven of our subsidiaries including Chalco Hong Kong Limited (the "Subsidiary Guarantors"). The indentures governing the Securities contain a number of significant financial and other covenants. Such covenants restrict, subject to certain exceptions, among other things, our and our subsidiaries' ability to create, or have outstanding, any security interest upon our or our subsidiaries' present or future undertaking, assets or revenues to secure any indebtedness which is in the form of bonds, notes, debentures, loan stock or other securities which for the time being are, or are intended to be or capable of being, quoted, listed or dealt in or traded on any stock exchange or over-the-counter or other securities market

("Relevant Indebtedness") which is issued outside the PRC, our ability to create or have any Relevant Indebtedness which is issued outside the PRC, our ability to create or have outstanding any guarantee or indemnity in respect of any Relevant Indebtedness which is issued outside the PRC and the Issuer's, Subsidiary Guarantors' and their respective subsidiaries' ability to create, or have outstanding, any security interest upon their present or future undertaking, assets or revenues to secure any Relevant Indebtedness or any guarantee or indemnity in respect of any Relevant Indebtedness or to sell or otherwise dispose of capital stock held or controlled by it in any direct or indirect subsidiary of Chalco Hong Kong Limited which is not a Subsidiary Guarantor.

As a result of the covenants, our ability to pay dividends or other distributions on our common shares and the ADSs may be limited. These covenants also restrict our ability to raise additional fund in the future through issuing Relevant Indebtedness which is issued outside the PRC or creating or having any guarantee or indemnity in respect of any Relevant Indebtedness which is issued outside the PRC and may restrict our ability to engage in some transactions that we expect to be of benefit to us.

The Securities are guaranteed by certain of our subsidiaries. A breach of any of the covenants in the indenture governing the Securities could result in a redemption of the Securities at our discretion or an increase of coupon rate if we do not redeem the Securities upon a breach of such covenants. If we default under the Securities in the future, the holders may enforce their claims against the guarantors to satisfy our obligations to them. In addition, such default may result in a default and acceleration of our senior debt and the holders of our senior debt could gain ownership of the capital stock of certain of our wholly owned subsidiaries (if such capital stock is pledged for such senior debt) and/or enforce their claims against the assets of the guarantors (if guarantee is provided for such senior debt). We conduct substantially all of our operations in China and substantially all of our assets are located in China and, if we default under our senior debt, we would lose control or ownership of our assets and operations in China and there may be few or no assets remaining with which we could conduct our business or from which the claims of our other creditors could be satisfied.

23

The interests of our controlling shareholder who exerts significant influence over us may conflict with ours.

As of December 31, 2014, our largest shareholder, Chinalco, directly owned 38.56% of our issued share capital and indirectly owned an additional 2.77% of our issued share capital through its controlled entities. The interests of Chinalco may conflict or even compete with our interests

and those of our public shareholders. Chinalco may take actions that are in the interest of its subsidiaries, associates and other related entities to our detriment. For example, Chinalco may seek to influence our decision as to the amount of dividends we declare and distribute. Any increase in our dividend payout would reduce funds otherwise available for reinvestment in our businesses and thus may adversely affect our future prospects and financial condition.

In addition, Chinalco and a number of its subsidiaries and associates provide a range of services to us, including engineering and construction services, social services, land and property leasing as well as the supply of raw and supplemental materials. It would be difficult to find an alternative source for some services that we receive from Chinalco. Our cost of operations may increase if Chinalco, its subsidiaries and associates are unable to continue providing such services to us.

We are subject to, and incur costs to comply with, environmental laws and regulations.

As we produce air emissions, discharge waste water, and handle hazardous substances at our bauxite mines, alumina refineries and aluminum smelters, we are subject to, and incur costs to comply with, environmental laws and regulations.

Given the magnitude, complexity and continuous amendments to these laws and regulations, compliance therewith may be onerous or may involve substantial financial resources and other resources to establish efficient compliance and monitoring systems. The liabilities, costs, obligations and requirements associated with these laws and regulations may therefore be substantial and may delay the commencement of, or cause interruptions to, our operations. Non-compliance with the relevant laws and regulations applicable to our operations may even result in substantial penalties or fines, suspension or revocation of our relevant licenses or permits, termination of government contracts or suspension of our operations. Such events could impact our operating results, financial condition and reputation, all of which could adversely impact the Group's ability to be profitable and attract new customers. We were fined for breaches of environmental laws and regulations and there is no assurance that there will not be any further breaches in the future.

In addition, the environmental laws and regulations in the PRC and other jurisdictions in which we operate continue to evolve. As a result, we may incur significant additional costs if relevant laws and regulations change or enforcement of existing laws and regulations becomes more rigorous. For instance, to comply with the requirement of desulphurization and denitration in China, we were requested to invest in upgrading or remoulding certain production facilities. Further, our overseas expansion projects are subject to foreign environmental laws and regulations. Failure to comply with environmental laws and regulations may trigger a variety of administrative, civil and criminal enforcement measures, including the assessment of monetary penalties, the imposition of remedial requirements

and the issuance of orders enjoining future operations, all of which may materially and adversely affect our business operations.

24

We are subject to administrative policies and orders relating to China's Energy-Saving and Emission Reduction Goals that could adversely affect our production.

We are subject to administrative energy-saving and emission reduction policies and orders carried out by the central and provincial governments in accordance with China's Energy-Saving and Emission Reduction Goals. In 2010 and 2011, some of our primary aluminum production facilities were subject to power rationing carried out by some provincial governments to fulfill their energy-saving and emission reduction goals. Although power rationing only slightly reduced our primary aluminum production in 2010 and 2011 and the PRC central government has denounced it as an improper means to fulfill the Energy-Saving and Emission Reduction Goals, some or all of our primary aluminum production facilities may be subject to power rationing or other similar policies and orders from time to time in the future, which may adversely affect our production. On July 18, 2013, the Ministry of Industry and InformationTechnology of the PRC ("MIIT") issued the Standard Conditions for Aluminum Industry, which sets forth various standards for existing and new projects, including standards for environment protection, energy consumption, and utilization of resources. In order to meet these standards, we may be required to update our equipment and improve our technology, which could delay our production or result in additional costs and expenses. The occurrence of any of the foregoing could have a material adverse effect on our business, results of operations and financial condition.

Our business is subject to unplanned business interruptions that may adversely affect our performance.

We may experience accidents in the course of our operations, which may cause significant property damage and personal injuries. Significant accidents and natural disasters may cause interruptions to our operations or result in property or environmental damage, an increase in operating expenses or loss of revenues. The occurrence of accidents, natural disasters and the resulting consequences may not be covered adequately, or at all, by the insurance policies we carry. Losses or payments incurred by us as a result of major accidents or natural disasters may have a material and adverse effect on our results of operations if such losses or payments are not fully insured.

We have not obtained valid titles or land use rights to certain properties or

land parcels that we occupy.

We had not obtained valid ownership certificates to certain properties that we occupy. These properties are used primarily for production plants and daily operations management. As of December 31, 2014, the book value of our properties with defective titles is RMB5,898.0 million, which represented approximately 14.9% of our net asset value. In addition, we had not obtained land use rights to certain land parcels, which we use primarily for our production plants. As of December 31, 2014, the book value of these land parcels is RMB398.6 million, represented approximately 1.0% of our net asset value. We have applied to the appropriate authorities to obtain the relevant ownership certificates. We cannot give any assurance that ownership dispute will not occur or that third parties will not assert any claims against us for compensation in respect of any use of these properties or land parcels.

Our business involves inherent risks and occupational hazards, which could damage our reputation, subject us to liability claims and cause substantial costs to us.

Our business involves inherent risks and occupational hazards. Under our mining operations, we engage or may engage in certain inherently risky and hazardous activities, including, among others, operations at height or on dangerous terrains, underground excavation and construction, use of heavy machinery, mining and handling of flammable and explosive materials, and we are therefore subject to risks associated with these activities, including, among others, geological catastrophes, toxic gas and liquid leakages, equipment failures, industrial accidents, fire, explosions and underground water leakages. Although we conduct geological assessments on mining conditions and adapt our mining plans to the mining conditions at each mine, we cannot assure you that adverse mining conditions will not endanger our workforce, increase our production costs, reduce our bauxite or coal output or temporarily suspend our operations. The occurrence of any of the foregoing events or conditions could have a material adverse impact on our business and results of operations. Additionally, we are exposed to operational risks associated with industrial or engineering activities, such as maintenance problems or equipment failures. These risks and hazards may result in personal injury and fatal casualties, damage to or destruction of properties or production facilities, and pollution and other environmental damage. Any of these consequences, to the extent they are significant, could result in business interruption, possible legal liability and damage to our business reputation and corporate image.

Our mines and operating facilities may be damaged by water, gas, fire or cave-ins due to unstable geological structures. Any significant accident, business disruption or safety incident could result in substantial uninsured costs and the diversion of our resources, which could materially and adversely affect our business operations and financial condition.

We may be subject to product liability claims.

Some of the products we sell or manufacture may expose us to product liability claims relating to property damage or personal injury. The successful assertion of product liability claims against us could result in significant damage payments and harm to our reputation, which in turn could have a material adverse effect on our business, financial condition and results of operations.

We are subject to risks normally associated with cross-border transactions, and our export products have been and may become subject to antidumping or countervailing duty proceedings.

We generate revenue from exports of certain alumina chemical products and certain non-ferrous metals and minerals products to foreign jurisdictions. Such foreign jurisdictions may take restrictive measures, including, among others, anti-dumping duties and other non-tariff barriers, to protect their own markets. Our sales in major overseas markets may be adversely affected by increases in or new impositions of anti-dumping duties, countervailing duties, quotas or tariffs imposed on our exports. Further increases in or new imposition of anti-dumping duties, countervailing duties, quotas or tariffs on our sales in these markets could adversely affect the exports to these regions in the future. By virtue of our transactions with parties outside the PRC, we will be subject to the risks normally associated with cross-border business transactions and activities. We will also be exposed to the risk of changes in social, legal, political and economic conditions in the foreign jurisdictions to which we export. In particular, unexpected changes in regulatory requirements, tariffs and other trade barriers and price or exchange controls could limit our operations and make the repatriation of profits difficult.

We are subject to litigation risks.

In the ordinary course of business, claims involving project owners, customers, suppliers and subcontractors may be brought against us and by us in connection with our contracts. If we were found to be liable on any of the claims, we would have to incur a charge against earnings to the extent a reserve had not been established for the matter in our accounts, or to the extent the claims were not sufficiently covered by our insurance coverage. Both claims brought against us and by us, if not resolved through negotiations, are often subject to lengthy and expensive litigation or arbitration proceedings. Charges associated with claims brought against us and write-downs associated with claims brought by us could have a material adverse impact on our business, financial condition, results of operations and cash flow. Moreover, legal proceedings resulting in

judgments or findings against us may harm our reputation and damage our prospects for future contract awards.

We face counterparty risks.

While we generally sell goods and provide services to reputable customers and evaluate the customers' credit in accordance with our internal risk management criteria, such as their credit history and likelihood of default, we have limited access to information about our customers and we may encounter difficulties in the collection of receivables in certain countries that we have less experience in our dealings. Therefore, we cannot guarantee that all of our customers will fully perform their obligations under their respective contracts with us, and the deterioration of any customers' credit or payment conditions may result in those customers defaulting on their contractual obligations, which could materially and adversely affect our business, financial condition and results of operations. In addition, disputes with governmental entities and other public organizations could potentially lead to contract termination if these remain unresolved or may take a considerably longer period of time to resolve than disputes with counterparties in the private sector, and payments from these entities and organizations may be delayed as a result.

26

We may be exposed to claims in relation to the unsatisfactory performance of third-party service providers, and disputes with business partners may also adversely affect our business.

We rely on third-party service providers for certain services, including but not limited to mining infrastructure construction, logistics services or warehouse management. Therefore, we are exposed to the risk that our third-party service providers may fail to perform their obligations, which may adversely affect our business operations. In addition, from time to time, we co-operate with business partners to develop our business, including acquiring strategic mining resources or businesses that complement our own business line. Furthermore, we operate certain mining projects through joint venture arrangements and may enter into further joint ventures in the future along with the expansion of our operations. We may have disputes with these business partners or joint venture partners over various aspects, such as performance of each party's obligations, scope of each party's responsibilities, product quality and logistics services. If such disputes cannot be settled in a timely manner, our financial condition and business may be adversely affected.

Failure to hire and retain management executives, technicians and other qualified personnel could adversely affect our business and prospects.

The growth of our business operations depends on the continued services of our senior management team. The industry experience, expertise and contributions of our executives and other members of our senior management are essential to our continued success. We will require an increasing number of experienced and competent executives in the future to implement our growth plans. If we were to lose the services of any of our key management members and were unable to recruit and retain personnel with equivalent qualifications at any time, the management and growth of our business could be adversely affected.

Competition for qualified personnel in general is intense in the PRC and other markets where we operate. We cannot guarantee that we will be able to maintain an adequate skilled labor force necessary for us to execute our projects or to perform other corporate activities, nor can we guarantee that staff costs will not increase as a result of a shortage in the supply of skilled personnel. If we fail to attract and retain personnel with suitable managerial, technical or marketing expertise or maintain an adequate labor force on a continuous basis, our business operations could be adversely affected and our future growth and expansions may be inhibited.

We may not be able to detect and prevent fraud or other misconduct committed by our employees, representatives, agents, customers or other third parties.

We may be exposed to fraud or other misconduct committed by our employees, representatives, agents, customers or other third parties that could subject us to litigation, financial losses and sanctions imposed by governmental authorities, as well as affect our reputation. These misconduct could include:

- \* hiding unauthorized or unsuccessful activities, resulting in unknown and unmanaged risks or losses;
- \* intentionally concealing material facts, or failing to perform necessary due diligence procedures designed to identify potential risks, which are material to us in deciding whether to make investments or dispose of assets;
- \* improperly using or disclosing confidential information;

27

\* engaging in improper activities such as offering bribes to counterparties in return for any type of benefits or gains;

- misappropriation of funds;
- \* conducting transactions that exceed authorized limits;
- \* engaging in misrepresentation or fraudulent, deceptive or otherwise improper activities;
- engaging in unauthorized or excessive transactions to the detriment of our customers; or
- \* otherwise not complying with applicable laws or our internal policies and procedures.

Our internal control procedures are designed to monitor our operations and ensure overall compliance. However, such internal control procedures may be unable to identify all incidents of non-compliance or suspicious transactions in a timely manner if at all. Furthermore, it is not always possible to detect and prevent fraud and other misconduct, and the precautions we take to prevent and detect such activities may not be effective.

There is no assurance that fraud or other misconduct will not occur in the future. If such fraud or other misconduct does occur, it may cause negative publicity as a result, and could have a material and adverse effect on our business, financial condition and results of operations.

Our operations are affected by a number of risks relating to conducting business in the PRC.

As a significant majority of our assets and operations are located in the PRC, we are subject to a number of risks relating to conducting business in the PRC, including the following:

- \* The central and local PRC government continues to exercise a substantial degree of control and influence over the aluminum industry in China and shape the structure and development of the industry through the imposition of industry policies governing major project approvals and safety, environmental and quality regulations. If the PRC government changes its current policies or the interpretation of those policies that are currently beneficial to us, we may face pressure on profit margins and significant constraints on our ability to expand our business operations.
- \* Although China has been transitioning from a planned economy to a market-oriented economy, a substantial portion of productive assets in China are still owned by the PRC government. The PRC government also exercises significant control over China's economic growth through the allocation of resources, control of payments of obligations denominated in foreign currencies and monetary and tax policies. Some of these measures benefit the overall economy of China, but

may have a materially adverse impact on us.

In 2005, China adopted a managed floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band based on supply and demand with reference to a basket of currencies. Since then the exchange rate between U.S. dollar and Renminbi has fluctuated and become increasingly unpredictable following the global financial crisis with increasing pressure on the Renminbi to appreciate. In April 2012, the PRC government took a milestone step in turning the Renminbi into a global currency by doubling the size of its trading band against the U.S. dollar, pushing through a crucial reform that further liberalizes its financial markets. The People's Bank of China further allows the Renminbi to rise or fall 2% from a mid-point every day, effective on March 17, 2014, compared with its previous 1% limit. Any appreciation of the Renminbi will affect the value of our US dollar-denominated borrowings and overseas investments, increase the prices of our export sales denominated in foreign currencies and reduce the Renminbi equivalent value of our trade and notes receivable denominated in foreign currencies, which may adversely affect our financial condition and results of operations. Our financial condition and operating performance may also be affected by changes in the value of currencies other than Renminbi in which our earnings and obligations are denominated.

28

\* The PRC legal system is still under development. Laws are enacted and amended and regulations are improving regularly and issued relatively frequently. Because of this and the limited volume of published decisions and their lack of binding precedential nature, the interpretation and enforcement of these laws and regulations involve uncertainties. The inability to enforce or obtain a remedy under any of our present or future agreements could result in a significant loss of business, business opportunities or capital.

The audit reports included in this annual report are prepared by auditors who are not inspected by the Public Company Accounting Oversight Board and, as such, you are deprived of the benefits of such inspection.

Auditors of companies that are registered with the SEC and traded publicly in the United States, including our independent registered public accounting firms, must be registered with the US Public Company Accounting Oversight Board (United States) (the "PCAOB") and are required by the laws of the United States to undergo regular inspections by the PCAOB to assess their compliance with the laws of the United States and professional standards. Because we have substantial operations within

the PRC and the PCAOB is currently unable to conduct inspections of the work of our auditors as they relate to those operations without the approval of the Chinese authorities, our auditors' work related to our operations in China is not currently inspected by the PCAOB.

This lack of PCAOB inspections of audit work performed in China prevents the PCAOB from regularly evaluating audit work of any auditor that was performed in China including that performed by our auditors. As a result, investors may be deprived of the full benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections of audit work performed in China makes it more difficult to evaluate the effectiveness of our auditors' audit procedures as compared to auditors in other jurisdictions that are subject to PCAOB inspections on all of their work. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

Proceedings instituted recently by the SEC against five PRC-based accounting firms could result in our financial statements being determined to not be in compliance with the requirements of the Exchange Act.

In December 2012, the SEC brought administrative proceedings against five accounting firms in China, alleging that they had refused to produce audit work papers and other documents related to certain other China-based companies under investigation by the SEC for potential accounting fraud. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and suspending four of the five firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until reviewed and approved by the SEC. The four firms which are subject to the six month suspension from practicing before the SEC have recently appealed the initial administrative law decision to the SEC. The sanction will not become effective until after a full appeal process is concluded and a final decision is issued by the SEC. The accounting firm can also further appeal the final decision of the SEC through the federal appellate courts. We were not and are not subject to any SEC investigations, nor are we involved in the proceedings brought by the SEC against the accounting firms. However, the independent registered public accounting firm that issues the audit reports included in our annual reports filed with the SEC is affiliated to one of the four accounting firms above.

29

On May 24, 2013, the PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the

CSRC and the Ministry of Finance of the PRC (the "MOF"), which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations in the United States and China. In February 2015, each of the four accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The firms' ability to continue to serve all their respective clients is not affected by the settlement. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the CSRC. If the firms do not follow these procedures, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings. The settlement did not require the firms to admit to any violation of law and preserves the firms' legal defenses in the event the administrative proceeding is restarted.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding China-based, United States-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm were denied, temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined to not be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delisting from the NYSE or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our ADSs in the United States.

## ITEM 4. INFORMATION ON THE COMPANY

#### A. HISTORY AND DEVELOPMENT OF THE COMPANY

We were incorporated as a joint stock limited company under the Company Law of the PRC on September 10, 2001 under the corporate name Aluminum Corporation of China Limited. Our principal executive and registered office is located in the People's Republic of China at No. 62 North Xizhimen Street, Haidian District, Beijing, China 100082, and our telephone number is (86) 10 8229 8560.

Pursuant to a reorganization agreement entered into among Chinalco, Guangxi Investment and Guizhou Development in 2001, substantially all

of Chinalco's alumina and primary aluminum production operations, as well as a research institute and other related assets and liabilities, were transferred to us upon our formation. We acquired our bauxite mining operations and associated mining rights from Chinalco in a separate mining rights agreement.

We are a vertically integrated aluminum producer with operations in bauxite and coal mining, alumina refining and primary aluminum smelting. We also produce ancillary products and services derived from or related to our aluminum operations. In addition, we are engaged in trading of alumina, primary aluminum, aluminum fabrication products, other non-ferrous metal products, coal products and raw and ancillary materials in bulk domestically and internationally. Since 2013, we have expanded our operations into power generation.

We have substantially increased the size and scope of our operations through organic growth as well as selective acquisitions and joint ventures. Our key operating assets currently include six subsidiaries mainly engaged in bauxite mining; one integrated alumina and primary aluminum production plant; eight stand-alone alumina refineries, including our Research Institute; 11 stand-alone primary aluminum smelters; one carbon production plantand one integrated power generation company with coal mining operations. All of our principal alumina and primary aluminum production facilities are operated in accordance with ISO14001 standards. In addition, as of December 31, 2014, we had one alumina production plant under construction.

30

#### Disposal of Aluminum Fabrication Business

In line with our development strategy to focus on the upstream sectors of the aluminum industry chain and the production of high value added products, we disposed of substantially all of our aluminum fabrication operations to Chinalco pursuant to the approval of shareholders at the 2012 annual general meeting on June 27, 2013.

On May 13, 2013, we submitted the tender notice to CBEX to dispose of the equity interest we held in eight aluminum fabrication enterprises, including Henan Aluminum, Chalco Southwest Aluminum, Chalco Southwest Aluminum, Chalco Southwest Aluminum, Qingdao Light Metal, Chalco Ruimin, Chalco Sapa Aluminum Products (Chongqing) Co., Ltd. and Guizhou Chalco Aluminum Co., Ltd. (collectively, "Aluminum Fabrication Interests") through open tender. Chinalco participated in and won the bid for the Aluminum Fabrication Interests on June 7, 2013. We entered into an agreement (the "Aluminum Fabrication Interests Transfer

Agreement") with Chinalco on June 9, 2013 for the disposal of Aluminum Fabrication Interests for a consideration of RMB3,242.2 million. Such consideration was the initial bidding price, which was determined with reference to the appraised value of the Aluminum Fabrication Interests. Pursuant to the Aluminum Fabrication Interests Transfer Agreement, Chinalco will pay the consideration in cash in two installments, namely, 30% of the consideration to be paid within five business days after the effective date of the agreement and 70% of the consideration to be paid by June 30, 2014. Chinalco must pay interest for the second installment for the period starting from the date immediately after the effective date until the payment date at the one-year lending rate set by the PBOC. The disposal was approved at the 2012 annual general meeting held on June 27, 2013 and we completed the disposal on June 27, 2013. As of the date of this annual report, Chinalco had paid the first and the second installments in accordance with the Aluminum Fabrication Interests Transfer Agreement.

As a condition of the disposal of the Aluminum Fabrication Interests, on June 9, 2013, we entered into an agreement with Chinalco to transfer the outstanding entrusted loans we provided to Henan Aluminum and Qingdao Light Metal as of December 31, 2012 to Chinalco for a consideration of RMB1,756.0 million. Such consideration was determined based on negotiations between the parties, with reference to the appraised total value of the loans. Pursuant to the agreement, Chinalco will pay the consideration in cash in five equal instalments of RMB351.2 million, with the last installment, together with the relevant interests at the one-year lending rate set by the PBOC, to be paid by June 30, 2017. The transfer was approved at the 2012 annual general meeting held on June 27, 2013 and we completed the transfer on June 27, 2013. As of the date of this annual report, Chinalco had paid the first and the second installments in accordance with the agreement.

In addition, we entered into an agreement with Northwest Aluminum Fabrication Plant, a subsidiary of Chinalco, on June 6, 2013 to dispose of all the assets of Northwest Aluminum for RMB1,659.6 million. Such consideration was determined based on negotiations between the parties, with reference to the appraised net asset value of Northwest Aluminum. Pursuant to the agreement, Northwest Aluminum Fabrication Plant will pay the consideration in cash in five equal instalments of RMB331.9 million, with the last installment, together with the relevant interests at the one-year lending rate set by the PBOC, to be paid by June 30, 2017. The disposal was approved at the 2012 annual general meeting held on June 27, 2013 and we completed the disposal on June 27, 2013. As of the date of this annual report, Northwest Aluminum Fabrication Plant had paid the first and the second installments in accordance with the agreement.

#### Disposal of Assets of Alumina Production Line of Guizhou Branch

On June 6, 2013, we entered into an agreement with Guizhou Aluminum Plant, a subsidiary of Chinalco, to dispose of the assets of alumina production line of our Guizhou branch for a consideration of RMB4,429.0 million. Such consideration was determined based on negotiations between the parties, with reference to the appraised net asset value of such alumina assets of our Guizhou branch. Pursuant to the agreement, Guizhou Aluminum Plant will pay the consideration in cash in five equal instalments of RMB885.8 million, with the last installment, together with the relevant interests at the one-year lending rate set by the PBOC, to be paid by June 30, 2017. The disposal was approved at the 2012 annual general meeting held on June 27, 2013 and we completed the disposal on June 27, 2013. As of the date of this annual report, Guizhou Aluminum Plant had paid the first and the second installments in accordance with the agreement.

We decided to dispose of the assets of alumina production line of Guizhou branch because the district in which they are located has been changed from an industrial district to a commercial district based on the local urban plan, which will significantly increase Guizhou branch's environmental compliance costs. We are in the process of building a new alumina production line in an area relatively close to major bauxite and coal mines in Guizhou Province.

### **Construction Projects**

As of the date of this annual report, we have undertaken a number of facility expansion projects in China. See "- D. Property, Plants and Equipment - Our Expansion."

#### Overseas Development

On July 29, 2010, we entered into a joint development agreement with Rio Tinto and Rio Tinto Iron Ore Atlantic Limited, an affiliate of Rio Tinto, for the development and operation of the Simandou Project, a premium open-pit iron ore mine located in Guinea, West Africa. This agreement provides that we (via our subsidiary) would acquire 47% of the equity interest in a joint venture company to be incorporated by Rio Tinto for an earn-in payment of US\$1.35 billion, and Rio Tinto would transfer its entire 95% of the equity interest in its project company for the Simandou Project, Simfer S.A., to the joint venture company.

On April 22, 2011, Rio Tinto Mining & Exploration Limited, a wholly-owned subsidiary of Rio Tinto, Simfer S.A. and the Government of Guinea entered into a settlement agreement, which, amongst other things, provided that the Government of Guinea would be entitled to acquire up to 35% of the equity interest in Simfer S.A. On November 28, 2011, we, through Chalco Hong Kong, established Chalco Iron Ore under the laws of

Hong Kong with the China-Africa Development Fund and three leading PRC enterprises in the steel, port building and railway construction industries to serve as an investment vehicle for investing in the Simandou Project. We, through Chalco Hong Kong, hold 65% and the other investors collectively hold 35% of the equity interest in Chalco Iron Ore.

32

Following the approvals of the relevant PRC authorities in March and April 2012, Chalco Hong Kong contributed approximately US\$878 million to Chalco Iron Ore, representing 65% of the US\$1.35 billion earn-in to be paid by Chalco Iron Ore to Simfer Jersey Limited, the joint venture company incorporated by Rio Tinto under the laws of Jersey to implement the joint development agreement, as amended. On April 24, 2012, Chalco Iron Ore paid in full the total earn-in payment of US\$1.35 billion to Rio Tinto and acquired its 47% equity interest in Simfer Jersey Limited. Simfer Jersey Limited currently holds 95% of the equity interest in Simfer S.A., with the remaining 5% being held by International Finance Corporation. In addition, during the period from May 2012 to the end of 2013, Chalco Iron Ore injected approximately US\$561.5 million in the form of capital contribution based on its proportion of equity interest to Simfer Jersey Limited for the development and operation of the Simandou Project pursuant to the joint development agreement, as amended. Meanwhile, the other shareholder of Simfer Jersey Limited also injected the capital contribution based on its proportion of equity interest to Simfer Jersey Limited. On October 18, 2013, we entered into a share purchase agreement with Chinalco and its wholly-owned subsidiary, Aluminum Corporation of China Overseas Holdings Limited ("Chinalco Overseas Holdings"), to dispose of 65% of the equity interest in Chalco Iron Ore and transfer outstanding bank loans provided by China Development Bank Corporation ("CDB") to Chinalco Overseas Holdings for a consideration of US\$2,066.5 million (the "Equity Interest") and US\$438.8 million (the "Loan Consideration"), respectively. The bank loans were used for Chalco Hong Kong's capital contribution in Chalco Iron Ore. The Equity Interest was determined with reference to 65% of the valuation of Chalco Iron Ore and the Loan Consideration was determined based on the principal amount of such outstanding bank loans as shown in the financial statements of Chalco Hong Kong.

We believe that such disposal will enable us to focus on the development of our core business of alumina and primary aluminum operations, where we have established leading market positions, and to reduce future capital expenditures on iron ore development and to improve asset-to-debt ratio and generate expected cash flows. Pursuant to the agreement, in the event that we obtain the consent from CDB on the transfer of the bank loans, Chinalco will pay the consideration for the Equity Interest in five

installments, namely, US\$438.8 million (which will be net off by the Loan Consideration), US\$387.9 million, US\$413.3 million, US\$413.3 million and US\$413.3 million, with the relevant interests at the London Interbank Offered Rate plus 0.9%, with the last installment to be paid by December 31, 2017. In the event that we could not obtain the consent from CDB on the transfer of the bank loan, Chinalco will pay the consideration for the Equity Interest in five equal instalments of US\$413.3 million, with the relevant interests at the London Interbank Offered Rate plus 0.9%, with the last installment to be paid by December 31, 2017. The transactions were approved at the 2013 second extraordinary general meeting held on November 29, 2013. We obtained the consent from Rio Tinto relating to such disposal on December 19, 2013. We completed the transactions on December 26, 2013. As of the date of this annual report, the bank loans have been transferred to net off the first installment and Chinalco had paid the second installment.

## Proposed Private Placement of A Shares

On March 8, 2012, our Board resolved to issue up to 1.25 billion A Shares in the PRC. The A Share issue plans previously proposed by our Board on June 30, 2009 and January 30, 2011 and approved by our shareholders at the extraordinary general meeting, A Share class meeting and H Share class meeting held on August 24, 2009 and on April 14, 2011, respectively, ceased. Pursuant to the new issue plan approved by our Board on March 8, 2012, we will issue up to 1.25 billion A Shares, with a nominal value of RMB1.00 each, by way of private placement for expected proceeds of not exceeding RMB8 billion. We will issue the A Shares to no more than ten specific target subscribers within six months from obtaining the approval of the CSRC. The issue price of A Shares to be offered will be not less than 90% of the average trading price of our A Shares in twenty trading days immediately preceding the pricing determination date. We intend to apply proceeds from this private placement to finance Chalco Xing Xian alumina project, Chalco Zhongzhou Ore-dressing Bayer Process expansion construction project and to supplement working capital. The issue plan was approved by the SASAC on April 5, 2012 and by our shareholders at the extraordinary general meeting, A Share class meeting and H Share class meeting held on May 4, 2012. On August 24, 2012, our Board resolved to adjust the issue plan by proposing, among others, to increase the number of A Shares to be issued to up to 1.45 billion A Shares. The adjusted issue plan was approved by the SASAC and our shareholders at an extraordinary general meeting, A Share class meeting and the H Share class meeting on October 12, 2012 and by the CSRC on December 7, 2012. On March 14, 2013, we obtained the approval from the CSRC on our proposed private placement of A Shares under such adjusted issue plan, with effective period of six months after the approval date. However, the CSRC temporarily retrieved its approval in July 2013 due to its on-going investigation on the sponsor of our proposed private placement of A Shares. The period of authorization to the Board relating to the adjusted issue plan was extended by our shareholders at the 2013 annual general meeting, A Share class meeting held on June 27, 2014 and H Share class meeting held on June 27, 2014, with an effective period of 12 months after

the approval date. On January 4, 2015, we submitted the "Report regarding theresumption of the approval of non-public offering of shares of Aluminum Corporation of China Limited" to CSRC. As of the date of this Annual Report, the CSRC is currently undergoing the related review procedures, and the aforementioned proposed offering of shares has not been issued.

33

#### Proposed Issuance of H Shares

On June 27, 2014, our shareholders at the 2013 annual general meeting passed a special resolution, which is valid until the earliest of (i) the end of 12 months from the date of passage, (ii) the conclusion of our next annual general meeting or (iii) the date on which the authority set out in this resolution is revoked or varied by a special resolution at a general meeting. The resolution authorizes us to issue up to 20% of the total nominal value of H Shares in issue as of the resolution date. Our Board is authorized to determine the use of the proceeds. The proposed issuance is subject to the approval by the CSRC and/or other relevant PRC government authorities.

## Senior Perpetual Capital Securities Offering

In April 2014, we completed the issuance of US\$400 million in aggregate principal amount of 6.25% senior perpetual capital securities (the "Securities") through Chalco Hong Kong Investment Company Limited (the "Issuer"), our wholly-owned subsidiary, which was exempted from, and not subject to, registration under the Securities Act. The Securities are guaranteed by seven of our subsidiaries including Chalco Hong Kong Limited. The Securities also have the benefit of a keepwell deed entered into by the Issuer, the Company, Chalco HongKong Limited and the trustee and a deed of equity interest purchase undertaking entered into by the Company and the trustee, both deeds being executed in favor of the trustee. The Securities were listed on the Hong Kong Stock Exchange on April 22, 2014. The net proceeds from the issue of the Securities have been on-lent to the Company or any of its subsidiaries for general corporate use.

#### B. BUSINESS OVERVIEW

### Our Principal Products

We are the largest producer of alumina and primary aluminum in China in terms of production volume. We have benefited from the strong growth of the PRC aluminum market, one of the world's fastest growing major aluminum markets. We refine bauxite into alumina, which is then smelted into primary aluminum. In addition to alumina and primary aluminum, we

also produce and sell a relatively small amount of alumina chemical products (alumina hydrate and alumina-based industrial chemical products), carbon products (carbon anodes and cathodes) and gallium. We are also engaged in the trading of alumina, primary aluminum, aluminum fabrication products, other non-ferrous metal products, coal products and raw and ancillary materials in bulk both manufactured by us and sourced from external suppliers domestically and abroad. In addition, we are engaged in coal mining and power generation. The remainder of our revenues were derived from research and development activities and other products and services. Accordingly, we organize and manage our operations in five business segments: alumina segment, primary aluminum segment, trading segment, energy segment and corporate and other operating segment. After elimination of inter-segment sales, revenues attributable to our alumina segment, primary aluminum segment, trading segment, energy segment and corporate and other operating segment accounted for approximately 4.1%, 21.3%, 70.8%, 3.6% and 0.2%, respectively, of our total revenues from continuing operations in 2014.

34

Our alumina segment includes the mining and purchasing of bauxite and other raw materials, and production and sale of alumina as well as alumina-related products, such as alumina hydrate, alumina-based chemical products and gallium. Alumina accounted for approximately 91.5% of the total production volume for this segment in 2014. Alumina chemical products are used in the production of chemical, pharmaceutical, ceramic and construction materials. In the process of refining bauxite into alumina, we also produce gallium as a by-product. Gallium is a rare, high value metal with applications in the electronics and telecommunication industries.

Our primary aluminum segment includes the procurement of alumina, other raw materials, supplemental materials and electricity power, the production and sale of primary aluminum and aluminum-related products, such as carbon products, aluminum alloy products and other electrolytic aluminum products. Our principal primary aluminum products are ingots and molten aluminum, which, in the aggregate, accounted for approximately 80.1% of our total production volume of primary aluminum in 2014. Our standard 20 kilogram remelt ingots are used for general aluminum fabrication in the construction, electricity, electronics, transportation, packaging, machinery and durable goods industries. We internally produce substantially all the carbon products used at our smelters and sell our remaining carbon products to external customers.

Our trading segment is mainly engaged in the trading of alumina, primary aluminum, other non-ferrous metal products, and crude fuels such as coal products, as well as supplemental materials to our internal manufacturing

plants and external customers. We established our trading business as a separate segment in July 2010 as a result of the implementation of our operational structural exercise.

Our energy segment includes coal mining and power generation, including conventional coal-fire power generation and renewable energy generation such as wind power and photovoltaic power. We established our energy segment in January 2013 as a result of our acquisition of Ningxia Energy in line with our development strategy to partially offset our future energy costs and secure a portion of the coal we consume in our operations. In 2014, we sold most of the electricity we generated to regional power grids at government-mandated rates, supplied a portion of the coal output to our own electric power plant and sold the remaining portion to external customers, including power generation enterprises and cement plants.

Our corporate and other operating segment mainly includes corporate and other aluminum-related research, development, and other activities of the Group.

We used to be engaged in aluminum fabrication operations, where we process primary aluminum for the production and sales of various aluminum fabrication products. As approved at our 2012 annual general meeting held on June 27, 2013, we disposed of substantially all of our aluminum fabrication operations to Chinalco in line with our development strategy to focus on the upstream sectors of the aluminum industry chain and the production of high value added products. As a result, we ceased to have our aluminum fabrication business as a separate segment in June 2013.

#### **Our Production Capacity**

As of December 31, 2014, our annual alumina and primary aluminum production capacity was approximately 14.71 million tonnes and 3.84 million tonnes, respectively. The following table sets forth the production capacity of each of our principal plants by business segment as of the indicated date:

35

	As of December 31, 20	14
Plant	Alumina	Primary Aluminum
	(in thousand tonnes	)(2)

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Guangxi branch	2,210.0	_
Zhongzhou branch	2,950.0	_
Qinghai branch	-	367.0
Shanxi branch	2,747.0	-
Guizhou branch	-	403.7
Henan branch	2,410.0	-
Shandong branch	1,770.0	55.0
Zunyi Alumina	1,000.0	-
Chongqing branch	800.0	-
Shanxi Huaxing	800.0	-
Shanxi Huaze	-	350.0
Lanzhou branch	-	388.0
Shanxi Huasheng	-	220.0
Fushun Aluminum	-	330.0
Zunyi Aluminum	-	235.0
Shandong Huayu	-	200.0
Gansu Hualu	-	230.0
Baotou Aluminum	-	538.0
Research Institute	20.0	-
Liancheng branch	-	523.0
Longmen Aluminum	-	-
Total	14,707.0	3,839.7

36

In 2014, we produced approximately 12.0 million tonnes of alumina and 3.4 million tonnes of primary aluminum. Our production of alumina and primary aluminum represented approximately 23.5% and 12.0%, respectively, of the total output in China in 2014.

<sup>(1)</sup> We disposed of substantially all of our aluminum fabrication operations in June 2013. As a result, we ceased to have our aluminum fabrication business as a separate segment in June 2013.

<sup>(2)</sup> Production capacity is calculated based on designed capacity, which accounts for various assumptions including downtime for ordinary maintenance and repairs, the ore grade of bauxite feedstock and subsequent capacity modifications.

The following table sets forth a breakdown of our production volume by product segment for the periods indicated:

	Year End	Ended December 31,		
Production Volume by Product	2012	2013	2014	
	(in thousand t	onnes, except G	allium)	
Alumina segment Alumina	11,934.0 1,312.0	12,143.2 1,717.2	12,024.0 1,822.3	
Alumina chemical products Gallium (in tonnes) Primary aluminum segment	39.2	127.8	81.2	
Primary aluminum <sup>(1)</sup> Carbon Aluminum fabrication	4,219.0 1,957.2	3,841.8 2,010.4	3,381.6 1,877.4	
(2) Aluminum fabrication products	622.9	290.0	-	

#### **Production Process**

#### Alumina

Alumina is refined from bauxite, an aluminum-bearing ore, through a chemical refining process. The refining process applied is determined by the mineral composition of the bauxite used in production. Our refineries may employ the Bayer process, the Bayer-sintering series process, the Bayer-sintering combined process or the ore-dressing Bayer process. Most of the bauxite reserves in China contain diasporic bauxite, which contains high alumina content and relatively high silica content, resulting in bauxite reserves with low alumina-to-silica ratio. The Bayer process cannot efficiently refine diasporic bauxite that has not undergone processing to increase its alumina-to-silica ratio. The sintering process or the Bayer-sintering combined process is suitable for refining low

<sup>(1)</sup> Including ingots, molten aluminum and other primary aluminum products.

<sup>(2)</sup> We disposed of substantially all of our aluminum fabrication operations in June 2013. As a result, we ceased to have our aluminum fabrication business as a separate segment.

alumina-to-silica ratio bauxite. We have developed and improved these processes to increase our refining yield. When we refine alumina using the Bayer process, we produce gallium as a by-product, which undergoes further processing before sale. In addition, we also produce some alumina chemical products (alumina hydrate and alumina-based industrial chemical products).

## Primary Aluminum

We smelt alumina into primary aluminum through electrolytic reduction. The electrolytic process takes place in a reduction cell, or pot, a steel shell lined with carbon cathodes and refractory materials. Powerful electric currents are passed through the pot to produce molten aluminum. The molten aluminum is transferred to holding furnaces and then poured directly into molds to produce foundry ingots, or further refined to form fabricating ingots, which may be used directly in the aluminum fabrication process. Most of the primary aluminum we produce is in the form of ingotsor molten aluminum.

All of our primary aluminum smelters use pre-bake anode reduction pot-lines. In the pre-bake reduction process, the anodes are pre-formed in a separate facility where pollutants can be contained. The cells themselves are enclosed with removable panels so that waste gas produced during the process can be extracted using large exhaust fans. Our waste gas is treated and purified to reduce dust and fluoride emissions to acceptable levels set by state environmental protection agencies.

37

#### **Production Facilities**

#### Alumina

We currently operate eight alumina refineries and one research institute with a total designed annual production capacity of approximately 14.7 million tonnes as of December 31, 2014. One of our refineries are integrated with primary aluminum smelters. In 2014, we produced approximately 12.0 million tonnes of alumina, approximately 1.8 million tonnes of alumina chemical products and approximately 81.2 tonnes of gallium. The overall utilization rate for our refineries was 82% as of December 31, 2014. In 2014, we supplied approximately 5.6 million tonnes, or 46% of our total production of alumina to our own smelters and sold the remaining alumina to other domestic smelters. All of the alumina chemical products that we produced in 2014 were sold by alumina refineries directly to external customers or internally to Chalco Trading for subsequent external trading. In addition, we abandoned an annual alumina

production capacity of 30,000 tonnes in the Zhongzhou branch in 2014.

The following table sets forth the annual production capacity, output of alumina and alumina chemical products, utilization rate of and production process applied in each of our alumina refineries and our Research Institute:

As of December 31, 2014 For the Year Ended December 31, 2014

	Annual Production Capacity <sup>(1)</sup>	Utilization Rate <sup>(2)</sup>	Alumina Production Output (in thousand to	Alumina Chemical Products Output	Production Process ot percentages)
Shanxi branch	2,747.0	100%	2,261.9	16.2	Bayer-sintering
Henan branch	2,410.0	72%	1,733.7	247.5	Bayer-sintering
Shandong branch	1,770.0	86%	1,583.5	1,091.2	Sintering and
-					Bayer
Zhongzhou	2,950.0	71%	2,133.8	277.8	Sintering and
branch					Bayer
Guangxi branch	2,210.0	100%	2,423.4	159.9	Bayer
Zunyi Alumina	1,000.0	100%	1,001.9	1.3	Bayer
Chongqing	800.0	0	216.0	5.6	Bayer-sintering
branch					
Shanxi Huaxing	800.0	100%	669.8	0	Bayer
Research	20.0	0	0	22.8	Bayer
Institute <sup>(3)</sup>					
Total	14,707.0	82%	12,024.0	1822.3	

<sup>(1)</sup> Production capacity is calculated based on designed capacity, which accounts for various assumptions including downtime for ordinary maintenance and repairs, the ore grade of bauxite feedstock and subsequent capacity modifications.

<sup>(2)</sup> Capacity utilization rate is calculated by dividing our utilized production capacity by our total designed production capacity.

<sup>(3)</sup> The alumina chemical products produced at our Research Institute are sold commercially, and such sales are included in our total revenues.

## Primary Aluminum

We operate 12 primary aluminum smelters located across eight provinces in China. Our smelters had an aggregate annual production capacity of approximately 3.8 million tonnes as of December 31, 2014. One of our smelters is integrated with alumina refineries and does not need to source alumina externally.

In 2014, we produced approximately 3.4 million tonnes of primary aluminum and the average utilization rate for our smelters was 94% as of December 31, 2014. Baotou Aluminum completed its remoulding and upgrading project in 2014, which increased our total annual primary aluminum production capacity by 150,000 tonnes. The following table sets forth the annual production capacity, aluminum output, utilization rate and smelting equipment used in each of our aluminum smelters:

As of December 31, 2014 For the Year Ended December 31, 2014

Plant	Annual Production Capacity <sup>(1)</sup>	Utilization Rate <sup>(2)</sup>	Aluminum Output	Smelting Equipment
				(in thousand tonnes, except percentages)
				200Ka, 240Ka and
Baotou Aluminum	538.0	100%	465.5	400Ka pre-bake 200Ka and 350Ka
Fushun Aluminum	330.0	100%	265.0	pre-bake
Gansu Hualu	230.0	100%	184.2	160Ka and 210Ka pre-bake
Guangxi branch <sup>(3)</sup>	0	0	76.6	160Ka and 320Ka pre-bake
Guizhou branch	403.7	83%	233.6	160Ka and 230Ka pre-bake 200Ka and 350Ka
Lanzhou branch	388.0	100%	397.5	pre-bake 160Ka and 200Ka
Qinghai branch	367.0	100%	393.3	pre-bake
Shandong Huayu	200.0	100%	218.1	240Ka pre-bake
S h a n d o n g branch <sup>(4)</sup>	55.0	0	0	200Ka pre-bake
Shanxi Huasheng Shanxi Huaze	220.0 350.0	100% 100%	221.3 354.3	300Ka pre-bake 300Ka pre-bake

				200Ka and 350Ka
Zunyi Aluminum	235.0	47%	60.2	pre-bake
·				200Ka and 500Ka
Liancheng branch	523.0	100%	512.0	pre-bake
U				1
Total	3,839.7	94%	3,381.6	
Total	3,037.7	) <del>+</del> //	3,361.0	

- (1) Production capacity takes into account designed capacity, downtime for ordinary maintenance and repairs and subsequent capacity modifications.
- (2) Capacity utilization rate is calculated by dividing our utilized production capacity by our total designed production capacity.
- (3) In 2014, we abandoned primary aluminum production facilities of our Guangxi Branch.
- (4) We suspended the operations of primary aluminum production facilities in our Shandong branch since June 2013.

39

#### Raw Materials

#### Alumina

Bauxite is the principal raw material in alumina production. Most of the bauxite in China is  $AL_2O_3.H_2O$  mineral. Bauxite deposits have been discovered across a broad area of central China and are especially abundant in the southern and northern parts of central China. The largest bauxite deposit in China lies in Shanxi Province.

## Rock Formation and Mineralization.

The bauxite deposits of our mines in China, except those of Guangxi Pingguo mine which is an accumulation deposit due to original erosion, usually have similar stratigraphical sequences. Primary bauxite deposit, as a type of sedimentary AL2O3.H2O of Carboniferous or Permian age, is contained in clay rock, limestone or coal seams. A zonary red shale is usually located at the bottom of the bauxite and the red seam distributes over the irregular "karst-type" erosion face on the top of Ordovician limestone. Aluminum deposits in northern China are usually covered with

a very thick Quaternary weathering.

The thickness and quality of deposits vary with our mine locations. Quality is usually consistent in smooth sections but changes sharply in karst "billabong" terrain. The level of hardness of minerals also varies. A sequence that includes a seam of hard bauxite of fine quality in the middle and soft bauxite of inferior quality on the bottom and top seams is common in deposits.

Generally, deposits are horizontal or with an obliquity of 0 to 8 degrees, but there are also steep deposits at an angle of 75 degrees, such as the Guizhou No. 2 mine. Most of the original mineralization is not influenced by folds and faults, and some fractures of a low obliquity and folds emerge in certain deposits, which is evident in the Guizhou No. 2 mine area where the underground mining method must be used due to the obliquity of its bauxite body reaching 70 degrees with the influence of folds and several meters of dislocation arising from partial faults.

## Economic Significance.

Our bauxite deposits in China are divided into three groups. They are primarily distinguished by drill hole spacing and the composition of the deposit, which can encompass rock formations such as intercalated clays, bauxite, footwall iron clay or Ordovician limestone. Bauxite deposit groups vary in the thickness and mineral quality of its reserves.

We use the Chinese bauxite deposit estimation method, which is calculated using cutoff grades and thickness to outline continuous areas within the limits defined by samples of marginal grade. We utilize actual limiting sample points that are joined to create a polygonal outline, and grades are then calculated using a length weighted arithmetic average. The Chinese program of systematic and accurate method of test boring, inspection pit, trial trench, density, tonnage analysis and calculation applied to the geological work of bauxite in China is an appropriate method to analyze these types of deposits.

### Supply.

To support the growth of our alumina production, we continuously seek opportunities to streamline and optimize our bauxite procurement, including the ongoing restructuring of our joint mining operators and acquisition of overseas bauxite resources. Except for our Shandong branch, all of our refineries are located in the four provinces where over 90% of China's potentially mineable bauxite has been found. We generally source our bauxite from mines close to our refineries to control transportation costs. Historically, we have procured our bauxite supply principally from three sources:

- \* our own bauxite mining operations;
- jointly-operated mines; and

\* other suppliers, which principally include small independent mines in China and, to a lesser extent, international suppliers.

On average, our refineries consume approximately 2.3 tonnes of bauxite to produce one tonne of alumina in 2014. We used approximately 29.8 million tonnes, 27.8 million tonnes and 27.4 million tonnes of bauxite in our alumina production in 2012, 2013 and 2014, respectively. Our own mines supplied approximately 17.54 million tonnes of bauxite to our refineries in 2014, all of which were from our own mines in China. Our jointly-operated mine did not produce bauxite in 2013 and 2014. We purchase bauxite from a number of suppliers and do not depend on any supplier for our bauxite requirements. In 2014, bauxite secured from other suppliers accounted for approximately 44.6% of our total bauxite supply, primarily because our demand for bauxite exceeded the production of our own mines.

40

The following table sets forth the volumes and percentages of bauxite supplied by our own mines, jointly-operated mines and other suppliers for the periods indicated:

Year Ended December 31,

	2012		20	2013		2014	
	Bauxite Supply	Percentage of Bauxite Supply	Bauxite Supply	Percentage of Bauxite Supply	Bauxite Supply	Percentage of Bauxite Supply	
		%		%		%	
		(in thousa	and tonnes,	except perce	entages)		
Own mines Jointly-operated	17,022.9	50.5	17,130.2	49.0	17,542.6	55.4	
mines	-	-	-	-	-	-	
Other suppliers	16,689.0	49.5	17,861.1	51.0	14,105.4	44.6	
Total	33,711.9	100.0	34,991.3	100.0	31,648.0	100.0	

Own Mines.

As of December 31, 2014, we owned and operated 19 mines in China that had approximately 273.1 million tonnes of aggregate bauxite reserves and we continue to explore new bauxite reserves to replenish our reserves. We also own and operate a bauxite mine in Laos through Lao Service Mining, in which we held 60% of the equity interest. We also hold the requisite mining permit or exploration permit for seven bauxite mines in West Kalimantan, Indonesia through our 96.28% owned subsidiary, PT Nusapati Prima. Our bauxite deposits in Indonesia are lateritic gibbsite and were formed by weathering and leaching of aluminum-rich silicate rock in tropical climates. We use low temperature Bayer process to refine alumina from our bauxite deposits in Indonesia, which results in relatively low energy consumption and high dissolution rate.

For the three years ended December 31, 2012, 2013 and 2014, we extracted approximately 17.3 million tonnes, 20.0 million tonnes and 17.3 million tonnes, respectively, of bauxite from our own mines. In order to retain the title to our mines, or obtain the title to new mines in China, we are required to comply with mining qualifications approved by the relevant PRC authorities and pay an annual fee equivalent to RMB1,000 per km² for our mines.

Our reported bauxite reserves for our own mines in China do not exceed the quantities that we estimate could be extracted economically if future prices were at similar levels to average historical prices for traded metals for the years ended December 31, 2012, 2013 and 2014, or the three year historical contracted prices for bulk commodities. However, we do not use the three year historical bauxite or aluminum price to determine bauxite reserves, nor did we utilize any currency conversion factors or pricing related mechanisms. Instead, the primary criteria are the specifications required by our aluminum refineries, as well as certain modifying factors that are dependent on reserve quality.

The following table sets forth information for our own mines as of December 31, 2014:

Mine	Location	Nature of ownership <sup>(1)</sup>	Mining method	Permit Renewal <sup>(1)</sup>	Present Condition/ Current State of Exploration	Bauxite Production (in thousand tonnes)
Pinggu	ioGuan o y	c i100% owned	10nen nit	October 2030	)Fully developed	6,131
mine	Zhuang	and	Topen pit	-	and	0,131
mme	_	us operated by	Į.	April 2036		
Guizho	•	u100% owned	dOpen	Septembe	rFully developed	651
mine(2)	Province,	and	pit/underground		and	
	China	operated by		Decembe	r operational	
		Chalco		2038	_	

Z u n y iG u i z h o u100% ownedOpen	August 2017 - Two stopes are 367
mine Province, and pit/undergroun	May 2021 currently
China operated by	under
Chalco	development
X i a o y iS h a n x i100% ownedOpen pit	August 2015 - Fully developed 3,329
mine Province, and	Septemberand
China operated by	2031 operational
Chalco	
ShanxiSh an x i100% ownedOpen	April 2015 - Five stopes are 1,967
O t h e rProvince, and pit/undergroun	May 2018 currently
Mines China operated by	under
Chalco	development
MianchiH e n a n100% ownedOpen	F e b r u a r yFour stopes are 358
mine Province, and pit/undergroun	2015 (3)- currently
China and the different	
China operated by	O c t o b e runder

Luoyang mine	H e n a Province, China	n100% owned and operated by Chalco	Open pit/underground			668
Xiaoguan mine	H e n a Province, China	n100% owned and operated by Chalco	Open pit/underground	•	Fully developed and operational	334
Gongyi mine	H e n a Province, China	n100% owned and operated by Chalco	Open pit/underground	•	1	484
Dengfeng mine	H e n a Province, China	n100% owned and operated by Chalco	Open pit/underground		-Two stopes are currently under development	75
Xinmi mine	H e n a Province, China	n100% owned and operated by Chalco	Open pit/underground	•	Three stopes are currently under infrastructure development	0
Sanmenxia mine	H e n a Province, China	n100% owned and operated by Chalco	Underground	April 2015 January 2026	-Fully developed and	32
Xuchang mine		n100% owned and operated by Chalco		February 2015 <sup>(3)</sup> -	Fully developed and operational	273

Jiaozuo mine	H e n a Province, China	n100% owned and operated by Chalco	Open pit/underground	September 2016 - October 2024	Fully developed and operational	184
Pingdingshan min	eH e n a Province, China	n100% owned and operated by Chalco	Open pit/underground	October 2014 <sup>(3)</sup> - September 202	Fully developed	540
Yangquan mine	S h a n x Province, China	i100% owned and operated by Chalco	Open pit	June 2015 - September 2031	Fully developed	94
Nanchuan mine	Chongqing Municipalit China	100% owned and y, operated by Chalco	Underground	November 2016 - December 2026	Fully developed	304
Huaxing mine		i100% owned and operated by Chalco	Underground	August 2018 - September 2018	Fully developed	1,301
P ALUSENTOSA	TW e s Kalimantan, Indonesia	tO w n e d a n	dOpen pit	December 2027	Suspended production	-
PT KALMINSENT OSA	W e s Γ Kalimantan, Indonesia	tO w n e d a n		November 2013 <sup>(4)</sup>	Under exploration	-
PT KALMIN	W e s Kalimantan, Indonesia	tO w n e d a n		December 2027	Suspended production	150
PT VISITAMA	W e s Kalimantan, Indonesia	tO w n e d a n operated by PT NusapatiPrima, a 96.28% subsidiary of Chalco		December 2015	U n d e r exploration	-
PT KALMIN LESTARI	W e s Kalimantan, Indonesia		dOpen pit	November 2013 <sup>(4)</sup>	Under exploration	-
			Open pit	July 2015		-

PT ADITAMA LESTARI	W e s Kalimantan, Indonesia	tO w n e d a n d operated by PT NusapatiPrima, a 96.28% subsidiary of Chalco		U n d e r exploration
PT KALMINADI MAKMUR	W e s Kalimantan, Indonesia	tO w n e d a n dOpen operated by PT NusapatiPrima, a 96.28% subsidiary of	pit July 2015	Under - exploration
Laos bauxite mine	Attape Province and Sekons Province Laos	•	pit August 2015	Under - exploration

42

- (1) All conditions to retain our properties or leases have been fulfilled as of December 31, 2014. Each mine may be covered by one or more mining permits or exploration permits and the range of permit renewal dates is set forth above.
- (2) Including Guizhou No. 1 mine and Guizhou No. 2 mine.
- (3) We are in the process of renewing these permits.
- (4) We are in the process of obtaining mining permits for these two mining areas.

We are required to obtain mining rights permits to conduct mining activities. Under PRC laws and regulations, a mine owner must prepare and submit exploration reports for a mine to the local government to obtain a mining rights permit for a mine. If an applicant for the mining rights permit is not the owner of a mine, the applicant must first enter into a lease agreement with the mine owner before submitting an application.

The mining rights permit is subject to renewal on a regular basis. Furthermore, we are required to obtain land use rights on the land in order to operate these mines. We lease the land use rights relating to our own mines in China from Chinalco pursuant to a land use rights lease agreement that became effective upon our formation. Chinalco's land use rights relating to over 90% of our mining properties in China are for 50-year terms beginning on July 1, 2001. The remaining land use rights relating to the mines we own and operate in China are for shorter terms, some as short as one year. All of our land use rights lease agreements end on the expiry date of the mining rights or the end of the working life of the mine, whichever is earlier. Both the land use rights and land use rights lease agreements are renewable.

For our own mines in Indonesia and Laos, neither proven nor probable reserves have been established as of the date of this annual report. The following table sets forth certain estimated details of the reserves for our own mines in China as of December 31, 2014:

Reserves (1)(2)

(million Mine tonnes)		$Al_2O_3$	SiO <sub>2</sub>	Ratio of Average A/S <sup>(3)</sup>
Pingguo mine	69.05	54.13	4.84	11.18
Guizhou No. 1 mine	1.1	65.74	10.48	6.27
Guizhou No. 2 mine	23.67	63.12	9.57	6.59
Zunyi mine	8.52	57.23	9.81	5.83
Xiaoyi mine	21.67	61.21	14.65	4.18
Shanxi Other Mines	22.7	64.04	11.48	5.58
Huaxing mine	7.74	63.39	9.95	6.37
Mianchi mine	3.14	63.34	12.12	5.23
Luoyang mine	4.29	61.39	9.74	6.3
Xiaoguan mine	27.25	63.56	15.11	4.21
Gongyi mine	2.92	64.06	13.92	4.6
Dengfeng mine	0.55	60.82	8.67	7.02
Xinmi mine	2.29	67.98	10.39	6.54
Sanmenxia mine	38.67	63.63	11.75	5.41
Xuchang mine	0.43	63.97	14.33	4.47
Jiaozuo mine	1.74	59.56	14.52	4.1
Pingdingshan mine	2.14	62.02	11.77	5.27
Yangquan mine	4.28	60	12.63	4.75
Nanchuan mine	30.97	60.65	13.95	4.35
Total (average) reserves	273.12	60.37	10.51	5.75

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By reserve type				
Proven reserve	130.2	60.7	10.45	5.81
Probable reserve	142.92	60.08	10.55	5.69
Total (average) reserves	273.12	60.37	10.51	5.75

- (1) Our reserves take into consideration mining dilution and loss factors, which generally vary from 5% to 10% and are based on the planned mining method and selected drill data for each site.
- (2) Our metallurgical recovery factors are calculated in accordance with the relevant PRC mining standards and vary from mine to mine.
- (3) Refers to the ratio of average grade of  $Al_2O_3$  to the average grade of  $SiO_2$  of the reserves.

43

We have been in compliance with the National Mining Safety Law and related rules and regulations in China. We closely supervise and routinely inspect mining conditions with continual implementation of safety measures and procedures at our own bauxite mines and safety training for our mining personnel. In 2014, we extracted approximately 17.3 million tonnes of bauxite from our own mines and did not experience any mining accidents that involved serious work injuries or death.

#### Jointly-operated Mines.

To optimize our resources and reduce costs, we manage our jointly-operated mines by contracting with local companies for their mining services to operate mines owned by us. Generally, we are able to control the mining operations of our jointly-operated mines, including determination of production schedules as well as the amounts and grades of bauxite produced. In the years ended December 31, 2012, 2013 and 2014, our jointly-operated mines did not produce any bauxite.

As of December 31, 2014, we had one jointly-operated mine in China, namely, Xiataohua mine, which is accessible by motor vehicles via public roads. and is powered by diesel fuel. The following table sets forth information on Xiataohua mine as of December 31, 2014:

Mine Province Name of Mining Permit Present Current Status

Joint Method Renewal Condition/Current

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		Operator					S t a t e o f Exploration	
-						_		
Xiataohua mine	Shanxi	n/a <sup>(1)</sup>	O p pit <sup>(1)</sup>	e n	J v 201	e	Exploration is finished	The previous mining rights holder is in the process of transferring the mining rights to us and we will become the sole owner of the mine and are conducting research on the development plan of the mine. We are searching for operators for future development.

The following table sets forth the specific details of Xiataohua mine as of December 31, 2014:

	Total Reserves (1)(2)(%	Average (	Grade	Ratio of Average A/S <sup>(3)</sup>
Mine	(million tonnes)	$Al_2O_3$	SiO <sub>2</sub>	
Xiataohua mine	4.9	58.97	13.91	4.24
By reserve type Proven reserve Probable reserve	4.9	58.97	13.91	4.24
Total (average) reserves	4.9	58.97	13.91	4.24

<sup>(1)</sup> We have decided to cooperate with other parties to undertake the mining operations in this mine. However, as of December 31, 2014, we had not confirmed any party as our partner.

- (1) Our reserves take into consideration mining dilution and loss factors, which generally vary from 5% to 10% and are based on the planning mining method and selected drill data for each site.
- (2) Our metallurgical recovery factors are calculated in accordance with the relevant PRC mining standards and vary from mine to mine.
- (3) Refers to the ratio of average grade of  $Al_2O_3$  to the average grade of  $S_iO_2$  of the reserves.

44

## Other Suppliers.

In addition to our own mines and our jointly-operated mines, we also source bauxite from other suppliers. A majority of other suppliers are small independent mines. Small independent mines are not affiliated with us and generally have annual bauxite production capacities not exceeding 200,000 tonnes. These mines have been an important source of bauxite for our operations. We purchase bauxite directly from small independent mines or through local distributors that procure bauxite from these mines. In addition, we also secure a portion of bauxite overseas. Bauxite secured from other suppliers accounted for 44.6% of our total bauxite supply in 2014.

#### Bauxite Procurement.

The corporate management department at our headquarters is responsible for the oversight and coordination of our supply of bauxite. To determine how our bauxite requirement will be allocated among our principal sources each year, we first estimate our total bauxite needs for the year. Based on market conditions, production costs and other factors, we determine the amount of bauxite that we wish to source from our own mines, and allocate the remaining requirements among the jointly-operated mines and other suppliers. Our management or operational control of our own mines and jointly-operated mines generally allows us to adjust procurement from these sources during the course of the year to accommodate changes in our plans or market conditions.

#### Alumina-to-Silica Ratio.

The production method for alumina refining is determined by the mineral composition of the bauxite, in particular, its alumina-to-silica ratio. Most of the bauxite reserves in China are diasporic with low alumina-to-silica

ratios. Based on our current technology, an efficient application of the Bayer process requires bauxite with an alumina-to-silica ratio of 10:1 or higher, while the sintering process can refine bauxite with an alumina-to-silica ratio as low as 4:1. In 2014, the average alumina-to-silica ratio of the proven and probable reserves of our mines ranges from approximately 4.1:1 to 11.18:1.

#### Prices.

There is neither governmental regulation on bauxite prices nor an official trading market for bauxite in China. We negotiate bauxite prices with our suppliers based on ore quality, mining costs, market conditions, transportation costs and various governmental taxes or levies, including a resource tax imposed by local governments. As we procure bauxite from three different sources, our total bauxite cost is influenced by the following factors:

- \* the cost of our mining operations;
- \* the terms of our operational arrangements with respect to our jointly-operated mines; and
- \* the market conditions relating to purchases from small independent mines.

The average purchase price of bauxite per tonne from our joint operations and other suppliers in 2012, 2013 and 2014 was approximately RMB309.0, RMB393.3 and RMB412, respectively. The average cost of bauxite per tonne from our own minesin 2012, 2013 and 2014 was approximately RMB207.0, RMB231.0 and RMB246.9, respectively. Our jointly-operated mine did not supply bauxite in 2012, 2013 and 2014.

We purchase a substantial amount of bauxite to satisfy our alumina production needs. Additionally, to fully utilize the bauxite from our mines, we refine all bauxite that meets the minimum technical requirements for our production of alumina. We also purchase higher grade ore from other suppliers and blend the ore of various grades to meet the technical requirements for our alumina production. This practice allows for flexibility and the inclusion of lower grade bauxite to optimize the use of bauxite deposits available to us. We do not use our historical average purchase prices for 2012, 2013 and 2014, or any other historical index to estimate our bauxite reserves.

45

mines for the periods indicated:

	Year E	Year Ended December 31,			
	2012	2013	2014		
		(RMB in thousands)			
Capital Expenditures Infrastructure construction Facility upgrade	335,440.0	766,917.1	1,116,770.3 372,256.8		
Total	335,440.0	766,917.1	1,489,027.1		

## Primary Aluminum

An average of approximately 1.9 tonnes of alumina and 13,695 kWh of electricity were required to produce one tonne of primary aluminum in 2014.

Alumina and electricity, the two principal components of costs in the smelting process, accounted for approximately 36.2% and 41.0%, respectively, of our unit primary aluminum production costs in 2014. Apart from alumina and electricity, we also require carbon anodes, carbon cathodes and sodium fluoride for our smelting operations.

Alumina is the main raw material in the production of primary aluminum. Our primary aluminum plants that do not have integrated alumina refining operations onsite obtain alumina internally from our alumina refineries located elsewhere or externally on the market.

# Supplemental Materials, Electricity and Fuel

The procurement department at our headquarters coordinates and manages our supply chain for all our major raw materials in conjunction with the procurement center at each production facility, which manages the logistics and inventory of raw materials locally. We are able to purchase diesel, the main fuel used by our mining and manufacturing equipment, from the public markets, and we source our water from local rivers, lakes or underground sources.

### Alumina

Electricity, coal, alkali (caustic soda or soda ash) and natural gas are the principal materials used in our alumina production. Electricity is one of the

principal cost components in our refining process. We generate electricity at a number of refineries and purchase our remaining electric power requirement from regional power grids at government-mandated rates. Most of our power supply agreements are one to three year renewable agreements. Power prices in China can vary, sometimes substantially, from one region to another, based on demand and power production costs in the region. Power costs for our various alumina refineries vary accordingly.

Large quantities of coal is used as a reducing agent and fuel to produce steam and gas in the alumina refining process. As of the date of this annual report, we held minority interests in a number of coal mining enterprises, including Shanxi Jiexiu, Qinghai Energy, Xuehugou Coal Industry Co., Ltd., Datong Coal Group Huasheng Wanjie Coal Co., Ltd., Dongdong Coal, Chalco Liupanshui, Huozhou Coal Group Xingshengyuan Coal Co., Ltd. and Guizhou Yuneng. We hold 70% of the equity interest in Gansu Huayang, which holds mining rights for coal deposits in the Luochuan mining area, Gansu Province. We have also acquired the mining rights for coal deposits in the Laodonghe area, Guizhou Province. In addition, we have acquired 70.82% of the equity interest in Ningxia Energy, which holds mining rights for coal deposits in Ningxia Autonomous Region.

46

All of the coal mining enterprises in which we directly or indirectly have minority equity interest are currently in the extraction or trial production stage, except:

- \* Chalco Liupanshui, a joint venture company in which we hold 49% of the equity interest;
- \* Huozhou Coal Group Xingshengyuan Coal Co., Ltd., a joint venture company in which Shanxi Huasheng holds 43.03% of the equity interest; and
- \* Guizhou Yuneng, a joint venture company in which we hold 25% of the equity interest.

Guizhou Yuneng is under development. The production of Huozhou Coal Group Xingshengyuan Coal Co., Ltd. and one of the mines owned by Chalco Liupanshui is currently suspended due to production technology renovation. See "- B. Property, Plants and Equipment" for details of coal mines that we operate. By investing in coal mining enterprises and acquiring mining rights for coal deposits, we plan to partially offset our future energy costs, and secure a portion of the coal we consume in our operations.

Alkali is used as a supplemental material in alumina refining. The sintering process and the Bayer-sintering combined process require soda ash while caustic soda is used in the Bayer process. Our alumina refineries usenatural gas and coal gas as fuel to refine alumina. There is no governmental regulation of the prices of coal, alkali or fuel. We purchase these raw materials from external suppliers under negotiated supply contracts, which we believe are competitively priced. We have not experienced difficulty in obtaining these materials in sufficient quantity and at acceptable prices.

## Primary Aluminum

Smelting primary aluminum requires a substantial and continuous supply of electricity. In 2014, we consumed 49.1 billion kWh of electricity for our primary aluminum production. The availability and price of electricity are key factors in our primary aluminum production. Electricity costs have fluctuated in recent years due to periodic shortages of electricity in China, cyclical demand and government policies to regulate key industries. See "Item 5. Operating and Financial Review and Prospects - A. Operating Results - Overview - Factors Affecting Our Results of Operations - Manufacturing Costs."

We generate electricity at four of our smelters and purchase our remaining electric power requirement from regional power grids or directly from power generation enterprises. As of December 31, 2014, one of our smelters have entered into direct purchase agreements with power generation enterprises. We purchase electricity from the regional power grids at prices set by the government for the rest of our smelters. Industrial users within each region are generally subject to a common electricity tariff schedule, but prices vary, sometimes substantially, across regions. We believe our power supply from regional grids is generally not reliant upon any particular generation facility supplying the grid. Electricity purchased from different power grids is subject to different tariff levels in 2014. The average electricity cost of our smelters was approximately RMB0.42/kWh in 2014, which decreased by 6.7% as compared to 2013, primarily due to the increased proportion of self-generated electricity and decreased price of coal.

Carbon anodes and cathodes are key raw materials in the smelting process. Each of our smelters is able to produce carbon products necessary for its operations other than carbon cathodes. Most of our carbon cathodes are supplied by Guizhou branch, which operates our one of our two carbon cathode production facilities and sells carbon cathodes to external smelters in China.

## Sales and Marketing

We coordinate substantially all of our sales and marketing activities of our self-produced alumina products and some of our sales and marketing activities of our self-produced primary aluminum products through Chalco Trading. Our subsidiaries and branches sell some of our self-produced primary aluminum products directly to external customers. Our alumina refineries sell our self-produced alumina chemical products directly to external customers or indirectly through Chalco Trading for subsequent external trading. For all of our self-produced products that are sold either through Chalco Trading for subsequent external sale or directly to external customers, our subsidiaries and branches play an important role in providing after-sales services and strengthening our presence in the marketplace. Since late 2009, we also have been engaged substantially in the trading of non-ferrous metal products including alumina, primary aluminum, copper, zinc and lead as well as coal products that we source from third-party suppliers through Chalco Trading.

#### Alumina

We sell our self-produced alumina to customers primarily through Chalco Trading, giving priority to customers with whom we have long-standing relationships and who have established a strong credit history, after reserving sufficient alumina for our forecasted primary aluminum production. In 2014, we supplied approximately 5.6 million tonnes of alumina produced at our refineries to our own smelters, which represented approximately 46% of our total alumina production, and sold the remainder to our customers. In addition, we also procure and sell outsourced alumina under long-term agreements or on the spot market through Chalco Trading. We sold approximately 2.2 million tonnes of outsourced alumina in 2014.

The sales prices of alumina that our alumina refineries sell internally to Chalco Trading are determined based on both a percentage of the weighted average of the three-month primary aluminum futures prices on the SHFE in the preceding calendar month and the average spot price of alumina in the domestic market in the preceding calendar month. Chalco Trading coordinates the external sales of our alumina products. Chalco Trading sells our self-produced alumina and alumina sourced from third-party suppliers to smelters throughout China. All of our major customers in the past three years have been domestic smelters. In the case of alumina sourced from third-party suppliers, we may procure alumina under long-term supply agreements or on the spot market. Our long-term supply agreement for the procurement of alumina normally sets forth the quantity of alumina to be procured by us in each month with the price for each monthly delivery to be determined through negotiations in the month before delivery. We are normally required to pay the full price of the outsourced alumina before each delivery.

We sell most of our self-produced alumina and a portion of the outsourced alumina under long-term sales agreements with terms ranging from one

year to three years. Our long-term sales agreement for alumina normally sets forth the quantity of alumina to be sold by us in each year or month with the price for each monthly delivery to be determined at both a percentage of the weighted average of the three-month primary aluminum futures prices on the SHFE in the calendar month before delivery and the average spot price of alumina in the domestic market in the preceding calendar month. Our customer is normally required to pay for its procurement before each delivery. As a result, the spot price of alumina and fluctuations of primary aluminum prices on the SHFE affect alumina prices under our long-term sales agreements.

Chalco Trading sells the rest of our self-produced and outsourced alumina products on the spot market. We set the price for the external sales of alumina products by reference to alumina prices at reference markets and taking into account the following factors:

- \* international and domestic supply-demand situation;
- \* CIF Chinese ports prices foralumina imports into China;
- \* international and domestic transportation costs;
- \* our short-term and mid-term projections for alumina; and
- \* relevant import expenses;

48

We sell the rest of the outsourced alumina on the spot market at prices determined through negotiations with our customers, taking into consideration factors including our procurement prices and the prevailing market conditions.

## Primary Aluminum

Our primary aluminum manufacturing subsidiaries and branches sell a portion of our primary aluminum output directly to external customers. Our primary aluminum manufacturing subsidiaries and branches also sell a portion of our primary aluminum output internally to Chalco Trading at prices based on the futures prices of primary aluminum on SHFE. Chalco Trading then coordinates the external sales of primary aluminum. Historically, we consumed the remaining primary aluminum output at our own aluminum fabrication plants. After we disposed of our aluminum fabrication business, we sold the remaining primary aluminum output to Chinalco, which now owns our previous aluminum fabrication business. Our subsidiaries and branches including Chalco Trading sell our self-produced primary aluminum products to external customers through

the following three channels:

- \* Contract sales. Most of our primary aluminum sales are made pursuant to contracts entered into directly with our long-standing customers. Terms of the sales contracts for primary aluminum are typically one year. We price our primary aluminum products based on the SHFE futures prices and spot market prices.
- \* Sales on the SHFE. As part of our effort to manage market risk, we sell a portion of our primary aluminum products on the SHFE through futures contracts with terms ranging from one month to twelve months to hedge against declines in primary aluminum prices.
- \* Sales on the spot market. We also sell our primary aluminum products on the spot market at the reference prices we set and adjust as necessary.

In addition, we also procure and sell outsourced primary aluminum on the spot market or through short-term futures and options transactions. We sold approximately 3.0 million tonnes of outsourced primary aluminum in 2014.

To improve the efficiency of our distribution, we divide our China market into several regions as follows:

- \* southern China (including Guangdong and Fujian Provinces);
- \* eastern China (including Jiangsu and Zhejiang Provinces and Shanghai Municipality);
- \* southwestern China (including Sichuan Province and Chongqing Municipality);
- \* the Beijing-Tianjin-Tanggu area; and
- \* northeastern China (including Liaoning and Heilongjiang Provinces).

We sell substantially all of our self-produced and outsourced primary aluminum to domestic customers. We expect China to remain our key market for primary aluminum for the foreseeable future. Although we have conducted export sales in the past, all of our external sales of primary aluminum in 2014 were domestic sales. Customers of our primary aluminum products principally consist of aluminum fabricators and distributors that resell our primary aluminum products to aluminum fabricators or other purchasers.

We establish pricing guidelines for Chalco Trading to conduct external domestic sales of our self-produced primary aluminum products, taking into account three main factors: the primary aluminum spot prices and futures price on the SHFE; our production costs and expected profit margins; and supply and demand. We determine our sales prices of the

outsourced primary aluminum through negotiations with our customers, taking into consideration factors including our procurement prices and the prevailing market conditions. As part of our efforts to coordinate and centralize sales, we also set minimum prices for primary aluminum products that are sold directly to nearby external consumers by our subsidiaries and branches with respect to each region in China where our primary aluminum is sold. These minimum prices are determined by reference to the SHFE spot price for primary aluminum. The smelter filling an order from an external customeris generally responsible for negotiating the pricing and delivery terms and must comply with the minimum pricing guidelines unless it obtains prior approval from our headquarters. In general, we satisfy each purchase order with products from our nearest smelter to minimize transportation costs.

49

#### Alumina Chemical Products and Gallium

Alumina chemical products and gallium are derived from our alumina production. We adjust our production of these products based on market demand. Our alumina refineries sell our alumina chemical products directly to external customers or indirectly to external customers through Chalco Trading for subsequent external trading.

We sell most of our alumina chemical products and gallium in China. Prices for our alumina chemical products and gallium are determined through negotiations with our customers, taking into consideration the market conditions. Our total sales of gallium in 2012, 2013 and 2014 amounted to approximately RMB56.8 million, RMB149.8 million and RMB140.9 million, respectively.

#### Coal

Ningxia Energy sells a portion of its self-produced coal directly to external customers through short-term contracts at prices determined through negotiations with our customers, taking into consideration factors including our procurement prices and the prevailing market conditions. Ningxia Energy consumes the rest of its self-produced coal at its own electric power plant.

In addition, we also procure and sell outsourced coal under long-term agreements or on the spot market through Chalco Trading. We sold approximately 3.3 million tonnes of outsourced coal in 2014.

Trading of Outsourced Non-ferrous Metal Products and Other Materials

Since late 2009, we have been substantially engaged in the trading of alumina and primary aluminum sourced from third-party suppliers. Please see "- Alumina" and "- Primary Aluminum" for more details. We also sell other non-ferrous metal products such as copper, zinc and lead as well as coal products that we procure from our third-party suppliers to external customers on the spot market or under long-term sales agreements. Please see "- Coal." In 2014, we sold approximately 330,000 tonnes of outsourced copper, zinc and lead. In addition, we also sell outsourced raw and ancillary materials in bulk to customers such as steel manufacturers and copper processing companies on the spot market.

Chalco Trading has a team with trading expertise to conduct research on the markets of non-ferrous metal products and other materials. From time to time, we may enter into futures and options transactions to hedge against price fluctuations in the non-ferrous metal product market.

## Delivery

We rely on rail shipping and trucks for the delivery of products within China. Our alumina is transported by rail or trucks, and transportation costs are generally borne by our customers and excluded from our sales prices. For long-distance deliveries, we maintain spur lines connecting our plants to the national railway routes. The price of rail shipping on the PRC national railway system is fixed by the government.

Most of our primary aluminum products are transported by rail, and our coal products are transported both by trucks and by rail.

50

## **Principal Facilities**

Our principal facilities include 22 principal production plants and our Research Institute. Set forth below is a description of our principal production plants.

## Guangxi Branch

The Guangxi branch commenced operations in 1994 and is located in Guangxi Zhuang Autonomous Region in southwestern China, an area rich in bauxite reserves. The Guangxi branch obtains bauxite delivered via highway from the Pingguo mine, one of our wholly-owned mines, located less than 17 kilometers from the Guangxi branch.

The Pingguo mine contains large, easily exploitable bauxite reserves with high alumina-to-silica ratios. The Guangxi branch is our only principal refinery that exclusively uses the Bayer process. With technology and

production equipment imported from Europe, the Guangxi refinery features a high level of automation and energy efficiency. Since its inception, we have continually increased the designed production capacity at this branch by removing production bottlenecks and investing in capacity expansions. Guangxi branch had an annual alumina production capacity of approximately 2,210,000 tonnes as of December 31, 2014. In 2014, the Guangxi branch produced approximately 2,423,400 tonnes of alumina, along with approximately 159,900 tonnes of alumina chemical products. In 2014, we abandoned primary aluminum production facilities of our Guangxi branch.

#### Guizhou Branch

The Guizhou branch commenced its smelting operations in 1966 and was subsequently expanded to include alumina refining operations in 1978. We disposed of the assets of alumina production line of Guizhou branch to a subsidiary of Chinalcoin June 2013. Our Guizhou branch uses 160Ka and 230Ka pre-bake reduction pot-lines in its primary aluminum production. As a result of technological innovations and overhauls since its inception, our Guizhou smelter is among the most technologically advanced smelters in China. As of December 31, 2014, our Guizhou branch had an annual primary aluminum production capacity of approximately 403,700 tonnes. In 2014, our Guizhou branch produced approximately 233,600 tonnes of primary aluminum.

Our Guizhou branch also contains a modern carbon production facility, which produces carbon cathodes in addition to carbon anodes. Guizhou branch supplies carbon cathodes to seven of our primary aluminum smelters and our Research Institute. Its carbon cathodes are also sold to external customers throughout China.

#### Henan Branch

The Henan branch commenced its alumina refining operation in 1966 and primary aluminum smelting operation in 1967 in Henan Province, a province rich in bauxite reserves. Bauxite is delivered to our Henan branch via railway and highway from the following mines: Xiaoguan mine, Gongyi mine and Dengfeng mine located in Zhengzhou, Luoyang mine in Luoyang, Mianchi mine in Mianchi, Xuchang mine in Zhengzhou, Sanmenxia mine in Sanmenxia and Jiaozuo mine in Jiaozuo and our mines in Indonesia. Our Henan branch was the first refinery in China to develop the Bayer-sintering combined process. We also have an alumina production line that uses the ore-dressing Bayer process, which we developed to refine low alumina-to-silica ratio bauxite. Since its inception, the Henan branch's production facilities have undergone substantial technological upgrades, based on equipment imported from Germany and Denmark. The refinery has also benefited from its access to high alumina-to-silica ratio bauxite from our own mines and through purchases on the market. Henan branch had an annual alumina production capacity of approximately 2,410,000 tonnes as of December 31, 2014. In 2014, our Henan branch produced approximately 1,733,700 tonnes of alumina and 247,500 tonnes of alumina

chemical products. In January 2013, we ceased the operation of the obsolete primary aluminum production facilities of Henan branch.

51

## **Shandong Branch**

The Shandong branch commenced operations in 1954 and has the capacity to produce alumina, primary aluminum and aluminum fabrication products. Bauxite is delivered to our Shandong branch via railway and highway from the Yangquan mine in Yangquan, Shanxi Province. Its alumina refinery was China's first production facility for alumina. It produces its alumina through the sintering process and Bayer process. The Shandong branch purchases some bauxite from overseas and the rest from small third-party mines in Henan and Shanxi Provinces. Shandong branch had an annual alumina production capacity of approximately 1,770,000 tonnes as of December 31, 2014. It produced approximately 1,583,500 tonnes of alumina in 2014.

In addition, our Shandong branch produces substantial amounts of alumina chemical products and produced approximately 1,091,200 tonnes of alumina chemical products in 2014. It is the largest and most technologically advanced alumina chemical products production facility in China with the ability to produce the widest variety of alumina chemical products.

As of December 31, 2014, our Shandong branch's annual primary aluminum production capacity was approximately 55,000 tonnes and it did not produce any primary aluminum in 2014.

Our Shandong branch also produce aluminum fabrication products. As of December 31, 2014, our Shandong branch had an annual aluminum fabrication production capacity of 10,000 tonnes and it produced a small amount of aluminum fabrication products in 2014.

## Qinghai Branch

Located in Qinghai Province, our Qinghai branch is a stand-alone primary aluminum production facility. This branch commenced operations in 1987 and is one of the most technologically advanced primary aluminum smelters in China. It operates 160Ka and 200Ka automated pre-bake anode reduction pot-lines that were developed domestically. It benefits from relatively low electricity costs in Qinghai Province due to the hydroelectric power stations in the region. The Qinghai branch sources alumina from our Shanxi, Shandong, Henan and Zhongzhou branches, but incurs higher transportation costs for both raw materials and its primary aluminum

products than our other branches.

Our Qinghai branch had an annual primary aluminum production capacity of approximately 367,000 tonnes as of December 31, 2014. Our Qinghai branch produced approximately 393,300 tonnes of primary aluminum in 2014.

#### Shanxi Branch

Our Shanxi branch commenced operations in 1987 and is located in Shanxi Province, a province rich in bauxite deposits. Bauxite is transported to our Shanxi branch via railway and highway from the Xiaoyi mine in Shanxi Province. Our Shanxi branch is a stand-alone alumina plant. Shanxi branch had an annual alumina production capacity of approximately 2,747,000 tonnes as of December 31, 2014. Our Shanxi branch produced approximately 2,261,900 tonnes of alumina and 16,200 tonnes of alumina chemical products in 2014.

Our Shanxi branch's production facilities are primarily imported. Shanxi branch relies on bauxite from our own mines as well as external suppliers. It is in the proximity of large coal mines and substantial water resources.

52

## Zhongzhou Branch

Located in Henan Province, our Zhongzhou branch is a stand-alone alumina plant, located near abundant bauxite, coal and water supplies. It commenced operations in 1993 and is equipped with imported and self-developed technology and has undergone various improvements and upgrades, in particular to its sintering process and Bayer process. Our Zhongzhou branch obtains bauxite supplies from external suppliers in Henan Province and Shanxi Province and overseas.

We abandoned alumina production capacity of 30,000 tonnes in the Zhongzhou branch in 2014. Our Zhongzhou branch had an annual alumina production capacity of approximately 2,950,000 tonnes as of December 31, 2014. Our Zhongzhou branch produced approximately 2,133,800 tonnes of alumina and approximately 277,800 tonnes of alumina chemical products in 2014.

#### Zunyi Alumina

Zunyi Alumina is located in Zunyi, Guizhou Province. In April 2006, we entered into a joint venture agreement with Guizhou Wujiang Hydroelectric Co., Ltd, to establish a joint venture company, Zunyi

Alumina. We held 73.28% of the equity interests in Zunyi Alumina as of December 31, 2014. Zunyi Alumina completed the construction of alumina production facilities and commenced operations in 2010. After the completion of its expansion project in 2012, Zunyi Alumina's annual alumina production capacity reached approximately 1,000,000 tonnes as of December 31, 2014. Zunyi Alumina produced approximately 1,001,900 tonnes of alumina and 1,300 tonnes of alumina chemical products in 2014.

## Shanxi Huaxing

Located at Xing Xian, Lvliang City of Shanxi Province, Shanxi Huaxing is a stand-alone alumina plant which commenced trial production in October 2013. Shanxi Huaxing obtains bauxite supplies from our own mines delivered primarily via highway and is located near abundant coal and water supplies.

Shanxi Huaxing had an annual alumina production capacity of approximately 800,000 tonnes as of December 31, 2014. Shanxi Huaxing produced approximately 669,800 tonnes of alumina in 2014.

## **Chongqing Branch**

Our Chongqing branch is located in Chongqing. Chongqing branch completed the construction of alumina production facilities in 2010 and its annual alumina production capacity was approximately 800,000 tonnes as of December 31, 2014. Chongqing branch produced approximately 216,000 tonnes of alumina and 5,600 tonnes of alumina chemical products in 2014. Our Chongqing Branch suspended production in July 2014 due to the relatively significant decrease in the price of alumina as compared with that during the construction period, large negative variation of mineral resources and the high costs of natural gas and other energy.

#### Lanzhou Branch

Located in Lanzhou city in Gansu Province, our Lanzhou branch is a stand-alone primary aluminum plant. It was part of Lanzhou Aluminum before July 2007 and was acquired by us through share exchange in April 2007. In July 2007, Lanzhou Aluminum was divided into two wholly-owned entities: Lanzhou branch and Northwest Aluminum. Our Lanzhou branch owns a primary aluminum smelting plant with a designed annual primary aluminum production capacity of approximately 388,000 tonnes as of December 31, 2014. It produced approximately 397,500 tonnes of primary aluminum in 2014.

#### Shanxi Huaze

Shanxi Huaze is situated in Shanxi Province. In March 2003, we established the joint venture company, Shanxi Huaze, with Zhangze Electric Power to commence the construction of a primary aluminum production facility. Shanxi Huaze's designed annual production capacity of primary aluminum was approximately 350,000 tonnes as of December 31, 2014 and it produced approximately 354,300 tonnes of primary aluminum in 2014. We currently hold 60% of the equity interest of Shanxi Huaze.

# Shanxi Huasheng

Shanxi Huasheng is situated in Shanxi Province. In December 2005, we entered into a joint venture agreement with Shanxi Guan Lv Company Limited to establish a joint venture company, Shanxi Huasheng. Shanxi Huasheng commenced operations in March 2006 and had a designed annual production capacity of primary aluminum of approximately 220,000 tonnes as of December 31, 2014. In 2014, Shanxi Huasheng produced approximately 221,300 tonnes of primary aluminum. We currently hold 51% of the equity interest in Shanxi Huasheng.

## Zunyi Aluminum

Zunyi Aluminum is situated in Guizhou Province. We currently hold 62.1% of the equity interest in Zunyi Aluminum. Zunyi Aluminum's annual primary aluminum production capacity was approximately 235,000 tonnes as of December 31, 2014and it produced approximately 60,200 tonnes of primary aluminum in 2014.

#### Fushun Aluminum

Fushun Aluminum is situated in Liaoning Province, and is a stand-alone primary aluminum plant. In March 2006, we entered into a share transfer agreement with Liaoning Fushun Aluminum Plant to acquire 100% of the equity interests in Fushun Aluminum for a consideration of RMB500 million. Fushun Aluminum's primary business is the production of primary aluminum and carbon products. Fushun Aluminum had an annual primary aluminum production capacity of approximately 330,000 tonnes as of December 31, 2014. Fushun Aluminum produced approximately 265,000 tonnes of primary aluminum in 2014.

## Shandong Huayu

Shandong Huayu is situated in Shandong Province and is a stand-alone primary aluminum plant. We currently hold 55% of the equity interest in Shandong Huayu. Shandong Huayu had an annual primary aluminum production capacity of approximately 200,000 tonnes as of December 31, 2014. Shandong Huayu also has supporting facilities and coal-fired generators. In 2014, Shandong Huayu produced approximately 218,100 tonnes of primary aluminum.

#### Gansu Hualu

Gansu Hualu is situated in Gansu Province, and is a stand-alone primary aluminum plant. In August 2006, we entered into a share transfer agreement with Baiyin Nonferrous Metal (Group) Co., Ltd. ("Baiyin Nonferrous") and Baiyin Ibis Aluminum Co., Ltd. ("Baiyin Ibis"). Baiyin Nonferrous contributed 127,000 tonnes of primary aluminum smelting and supporting facilities owned by Baiyin Ibis as capital contribution and holds a 49% equity interest in Gansu Hualu, a subsidiary of Baiyin Ibis, and we hold 51% of the equity interest in Gansu Hualu. Gansu Hualu had an annual primary aluminum production capacity of approximately 230,000 tonnes as of December 31, 2014 and it produced approximately 184,200 tonnes of primary aluminum in 2014.

#### Baotou Aluminum

Baotou Aluminum is located in Inner Mongolia Autonomous Region, and is a stand-alone primary aluminum plant. On December 28, 2007, through A Shares issuance and exchange for Baotou Aluminum shares, we acquired 100% of the equity interest of Baotou Aluminum. Baotou Aluminum had a designed annual primary aluminum production capacity of approximately 538,000 tonnes as of December 31, 2014. In 2014, it produced approximately 465,500 tonnes of primary aluminum.

54

## Liancheng branch

Liancheng branch is located in Gansu Province. In late May, 2008, we acquired 100% of the equity interest of Liancheng Longxing Aluminum Company Limited from Chinalco on the China Beijing Equity Exchange and subsequently turned it into our Liancheng branch which specializes in producing primary aluminum. Liancheng branch had an annual primary aluminum production capacity of approximately 523,000 tonnes as of December 31, 2014. It produced approximately 512,000 tonnes of primary aluminum in 2014.

# Longmen Aluminum

Located in Shanxi Province, Longmen Aluminum was established in 1991. We hold 55% of its equity interests. It specializes in producing primary aluminum. In March 2012, we ceased the operation of our obsolete primary aluminum production facilities of Longmen Aluminum.

#### Chalco Nanhai

Established in June 2007 and located in Foshan, Chalco Nanhai specializes in aluminum fabrication. Chalco Nanhai commenced its commercial operation in 2011 and had an annual aluminum fabrication production capacity of approximately 110,000 tonnes as of December 31, 2014. It suspended production and did not produce any aluminum fabrication products in 2014.

## Ningxia Energy

We acquired 70.82% of the equity interest in Ningxia Energy in January 2013. Please see "- A. History and Development of the Company - Significant Acquisitions and Joint Ventures." Ningxia Energy was established in June 2003. It is an integrated power generation company with total installed capacity of 2831.5 MW, operating coal mines located in Ningxia Autonomous Region. Its principal business includes conventional coal-fire power generation and renewable energy generation. In 2014, Ningxia Energy produced approximately 7.4 million tonnes of coal and approximately 10.6 billion kWh of electricity.

#### Research Institute

Established in August 1965 and located in Zhengzhou, Henan Province, the Research Institute specializes in the research and development of technology for smelting aluminum. It is the only research institute in China dedicated to light metals research and has played a key role in bringing about technological innovations in China's aluminum industry. The Research Institute is central to our research and development efforts. The Research Institute operates test facilities, which produce alumina chemical products and primary aluminum. The Research Institute was approved by the Ministry of Science and Technology of the PRC in 2003 to establish the National Research Center of Aluminum Refinery Technologies and Engineering. In 2014, our Research Institute abandoned its primary aluminum production facilities. As of December 31, 2014, our Research Institute has a limited alumina chemical products production capacity, which it uses in connection with its research and development efforts.

55

Competition

Competition from Domestic Competitors

Alumina

As the largest producer of alumina in China, although we face competition from other large domestic refineries, we have several advantages over such competitors, including:

- \* we have access to a substantial and stable supply of bauxite;
- \* we are experienced in alumina production and our production technologies are specifically adapted to the particular chemical composition of bauxite found in China;
- \* we have strong capacity in technology research and hold certain proprietary technologies and patents; and
- \* our substantial workforce that has extensive experience in production and management.

In order to improve the efficiency and competitiveness of the Chinese alumina industry as well as to protect the environment, MIIT published "Standard Conditions for Aluminum Industry" (the "Standard Conditions") in July 2013, pursuant to which any new alumina project must be approved by the relevant department of the State Council of China and meet the requirements for annual production capacity and raw materials supply. The Standard Conditions have established a high entry barrier for new alumina producers in China.

## Primary Aluminum

We derived all of our primary aluminum revenues from domestic sales in 2014. Our competitors include other domestic and international primary aluminum producers that conduct sales in China. In 2014, our primary aluminum production represented approximately 12.02% of total domestic production in China.

We are the largest integrated alumina and primary aluminum producer in China. Currently, 10 primary aluminum producers in China (including Chalco) have annual production capacities of one million tonnes or more, which represent approximately 64.3% of the total primary aluminum production capacity in China. 17 primary aluminum producers in China (including Chalco) have annual production capacity of 500,000 tonnes or more, which represent approximately 77.5% of the total primary aluminum production capacity in China. The PRC government encourages consolidation in the Chinese primary aluminum industry to create larger, more efficient producers that are better positioned to implement measures to reduce emissions. Moreover, according to the Standard Conditions, new aluminum projects for expanding production capacity must be approved by the relevant department of the State Council of China and must have stable supply of alumina. As of the date of the annual report, the relevant department of the State Council of China is not expected to approve any new aluminum projects except those environmental protection upgrade projects and expired equipment exchange projects planned by the PRC government.

Although we face competition from other large domestic smelters, we have several advantages over such competitors, including:

- \* Scale of production. With 12 primary aluminum smelters, we can achieve significant economies of scale. In addition, our scale of production enables us to achieve high production volumes to fill large customer orders and maintain a large customer base. Through our national distribution network, we are able to make timely deliveries to customers from our local warehouses.
- \* Technology. We believe we have more sophisticated and efficient technology than most of our domestic competitors. Our Liancheng and Lanzhou branches are among the most technologically advanced primary aluminum smelting facilities in China. In addition, our technological support and research and development capabilities are superior to other domestic smelters.
- \* Vertical integration. As the largest integrated alumina and primary aluminum producer in China, we are able to supply alumina internally to our primary aluminum plants. As a result, we save on transportation, warehousing and related costs. In addition, because we operate our own alumina refineries, we are able to assure a stable supply of alumina for our primary aluminum smelting operations.
- \* Quality. The quality of our primary aluminum has maintained high standards and continued improving, and has satisfied national and industrial standards and customers' need.

The primary aluminum produced by most of our smelters satisfies the quality standards of the LME.

56

#### Competition from International Competitors

The tariff rate for alumina and primary aluminum imports was eliminated on January 1, 2008 and August 1, 2007, respectively. In 2014, China imported approximately 5.3 million tonnes of alumina, representing approximately a 37.8% increase from 2013. China had net import of approximately 171,200 tonnes of primary aluminum in 2014, which represented a 33.0% decrease from 2013. We expect to continue to face competition from international suppliers of alumina and primary aluminum which are large international companies. Some competitors may also consider establishing joint venture companies with local producers in China to gain access to the resources in China and to lower transportation

costs. However, we expect to continue benefiting from certain PRC governmental policies that promote the growth of large domestic smelters.

## Research and Development

Our research and development efforts over the years have facilitated the expansion of our production capacity and reduced our unit costs. We have successfully commercialized our previous research and development results in various technologies. In 2014, we completed 58 technological projects, including 40 independent research and development projects, 13 special projects of key science and technology and five application projects of science and technology. In addition, we filed a total of 137 patent applications in 2014.

As of December 31, 2014, we owned 1,683 patents, which were primarily related to technologies and process, equipment and new products. Once registered, a patent in China for an invention is valid for 20 years and for a utility model or a design, 10 years from the date of the patent application. As of December 31, 2014, we owned 29 trademarks, each of which had a term of 10 years.

We do not regard any single patent, license, or trademark to be material to our sales and operations as a whole. We are neither involved in any material intellectual property disputes against us nor are we pursuing any legislation relating to intellectual property rights against any party.

#### **Environmental Protection**

Our operations are subject to a wide variety of PRC national and local environmental laws and regulations, including those governing waste discharge, generation, treatment and disposal of hazardous materials, land reclamation, air and water emissions and mining matters. For example, the PRC government has set discharge standards for emissions to air and water. To enforce these standards, national environmental protection authorities have imposed discharge fees that increase for each incremental amount of discharge up to the limit set by the regulation. The relevant PRC government agencies are authorized to order any operations that exceed discharge limits to take remediation measures, which are subject to the relevant agency's approval, or order the closure of any operations that fail to comply with applicable regulations.

The pollutants discharged from our alumina refining process include red mud, waste water and gas emissions and particulates. Our primary aluminum production process generates fluorides, pitch fume and particulates. It is illegal to release these pollutants untreated, or those after treatment but still not complying with discharge limits, the discharge of these pollutants must comply with national and local discharge limits.

Each of our alumina refineries, primary aluminum smelters and other production plants has its own waste treatment facilities onsite or has developed other methods to dispose of industrial waste in compliance with applicable environmental laws and regulations. We were granted ISO14001 accreditations issued by China Quality Certification Center and the International Certification Network in 2004. In 2014, we passed the review and the accreditations were renewed.

We have increased our energy-efficiency by implementing new production techniques and technologies, upgrading our production facilities, optimizing our production process and enhancing our logistics and operations management. Through these efficiency initiatives, we estimate that we conserved the energy equivalent of 800,000 tonnes of standard coal in 2014. We have incorporated clean technology and processes into our operations with a view to promoting the concept of "zero emission" plants. Since 2009, we have achieved our target of zero industrial waste water emission.

Our total expenditures for maintaining compliance with environmental laws and regulations were RMB1,073.7 million, RMB556.4 million and RMB520.2 million for the years ended December 31, 2012, 2013 and 2014, respectively. In 2014, we did not have any major environmental pollution incidents.

#### Insurance

We maintain insurance coverage for our fixed assets such as plant, machinery, equipment, office facilities and transportation vehicles against accidents or natural disasters such as typhoons, hurricanes, floods, landslides and lightning strikes. However, there are certain types of losses, such as losses from war, acts of terrorism and nuclear radiation, for which we cannot obtain insurance at a reasonable cost or at all.

We are covered under the work-related injury insurance required by the local government labor departments, and we have procured additional business accidental insurance for our employees. More extensive insurance is either unavailable in China or would impose a cost on our operations that would reduce our competitiveness.

Our insurance premiums were RMB58.8 million, RMB41.0 million and RMB33.4 million in 2012, 2013 and 2014, respectively.

#### Seasonality

Our business is not subject to seasonality.

#### Cyber Security

With respect to our internet policies on cyber-security and Internet safety, we have established an information safety management system and issued internal regulations on cyber-security, internal hardware and data safety systems to prevent loss of information due to cyber-security incidents, network outages or hardware incidents. We also plan to implement measures relating to the office environment information safety management and information system emergency management, information system access control, protection from any malicious software, management of information exchange tools and internal review and audit of information safety risks. During the year ended December 31, 2014, we did not experience any material cyber-security incidents or related losses.

58

# Regulatory Overview

Producers of alumina and primary aluminum are subject to national industrial policies and relevant laws and regulations in areas of environmental protection, import and export, land use, foreign investment regulation and taxation. We are also subject to regulations relating to activities such as mining.

We are principally subject to governmental supervision and regulation by three agencies of the PRC government:

- \* the NDRC, which sets and implements the major policies concerning China's economic and social development, approves investments exceeding certain amounts, coordinates and improves the reform of the economic system;
- \* the Ministry of Land and Resources of China, which has the authority to grant land use licenses and mining right permits; and
- \* the MIIT, which formulates industrial policies and investment guidelines for all industries including the aluminum industry.

The following is a brief summary of the principal laws, regulations, policies and administrative directives to which we are subject.

## Requirements for Capital Investments

Any capital markets financing activities by an enterprise or company incorporated in the PRC such as those to finance capital projects, are subject to approval by the CSRC and/or other relevant authorities in China, regardless of whether the funds are raised in China or on the international

capital markets. An issuer incorporated in the PRC must obtain prior approval from the CSRC for issuance of equity securities or equity-linked securities. Offering of corporate bonds in the PRC by a listed PRC-incorporated company is subject to approval from the CSRC, while offering of enterprise bonds in the PRC by other enterprises is subject to approval from the NDRC and/or other relevant authorities. Offering of bonds by a PRC-incorporated company outside the PRC is subject to approval from the NDRC, the People's Bank of China and/or the State Administration of Foreign Exchange (the "SAFE"). For all overseas financing activities by an enterprise or company incorporated in the PRC, the issuer must register with and obtain prior approval from the administrative authorities of foreign exchange. Foreign investment in the exploring and mining of alumina and primary aluminum is permitted by the PRC government.

## Standard Conditions for Aluminum Industry

Standard Conditions provides that bauxite mining, alumina and primary aluminum projects must comply with the state industry policies and overall plans on the development of aluminum industry, land use, urban planning and designation of functional zones. The aluminum smelting enterprises must be appropriately distributed according to conditions including availability of resources, energy and environment. The regulation indicates that with guidance and plans, aluminum smelting enterprises located in regions lacking competitive production elements should be gradually moved to more competitive region, and the amount of newly increased production capacity shall be strictly controlled to prevent excessive capacity caused by over-investing. The regulation further sets standards for production scale and major external conditions for newly established bauxite mining, alumina, electrolytic aluminum and recycled aluminum projects. The MIIT promulgated on April 4, 2014 and January 4, 2015, respectively, the first and the second lists of enterprises that meet the Standard Conditions for the aluminum industry. Most of our production branches and subsidiaries have met the Standard Conditions and are included on these lists.

59

# Pricing

The PRC government does not impose any limitations with respect to the pricing of alumina, primary aluminum and related products. Thus, alumina and primary aluminum producers are free to set prices for their products. All the raw materials, supplemental materials and other supplies that we purchase are based on market prices. Freight transportation on the national railway system is subject to government mandated pricing.

## **Electricity Supply and Price**

The State Electricity Regulatory Commission of China is responsible for the supervision and administration of the power industry in China. The NDRC and local governments regulate electricity pricing. Electricity suppliers may not change their electricity prices without governmental authorization.

The Electric Power Law of China and related rules and regulations govern construction, generation, supply and consumption of electric power. Currently, China's state-owned power companies, through their respective local subsidiaries, operate all the regional power grids in China from which we obtain most of our electricity requirements. In October 2007, Chinese government issued "Notice on Further Solutions of the Difference in Electricity Rates", according to which the preferential electricity prices originally enjoyed by Chinese primary aluminum enterprises have been gradually abolished. In May 2010, Chinese government issued "Notice of Eliminating Preferential Electricity Rate for High Energy Consuming Enterprises and Related Matters", which further eliminated the preferential electricity price arrangement enjoyed by Chinese primary aluminum enterprises. In December 2013, the NDRC and MIIT issued the "Circular on the Policies for Tiered Pricing of Electricity Used by Electrolytic Aluminum Enterprises" (the "Electricity Tiered Pricing Circular"), which became effective on January 1, 2014, to impose tiers of electricity prices on primary aluminum smelters. Specifically, if the alternating current consumed by any smelter is more than 13,700 kWh per tonne but no more than 13,800 kWh per tonne, such smelter must pay additional RMB0.02 per kWh for the electricity used. If the alternating current consumed by any smelter is more than 13,800 kWh per tonne, such smelter must pay additional RMB0.08 for per kWh for the electricity used.

Regulations Concerning Imports and Exports of Alumina and Primary Aluminum

Import taxes on alumina and primary aluminum have been eliminated. The export tariff on certain primary aluminum products has been 15% since August 1, 2007.

**Environmental Protection Laws and Regulations** 

The Ministry of Environmental Protection of China is responsible for supervision and administration of environmental protection in China. It formulates national environmental quality and discharge standards and monitors China's environmental system. Environmental protection bureaus at the county level or above are responsible for environmental protection within their respective jurisdictions.

Environmental regulations require each enterprise to file an environmental impact report with the relevant environmental bureau for approval before undertaking the construction of a new production facility or any major

expansion or renovation of an existing production facility. New facilities built pursuant to this approval are not permitted to operate until the relevant environmental bureau has performed an inspection and concluded that the facilities are in compliance with environmental standards.

The Environmental Protection Law requires any facility that produces pollutants or other hazards to incorporate environmental protection measures in its operations and establish an environmental protection responsibility system. Such system includes adoption of effective measures to control and properly dispose of waste gases, waste water, waste residue, dust or other waste materials. Any entity that discharges pollution must register with the relevant environmental protection authority.

Penalties for breaches of the Environmental Protection Law include warning, payment of damages and imposition of fines. Any entity undertaking a construction project that fails to install pollution prevention and control facilities in compliance with environmental standards for a construction project may be ordered to suspend production or operations or to cease operations and may be fined. Criminal liability may be imposed for a material violation of environmental laws and regulations that causes any significant loss of property or personal injuries or death.

60

## Mineral Resources Laws and Regulations

All mineral resources in China are owned by the state under the current Mineral Resources Law. Exploration, exploitation and mining operations must comply with the relevant provisions of the Mineral Resources Law and are under the supervision of the Ministry of Land and Resources. Exploration and exploitation of mineral resources are also subject to examination and approval by the Ministry of Land and Resources or relevant local authorities. Upon approval, the relevant administrative authorities, which are responsible for supervision and inspection of mining exploitation in their jurisdiction, will issue an exploration permit or mining permit. The holders of mining rights are required to file with the relevant administrative authorities annually.

The PRC government permits mine operators of collectively owned mines to exploit mineral resources in designated areas and individuals to mine scattered mineral resources. Such mine operators and individuals are subject to government regulation. Mining activities by individuals are restricted. Individuals are not permitted to exploit mineral reserves allocated for exploitation by a mining enterprise or company, or specified minerals prescribed by the state for protective mining. Indiscriminate mining that damages mineral resources is prohibited.

If mining activities result in damage to arable land, grassland or afforested area, the mining operator must take measures to return the land to an arable state within the prescribed time frame. Any entity or individual which fails to fulfill its remediation obligations may be fined and denied application for land use rights for new land by the relevant land and natural resources authorities.

It is unlawful for an entity or individual to conduct mining operations in areas designated for other legal mining operators. A mining operator whose exploitation causes harm to others in terms of production or in terms of living standards is liable for compensation and is required to take necessary remedial measures. When a mine is closed, a mine closure report and information concerning the mining facilities, hidden dangers, remediation and environmental protection must be submitted for examination and approval in accordance with the relevant PRC law and regulations.

The mineral products illegally extracted and the income derived from such activities may be confiscated and may result in fines, revocation of the mining permit and, in serious circumstances, criminal liability.

## **Energy Conservation Law**

The new Energy Conservation Law came into effect on April 1, 2008. It sets out the general principles for reducing energy waste and improving efficiency of energy consumption. It urges the adjustment of industry structure and replacement of high energy consumption projects with new energy or renewable energy resources. In March 2014, the MIIT issued a regulation, the "Opinion on Implementing Supervision of Industrial Energy Conservation", which lists the primary aluminum smelting as one of the high energy consumption operations that will be highly monitored. In December 2014, the MIIT issued the Guidance for National Industrial Efficiency, which sets forth industrial efficiency standards for producers of major products in industries that involve high energy consumption, which included electrolytic aluminium and aluminium oxide products.

#### Tax Laws and Regulation

In March 2007, the PRC government promulgated the Enterprise Income Tax Law which became effective from January 1, 2008. The Enterprise Income Tax Law imposes a single income tax rate of 25% on both domestic and foreign invested enterprises. Certain branches and subsidiaries of us were granted tax concessions including preferential tax rates of 15%. On December 6, 2007, PRC government promulgated the Enterprise Income Tax Law Implementation Rules which also became effective on January 1, 2008.

# C. ORGANIZATIONAL STRUCTURE

Below is a summary of our corporate structure and principal subsidiaries as of December 31, 2014:

Company	Percentage of ownership interest attribution to the Company	Principal activities
Baotou Aluminum Co., Limited	100%	Manufacture and distribution of primary aluminum, aluminum alloy and carbon products
Chalco Hong Kong Ltd.(1)	100%	Overseas investments, import and export activities
Chalco Zunyi Alumina Co., Ltd.	73.28%	Manufacture and distribution of alumina
China Aluminum International Trading Co., Ltd.	100%	Import and export activities
Chalco Mining Co., Ltd.	100%	Manufacture, acquisition and distribution of bauxite mines, limestone ore, aluminum magnesium ore and related nonferrous metal products
Fushun Aluminum Co., Ltd.	100%	Aluminum smelting, manufacture and distribution of nonferrous metals
Gansu Hualu Aluminum Co., Ltd.	51%	Manufacture and distribution of primary aluminum
Shandong Huayu Aluminum and Power Co., Ltd.	55%	Manufacture and distribution of primary aluminum
Shanxi Huasheng Aluminum Co., Ltd.	51%	Manufacture and distribution of primary aluminum, aluminium alloy and carbon-related products
Shanxi Huaze Aluminum and Power Co., Ltd.	60%	Manufacture and distribution of primary aluminum and anode

		carbon products and electricity generation and supply
Zunyi Aluminum Co., Ltd.	62.10%	Manufacture and distribution of primary aluminum
Shanxi Huaxing Alumina Co., Ltd. (2)	60%	Manufacture and distribution of alumina
Gansu Huayang Mining Development Company Limited	70%	Manufacture and distribution of coal and other mineral products
Chalco Energy Co., Ltd.	100%	Thermoelectric supply and investment management
Chalco Ningxia Energy Group Co., Ltd.	70.82%	Thermal power, wind power and solar power generation, coal mining, and power related equipment manufacturing
Chalco Hong Kong Investment Company Limited <sup>(1)</sup>	100%	Bond issuance
Guizhou Huajin Aluminum Co., Ltd.	60%	Manufacture and distribution of alumina
Yinxing Energy <sup>(3)</sup>	37.47%	Operation of wind power, design, manufacture and distribution of windpower and solar power equipment

- (1) Chalco Hong Kong Ltd. is incorporated in Hong Kong and Chalco Hong Kong Investment Company Limited is incorporated in the British Virgin Islands. All other principal subsidiaries are incorporated in the PRC.
- (2) We indirectly hold the remaining 40% shares of Shanxi Huaxing Alumina Co., Ltd, through Chalco Hong Kong Ltd., our wholly-owned subsidiary.
- (3) We indirectly hold 37.47% shares of Yinxing Energy through Ningxia Energy, a subsidiary of ours in which we hold 70.82% of its shares.

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D.	PROPERTY,	PLANTS	AND	LOUIPN	/IENT

Mines

**Bauxite Mines** 

The following map sets forth details of the area surrounding Pingguo mine, our largest bauxite mine in China:

The Guangxi Pingguo plant, located in the Guangxi Zhuang Autonomous Region, commenced operations in 1994. The surrounding infrastructure includes roadways and waterways.

Modernization and Physical Condition, Equipment, Infrastructure and Other Facilities

We have modern facilities at our mines in China, which were designed by professional PRC mine design institutes and adhere to international standards. Our mines are either open pit or underground. Our mines generally have mining offices and transportation facilities that have access to local roads and highways. In addition, we utilize advanced heavy equipment such as bulldozers and scrapers.

#### Source of Power and Water

All of our mining facilities in China are connected to the local or regional electric power grids. In addition, our mining facilities are connected to reliable water sources, all of which were sufficient for the requirements of each individual mine.

Our mines in Indonesia have access to local roads. The two mines in production are powered by diesel fuel and are equipped with washing machines.

63

## Coal Mines

We acquired 70% of the equity interest in Gansu Huayang in March 2011, which holds exploration rights for certain coal deposits in Gansu Province, namely, Luochuan mine. The exploration permit will expire in October 2016. Luochuan mine is an underground mine. We have completed the exploration but have not commenced development of Luochuan mine. As of the date of this annual report, neither proven nor probable reserves have been established in accordance with United States Securities and Exchange Commission Industry Guide 7 ("Industry Guide 7").

We acquired the mining rights for certain coal deposits Guizhou Province, namely Laodonghe mine, in January 2013 through Chalco Guizhou Mining Co., Ltd. We held 80% of the equity interest of Laodonghe mine. The mining permit will expire in December 2018. We have completed the exploration but have not commenced development of Laodonghe mine. Laodonghe mine is an underground mine. As of the date of this annual report, neither proven nor probable reserves have been established in accordance with Industry Guide 7.

We completed the acquisition of 70.82% of the equity interest in Ningxia Energy in January 2013, which holds mining rights or exploration rights for certain coal deposits in Ningxia Autonomous Region. The coal mines owned and operated by Ningxia Energy include Wangwa mine, Wangwa No.2 mine, Yindonggou mine and Yinxingyijing mine, all of which are underground thermal coal mines. The operations at these coal mines are

powered by electricity from local power grids and are accessible by public roads. As of the date of this annual report, neither proven nor probable reserves have been established in accordance with Industry Guide 7.

Wangwa mine and Wangwa No.2 mine are currently in extraction stage. We primarily use fully mechanized longwall mining method to extract coal from Wangwa mine and Wangwa No.2 mine and we use advanced coal mining equipment including hydraulic roof supports and shearers. Yindonggou mine has completed construction for capacity expansion and technology upgrade and is currently in trial production. The mining permit of Yindonggou mine will expire in July 2015. Ningxia Energy holds 50% of the interest in Yinxingyijing mine with the joint owner not participating in the operation of such mine. Yinxingyijing mine is currently under development. The exploration permit of Yinxingyijing mine will expire in August 2016 and we are in the process of applying for mining permit.

The following table sets forth detailed information on Wangwa mine and Wangwa No.2 mine:

	Wangwa mine	Wangwa No. 2 mine
	Owned and operated by	Owned and operated by
	Ningxia Energy, a	Ningxia Energy, a
Nature of Ownership	70.82% subsidiary of Chalco	70.82% subsidiary of Chalco
Commencement of construction Commencement of extraction Permit renewal	1984 <sup>(1)</sup> 1990 <sup>(1)</sup> January 2017	2007 2010 July 2017
Mining recovery rate (%) <sup>(2)</sup> Depth of mine (meters underground)	78% 400	76% 400
Average thickness of main coal seam (meters)	6-11	8-10
Calorific value ( <i>Kcal/kg</i> ) Sulphur content (%) Average ash content (%)	4,900-5,100 1.1 14.2	4,800-5,000 1.2 15.3

<sup>(1)</sup> Wangwa mine implemented a capacity expansion and technology upgrade in 2008 and resumed its production after completion of the foregoing expansion and upgrade in 2009. In addition, Wangwa mine is currently under construction for capacity expansion and technology upgrade and we expect to complete such expansion and upgrade in the first quarter of 2017.

(2) The mining recovery rate is the rate of the amount of coal recovered from a determined amount of reserves, which is calculated by dividing the actual volume of coal recovered in a year by the volume of reserves mined and consumed in the same year.

For the year ended December 31, 2014, Ningxia Energy incurred capital expenditures of approximately RMB803.1 million and RMB73.5 million, respectively, on infrastructure construction and facility upgrading of its coal mines.

64

#### Land

Chinalco leases to us 467 pieces or parcels of land, located in eight provinces, covering an aggregate area of approximately 63.9 million square meters for any purpose related to our operations and businesses. Currently, all leases for our properties are valid and have not expired. The leased land mainly consists of:

- \* 455 pieces of allocated land with an area of approximately 62.6 million square meters. Chinalco has obtained authorization from the relevant administrative authorities to manage and lease the land use rights for such land; and
- \* 12 pieces of land with an area of approximately 1.3 million square meters. Chinalco has paid the land premiums and obtained land use rights certificates.

The land is leased for the following terms:

- \* allocated land: 50 years commencing from July 1, 2001 (except for land use rights of mines operated by us, whose leased terms shall end on the expiration date of the mining rights or at the end of the actual mine life, whichever is earlier);
- \* granted land: until expiration of the relevant land use right permits; and
- \* for both allocated or granted land: normal commercial terms that stipulate, among other conditions, the terms of use, monthly or annual rental amounts payable in RMB and a six-month notification provision for termination of any lease agreement.

## **Buildings**

Our principal executive offices, which we lease from Chinalco, are located at No. 62 North Xizhimen Street, Hai Dian District, Beijing, People's Republic of China, 100082.

Pursuant to the reorganization in connection with our initial public offering in 2001, Chinalco transferred to us, among other operating assets, ownership of the buildings and properties for the operation of our core businesses. Chinalco retained its remaining buildings and properties for its operations. The buildings transferred to us comprise 4,631 buildings with an aggregate gross area of approximately 4.2 million square meters. These buildings may be sold or transferred only with the consent of Chinalco and in accordance with applicable land transfer procedures. Chinalco has undertaken to provide its consent and the necessary assistance to affect land grant procedures to ensure that our buildings can be legally transferred or sold.

We and Chinalco also lease to each other a number of other buildings and properties for ancillary uses, which comprise mainly buildings for offices, dormitory, canteen and storage purposes. We lease 50 buildings to Chinalco, with an aggregate gross area of approximately 40,256 square meters. Chinalco leases 168 buildings to us, with an aggregate gross area of approximately 334,670 square meters. The lease terms of all these buildings are 20 years commencing from July 1, 2001. Chinalco had obtained proper land and building title certificates for all of the buildings it leases to us by the end of 2004. On March 28, 2005, we entered into a tenancy agreement with China Aluminum Development Company Limited, a wholly-owned subsidiary of Chinalco, for leasing the office premises at 12th to 16th floors and 18th to 31st floors of No. 62 North Xizhimen Street, Hai Dian District, Beijing, PRC with an aggregate gross floor area of 30,160.81 square meters for a term of three years. On October 15, 2008, our tenancy agreement with China Aluminum Development Company Limited expired, and we renewed the tenancy agreement to extend it for another three years commencing on October 16, 2008, pursuant to which, the aggregated gross floor area we leased under such tenancy agreement was increased to 30,188.0 square meters. On October 10, 2010, we entered into a supplemental tenancy agreement with China Aluminum Development Company Limited, pursuant to which, the aggregate gross floor area we lease under the tenancy agreement was reduced to 26,036.3 square meters. On October 15, 2011, we renewed the tenancy agreement to extend it for another two years, pursuant to which, the aggregate gross floor area we lease under the tenancy agreement was further reduced to 23,551 square meters. On March 26, 2013, we renewed the tenancy agreement with its term to be expired on December 31, 2015.

For environmental issues in relation to the utilization of our assets, please refer to "- Environmental Protection."

## Our Expansion

Our expansion projects in 2015 primarily include:

- \* Construction of two mining areas of Sanmenxia mine at Duancun-Leigou: This project is expected to be completed by the end of 2015, with an annual bauxite production capacity of 1.6 million tonnes. We expect to invest a total amount of RMB1,358 million in this project and we had invested RMB590 million as of December 31, 2014.
- \* Capacity expansion and technology upgrade of Wangwa mine: This project is expected to be completed in the first quarter of 2017, with an annual coal production capacity of 6.0 million tonnes. We expect to invest a total amount of approximately RMB3.1 billion in this project and we had invested approximately RMB414 million as of December 31, 2014.
- \* Construction of the mining project of 0-24 line in Mao Chang mine: The project is expected to commence production in 2015 with 1.20 million tonnes of additional production capacity of bauxite. We expect to invest a total amount of RMB787 million in this project and we had invested RMB386 million by the end of December 31, 2014.
- \* Qingzhen alumina project: This project is expected to obtain the condition for trial production in June 2015, with an annual alumina production capacity of 1.6 million tonnes. We expect to invest a total amount of approximately RMB3.8 billion in this project and we had invested approximately RMB829 million as of December 31, 2014.

We intend to fund these capital expenditures through a combination of internal funds derived from our own operations and the proceeds from medium-term and long-term debt financing.

#### ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

# ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis should be read in conjunction with our audited consolidated financial statements and selected historical financial data, in each case together with the accompanying notes included elsewhere in this annual report. This section contains certain "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements are not guarantees of

our future performance or results and our actual results could materially differ from those disclosed in the forward-looking statements. In evaluating our business, you should carefully consider the information provided in "Item 3. Key Information - D. Risk Factors."

66

#### A. OPERATING RESULTS

#### Overview

We are the largest producer of alumina and primary aluminum products in China. We are engaged principally in alumina refining, primary aluminum smelting, and trading of non-ferrous metal products, coal products and other products. In addition, we are engaged in coal mining and power generation. The remainder of our revenues were derived from research and development activities and other products and services. We organize and manage our operations according to the following key segments:

- \* Our alumina segment, which consists of the mining and purchasing of bauxite and other raw materials, and production and sale of alumina as well as alumina-related products, such as alumina hydrate, alumina-based chemical products and gallium. Alumina accounted for approximately 91.5% of the total production volume for this segment in 2014. Alumina chemical products are used in the production of chemical, pharmaceutical, ceramic and construction materials. In the process of refining bauxite into alumina, we also produce gallium as a by-product. Gallium is a rare, high value metal with applications in the electronics and telecommunication industries.
- \* Our primary aluminum segment, which consists of the procurement of alumina, other raw materials, supplemental materials and electricity power, the production and sale of primary aluminum and aluminum-related products, such as carbon products, aluminum alloy products and other electrolytic aluminum products. Our principal primary aluminum products are ingots and molten aluminum, which, in the aggregate, accounted for approximately 80.1% of our total production volume of primary aluminum in 2014. Our standard 20 kilogram remelt ingots are used for general aluminum fabrication in the construction, electricity, electronics, transportation, packaging, machinery and durable goods industries. We internally produce substantially all the carbon products used at our smelters and sell our remaining carbon products to external customers.
- \* Our trading segment, which consists of the trading of alumina, primary aluminum, other non-ferrous metal products, and crude fuels such as coal products, as well as supplemental materials to our internal manufacturing plants and external customers. We established our trading business as a separate segment in July 2010 as a result of the

implementation of our operational structural exercise.

- \* Our energy segment, which consists of coal mining and power generation, including conventional coal-fire power generation and renewable energy generation such as wind power and photovoltaic power. We established our energy segment in January 2013 as a result of our acquisition of Ningxia Energy in line with our development strategy to partially offset our future energy costs and secure a portion of the coal we consume in our operations. In 2014, we sold most of the electricity we generated to regional power grids at government-mandated rates, supplied a portion of the coal output to our own electric power plant and sold the remaining portion to external customers, including power generation enterprises and cement plants.
- \* Our corporate and other operating segment, which consists of corporate and other aluminum-related research, development, and other activities of the Group.

67

We used to be engaged in aluminum fabrication operations, where we processed primary aluminum for the production and sales of various aluminum fabrication products. As approved at our 2012 annual general meeting held on June 27, 2013, we disposed of substantially all of our aluminum fabrication operations to Chinalco in line with our development strategy to focus on the upstream sectors of the aluminum market value, industry chain and the production of high value added products. As a result, we ceased to have our aluminum fabrication business as a separate segment in June 2013. In accordance with IFRSs, our aluminum fabrication segment is classified as discontinued operation and the operating results of aluminum fabrication segment are presented as discontinued operation in the consolidated statement of comprehensive income for the year ended December 31, 2013. Our alumina, primary alumina, trading, energy and corporate and other segments are classified as continuing operations and the operating results of such segments are presented as continuing operations in the consolidated statement of comprehensive income for the years ended December 31, 2012, 2013 and 2014.

## **Critical Accounting Policies**

We prepare our consolidated financial statements in accordance with IFRSs as issued by the IASB, which requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the accounting policies. The areas in our

financial reporting involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4 to our consolidated financial statements. We have established procedures and processes to facilitate the making of such judgments in the preparation of our consolidated financial statements. Management has used the best information available but actual performance may differ from our management's estimates and future changes in key variables could change future reported amounts in our consolidated financial statements.

Property, plant and equipment (including construction in progress)

Property, plant and equipment are stated at historical cost less accumulated depreciationand accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to us and the cost of the item can be measured reliably. The carrying amount of any replaced parts is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

We calculate depreciation on property, plant and equipment using the straight-line method to allocate their costs over their estimated useful lives down to their residual values, as follows:

Buildings	8-45 years
Machinery	3-30 years
Transportation facilities	6-10 years
Office and other equipment	3-10 years

We reviewed and adjusted the assets' depreciation method, residual values and useful lives, if appropriate, at the end of each reporting period. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater thanits estimated recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of the asset and are recognised within "other gains, net" in profit or loss.

Construction in progress ("CIP") represents buildings under construction, and plant and equipment pending for installation, and is stated at cost less accumulated 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 assets are ready for their intended use that are eligible for capitalisation. CIP is transferred to property, plant and equipment when the CIP is ready for its intended use.

# Intangible assets - goodwill

Goodwill arises on the acquisition of subsidiaries, associates and joint ventures and represents the excess of the consideration transferred over the fair value of the our share of the net identifiable assets of the acquiree at the date of acquisition.

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. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense and is not subsequently reversed.

## Intangible assets - mining rights and mineral exploration rights

Our mineral exploration rights and mining rights relate to coal, bauxite and other mines.

## (i) Recognition

Mineral exploration rights and mining rights are initially recorded at the 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 amortization 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. Mineral exploration rights are subject to amortization when the mineral exploration rights are converted to mining rights and commercial production has commenced.

We assess 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. We consider various relevant criteria, such as completion of a reasonable period of testing of the mine and equipment, ability to produce in saleable form (within specifications) and ability to sustain ongoing production to assess when a mine is substantially complete and ready for its intended use.

## (iii) Amortization

Amortization 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 mine able period of natural resources. Estimated mine able 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.

69

# (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 impairment loss.

## 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.

# Estimated impairment of trade and other receivables and inventories

A provision for impairment of trade and other receivables is established when there is objective evidence that we will not be able to collect all amounts due according to the original repayment terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganization, and default or delinquency in payments are considered as indicators that a trade receivable is impaired. The amount of provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. Cash flows relating to trade and other receivables are discounted if the effect of discounting is material. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in the consolidated statement of comprehensive income. When a trade and other receivable is uncollectible, it is written-off against the allowance account for trade and other receivables. Subsequent recoveries of amounts previously written-off are recognized as income in profit or loss. The impairment is subject to our management's assessment as of the end of the reporting period, and hence, the provision amount is subject to uncertainty.

Our management tests whether inventories suffered any impairment based on estimates of the net realizable value of the inventories. For different types of inventories, it requires the exercise of accounting estimates on selling price, costs of conversion, selling expenses and related tax expense to calculate their net realizable value. For inventories held for executed sales contracts, our management estimates the net realizable value based on the contractual price; for other inventories, our management estimates the realizable future price based on the actual prices during the period from the balance sheet date to the date these financial statements were approved for issuance by our Board, taking into account the nature and balance of inventories and future estimated price trends. For raw materials and work-in-progress, our management has established a model in estimating the net realized value at which the inventories can be realized in the normal course of business after considering our manufacturing cycles, production capacity and forecasts, estimated future conversion costs and selling prices. The 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 as of the end of the reporting period.

It is reasonably possible that if there is a significant change in circumstances including our business and the external environment, outcomes within the next financial year may be significantly affected.

# Coal reserve estimates and units-of-production amortization for coal mining rights

External qualified valuation professionals evaluate "economically recoverable reserves" based on reserves estimated by external qualified exploration engineers in accordance with the PRC standards. Engineering estimates of our coal reserves are inherently imprecise and represent only approximate amounts because of the subjective judgments involved in developing such information. Economically recoverable reserve estimates are updated on regular basis and have taken into account recent production and technical information about each mine.

#### **Income Tax**

We estimate our income tax provision and deferred income taxation in accordance with the prevailing tax rules and regulations, taking into account any special approvals obtained from relevant tax authorities and any preferential tax treatment to which we are entitled in each location or jurisdiction in which we operate. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. We recognize liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred income tax provisions in the period in which such determination is made.

Deferred tax assets are recognized for unused tax losses and other temporary differences, such as 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 profit will be available against which the losses can be utilized or other temporary difference could be recovered. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The carrying value of our deferred tax assets as of December 31, 2014 was RMB2,403 million, compared with approximately RMB1,892 million as of December 31, 2013 without taking into consideration the offsetting of the balances within the same tax jurisdiction. The amount of unrecognized tax losses as of December 31, 2014 was RMB22,564 million, compared with approximately RMB16,709 million as of December 31, 2013.

An entity shall recognize 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: (a) the parent, investor or joint venturer is able to control the timing of the reversal of the temporary difference; and (b) it is probable that the temporary difference will not reverse in the foreseeable future. We believe that the taxable temporary differences associated with investments in subsidiaries, associates and joint ventures satisfy the above criteria and

therefore, relevant deferred tax liabilities was recognized as disclosed in Note 12 to our consolidated financial statements.

We believe we have recorded adequate current tax provision and deferred income taxes based on the prevailing tax rules and regulations and our current best estimates and assumptions. In the event that future tax rules and regulations or related circumstances change, adjustments to current and deferred income taxation may be necessary which would impact the our results or financial position.

71

# Going concern

As set out in Note 2.1 to the consolidated financial statements, our directors believe that we have adequate resources to continue operation for the foreseeable future of not less than 12 months from the approval date of these financial statements. Our directors therefore are of the opinion that it is appropriate to adopt the going concern basis in preparing the consolidated financial statements.

# **Revenue recognition**

We recognise revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to us and when specific criteria have been met for each of the our activities (see descriptions below).

### (i) Sales of goods

Revenue from the sales of goods is recognised when we have already transferred the significant risks and rewards of ownership of the goods to the buyers, we have retained neither continuing managerial involvement nor control over the goods, it is probable that the economic benefits related to the transaction will flow into us, and the revenue and related costs incurred can be measured reliably.

If we are acting solely as an agent, amounts billed to customers are offset against the relevant costs, and the related revenue is reported on a net basis.

# (ii) Rendering of services

We provide 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.

#### **New IFRSs Pronouncements**

For a detailed discussion of new accounting pronouncements, please see Note 2 to our audited consolidated financial statements.

### Factors Affecting Our Results of Operations

We believe that the following factors which impact our various revenue and expense items (as described below) have had, and will continue to have, a significant effect on the development of our business, financial position and results of operation.

#### Economic Condition of China and the World

As the major aluminum product market is globalized, the demand for and prices of our products are highly correlated with the general economic condition of China and the world and the performance of the major aluminum and related product markets. In recent years, China's economy has experienced rapid growth despite the continued negative effects of the global financial crisis beginning in the second half of 2008 and economic recession in 2009, as well as general market volatility and changing macroeconomic conditions. The measured growth of China's economy has led to a general increase in demand in major aluminum product markets, which in turn resulted in increased demand for our products. From 2013 to 2014, China's GDP grew by 7.5%.

However, despite the growth in China's economy and the recovery of the global economy from the global financial crisis, general market volatility and changing macroeconomic conditions along with excessive supply over demand in the aluminum industry and fierce competition among aluminum producers remained unchanged in 2014.

The global output of alumina in 2014 increased to approximately 112.3 million tonnes from 2013. The global alumina consumption in 2014 increased to approximately 111.3 million tonnes from 2013. In 2014, the domestic output of alumina products increased to approximately 51.3 million tonnes from 2013 and the domestic consumption for alumina increased to approximately 56.2 million tonnes from 2013. In 2014, alumina imported into the PRC increased to approximately 5.3 million tonnes from 2013.

The global output of primary aluminum in 2014 increased to approximately 53.9 million tonnes from 2013. The global consumption of primary aluminum in 2014 increased to approximately 54.9 million tonnes from 2013. In 2014, the domestic output of primary aluminum increased to approximately 28.1 million tonnes from 2013 and the domestic consumption of primary aluminum increased to approximately 28.1 million tonnes from 2013.

For the year ended December 31, 2014, we had cost of sales from continuing operations of RMB141,138.8 million, compared with cost of sales from continuing operations of RMB166,679.8 million for the year ended December 31, 2013.

72

# Mix and Pricing of Our Products

We are engaged principally in alumina refining, primary aluminum smelting and sales of these products and trading of non-ferrous metal products and other products. In addition, we are engaged in coal mining and power generation. We sell most of our self-produced products through Chalco Trading, taking into account the relevant LME and SHFE prices. In 2014, revenues generated from alumina, primary aluminum, trading and energy segments (after elimination of inter-segment sales) accounted for 4.1%, 21.3%, 70.8% and 3.6%, respectively, of our consolidated total revenues from continuing operations after elimination of inter-segment sales. We apply different policies to price different products. For information on our pricing of different products, please see the section headed "Item 4. Information of the Company - B. Business Overview - Sales and Marketing."

The sales prices of alumina that our alumina refineries sell internally to Chalco Trading are determined at both a percentage of the weighted average of the three-month primary aluminum futures prices on the SHFE in the preceding calendar month and the average spot price of alumina in the domestic market in the preceding calendar month. Chalco Trading coordinates the external sales of our alumina products. In 2014, due to the increase in demand for alumina in China, international alumina prices slightly rebounded. The domestic alumina prices dropped to the lowest level of the year in the first quarter of 2014 as a result of the suspension of certain domestic aluminum production, which decreased domestic demand for alumina. Domestic alumina prices rebounded in the second and third quarters as the suspended domestic aluminum production resumed and new smelting production capacity added. In 2014, the spot price of alumina in the international market reached a high of approximately US\$357 per tonne and bottomed out at approximately US\$307 per tonne, and the average spot price of alumina in the international market was approximately US\$330 per tonne, representing an increase of 1.2% from 2013. The spot price of alumina in the domestic market reached a high of RMB2,832 per tonne and bottomed out at RMB2,358 per tonne, and the average spot price of alumina in the domestic market was approximately RMB2,541 per tonne, representing an increase of 1.8% from 2013. Our average selling price of alumina decreased by 1.8% from RMB2,544 per tonne in 2013 to RMB2,498 per tonne in 2014.

Like most primary aluminum producers in China, we price our primary aluminum products by reference to the SHFE spot prices and spot market prices. Fluctuations in the SHFE spot prices have a significant effect on our operating results. In 2014, the international and domestic price of primary aluminum showed an inclination of picking up following an initial dip. In terms of international market, the international price of aluminum was suppressed in the first quarter due to the influence by the extreme cold weather in certain regions of the United States and general market volatility and downturn of the global economy. However, from the second quarter of 2014, as the global economy and, in particular, the U.S. economy, rebounded, demand for primary aluminum gradually increased, resulting in an increase in primary aluminum prices. The average three-month aluminum futures prices at LME increased by 0.3% from US\$1,888 per tonne in 2013 to US\$1,893 per tonne in 2014. The average three-month aluminum futures prices at SHFE decreased by 6.1% from RMB14,592 per tonne in 2013 to RMB13,697 per tonne in 2014. Our average selling price of primary aluminum decreased by 7.3% from RMB14,612 per tonne in 2013 to RMB13,546 per tonne in 2014.

73

Price Volatility of Non-ferrous Metal and Coal Products.

Since late 2009, as a result of the implementation of our operational structural adjustment, we have been engaged substantially in the trading of outsourced non-ferrous metal products to increase our profit. In 2012, we began to engage in the trading of significant amount of outsourced coal products to diversify our product portfolio. Although the profit margin of sales of outsourced products is typically lower than that of our self-produced products, we generated substantial revenues and profit from trading of outsourced products in 2014 due to our significant trading volumes. Our revenue generated from external sales of products purchased from external sources in 2014 was approximately RMB72,372.8 million, representing approximately 72.1% of total revenue from external sales in our trading segment. From time to time, we may enter into futures and option transactions in addition to the simple buy-low-sell-high trading model to hedge against price fluctuations in non-ferrous metal and coal products market. However, short-term price volatility of these products remains a key factor affecting our operation result, as we need to make the correct prediction of the price trends of these products on the markets to ensure substantial revenues through large trading volume. If the market price trend does not match our prediction, we may be forced to sell trading products at low prices or to purchase trading products at high prices, which may adversely affect gross margins and profitability.

# **Manufacturing Costs**

Our cost of revenues consists primarily of the costs of the raw materials, overhead cost and the electric power cost which is our principal energy cost. Our principal raw material is bauxite. For the years ended December 31, 2012, 2013 and 2014, bauxite supplied by our own mines accounted for 50.5%, 49.0% and 55.4%, respectively, of our total bauxite used in the production of alumina. The unit cost of bauxite produced by us is generally lower than the unit cost of bauxite procured from external suppliers. In 2014, as a result of a decrease in the energy prices and improvement in energy efficiency during the manufacturing process, our average cost of alumina per tonne decreased by approximately 5.2% from that in 2013.

Given our high proportion of fixed costs, we must generate sufficient sales to absorb our fixed costs to maintain or increase our operating margins. Our acquisitions and production expansion in recent years have significantly increased our costs that are relatively fixed in nature such as leases and depreciation of property, plant and equipment and employee benefit expenses. If we are able to maintain satisfactory facility utilization rates and productivity, our production capacity expansion will enable us to reduce our unit costs through economies of scale and recover associated increased costs through higher output. In 2014, we continued to focus on lowering the production costs and increasing production efficiency through reducing raw materials consumption by improving technology and internal management.

Primary aluminum is one of our major aluminum products and is produced by smelting operations. Smelting operations require a substantial and continuous supply of electricity. Electricity cost is the most significant component of our primary aluminum production cost and accounted for approximately 41.0% of our unit production cost for primary aluminum in 2014. The availability and price of electricity are key considerations in our primary aluminum operations. Interruptions of electricity supply can result in lengthy production shutdowns, increased costs associated with restarting production and waste of production in progress, and prolonged interruptions can cause damage to or the destruction of production equipment and facilities. The preferential electricity prices formerly enjoyed by Chinese primary aluminum enterprises were eliminated in 2009. Our average annual electricity price per kilowatt-hour decreased by 5.1% from 2012 to 2013 and decreased by 6.7% from 2013 to 2014.

74

Availability and Costs of Financing

We require a significant amount of capital to fund our operations. For

example, we need substantial amount of funds for expanding our operations, purchasing and maintaining equipment and procuring commodities. We have in the past funded our capital expenditures primarily with bank loans and issuance of medium-term notes and bonds and long-term bonds. The availability of financing is subject to various factors, including our credit history and PRC Government's policy on credit markets. Over the years, we have maintained good relationships with the commercial banks in China, which enables us to access bank financing at relatively low costs. In recent years, the PRC government had tightened its monetary policies to control inflation, including increasing interest rates on bank loans and deposits and tightening the money supply. The PRC government has loosened its monetary policy and lowered interest rates on bank loans since the end of 2014. However, any change towards stricter lending policies in the future may, among other things, affect our ability to obtain financing and may in turn adversely affect our operating results.

Our finance costs from continuing operations increased by 14.8% from 2013 to 2014, primarily due to an increase in interest rate of interest-bearing debts. If we are unable to secure sufficient external funding when required, we may not be able to fund our working capital requirements and necessary capital expenditures, which could adversely affect our business, financial performance and prospects.

In addition, our borrowing costs and access to debt financing depend significantly on our credit ratings. These ratings, including long term corporate credit ratings and financing bond credit ratings, are assigned by rating agencies, which may lower or withdraw their ratings. Any change in our credit ratings or average interest rate could have negative implications, which may increase our finance costs and affect our financial results.

# Regulatory Environment

The central and local governments in PRC continues to exercise a substantial degree of control and influence over the aluminum and other non-ferrous metal product industry in China and shape the structure and development of the industry through the imposition of industry policies governing major project approvals and safety, environmental and quality regulations, including but not limited to the "Aluminum Industry Development Policy", "Notice on Guiding Opinions for Accelerating Aluminum Industrial Restructuring", "Environmental Protection Guide for Developing Cyclic Economy in Aluminum Industry", "Notice of the State Council of China on Further Strengthening the Elimination of Obsolete Production Capacities" and "Non-ferrous Metals Industry Restructuring and Revitalization Planning", etc. Certain existing laws and regulations involve barriers to entry, setting, amending or abolishing import tariffs and limitations and duties on the export of aluminum and certain non-ferrous metals and related products. If the PRC government changes its current policies or the interpretation of those policies that are currently beneficial to us, we may face pressure on profit margins and significant constraints on our ability to expand our business operations.

# Selected Statement of Operation Items

### Revenue

Our revenue from continuing operations is primarily generated from sales of alumina, primary aluminum, other non-ferrous metal products and coal products. In addition, we are engaged in coal mining and power generation. The remainder of our revenues were derived from research and development activities and other products and services. Historically, Chalco Trading mainly generated revenue by selling self-produced products procured from our alumina, primary aluminum and aluminum fabrication plants. As a result of the implementation of our operational structural adjustment exercise, we established our trading business as a new business segment in 2010. In connection with the significant increase of trading revenue, we refined our existing accounting system to separately capture sales of self-produced products and products sourced from external suppliers within the trading segment in 2011 and 2012. We disposed of the aluminum fabrication segment in June 2013. As the result, the operation results of such segment was classified as discontinued operation in the consolidated statement of comprehensive income for the year ended December 31, 2013 and the comparative figures and the consolidated statements of comprehensive income for the year ended December 31, 2012 are revised to reflect the reclassification between continuing operations and discontinued operation accordingly. Thus, our revenue from continuing operations for the years ended December 31, 2012 and 2013 does not include revenue from the aluminum fabrication business.

75

#### Cost of Sales

Our cost of sales from continuing operations consists primarily of purchase of inventories in relation to trading activities, the cost of the raw materials and consumables used, the electric power cost which is our principal energy cost, the fixed cost and employee benefit expenses. For the years ended December 31, 2012, 2013 and 2014, our cost of sales from continuing operations was RMB143,425.9 million, RMB166,679.8 million and RMB141,138.8 million, respectively, and accounted for 99.9%, 98.4% and 99.6% of the total consolidated revenues from continuing operations for those periods.

# **Operating Expenses**

Selling and Distribution Expenses.

Our selling and distribution expenses from continuing operations consist primarily of transportation and loading expenses, packaging expense and, to a lesser extent, port expenses, employee benefit expenses for employees

in selling and distribution department, warehouse and other storage fees, depreciation of non-production property, plant and equipment, sales commissions and other handling fees, marketing and advertising expenses, and others. Selling and distribution expenses from continuing operations accounted for 38.3%, 33.8% and 14.0% of our total operating expenses from continuing operations for the years ended December 31, 2012, 2013 and 2014, respectively.

### General and Administrative Expenses.

Our general and administrative expenses from continuing operations consist primarily of early retirement benefit expenses, employee benefit expenses for directors and officers and employees in administrative department and, to a lesser extent, taxes other than income tax expenses, impairment of intangible assets, depreciation of non-production property, plant and equipment, provision for impairment of receivables, termination benefit expenses, operating lease rental expenses, travelling and entertainment, legal and other professional fees, amortization of land use rights and leasehold land, utilities and office supplies, insurance expense, pollutants discharge fees, repairs and maintenance expenses, auditors' remuneration, amortization of intangible assets, and others. General and administrative expenses from continuing operations accounted for 57.4%, 53.6% and 38.5% of our total operating expenses for the years ended December 31, 2012, 2013 and 2014, respectively. Employee benefit expenses from continuing operations, including salaries and bonus, housing fund, staff welfare and other expenses, employment expense in relation to early retirement schemes, termination benifit and retirement benefit cost-defined contribution schemes, comprise the significant component of our general and administrative expenses from continuing operations, accounting for 30.5%, 32.7% and 53.4% of our total general and administrative expenses from continuing operations for the years ended December 31, 2012, 2013 and 2014, respectively, among which, we had expenses for early retirement benefit and termination benefit from continuing operations of RMB1,536.3 million, accounting for 31.8% of our total general and administrative expenses from continuing operations for the year ended December 31, 2014.

#### Research and Development Expenses.

Our research and development expenses from continuing operations accounted for 3.9%, 3.5% and 2.3% of our total operating expenses from continuing operations for the years ended December 31, 2012, 2013 and 2014, respectively.

Impairment loss on property, plant and equipment.

Our impairment loss on property, plant and equipment from continuing operations accounted for 0.4%, 9.1% and 45.2% of our total operating expenses from continuing operations for the years ended December 31, 2012, 2013 and 2014, respectively.

#### Government Grants

Government grants primarily were research subsidies, grants on environment protection projects and electricity price subsidies from government.

#### Other Gains, net

Our other net gains from continuing operations in 2014 were RMB356.9 million, which consisted primarily of gains on future, forward and options contracts and gains on financial products, partially offset by losses on disposal of property, plant and land use rights.

#### Finance Income

Our finance income from continuing operations consists primarily of interest income. For the years ended December 31, 2012, 2013 and 2014, our finance income was RMB302.3 million, RMB616.6 million and RMB1,047.6 million, and accounted for 0.2%, 0.4% and 0.7% of the total consolidated revenues from continuing operations, respectively.

### **Finance Costs**

Our financing costs consist primarily of interest expense on our borrowings, which we have incurred mainly to fund our capital expenditures. Interest rates on loans related to capital expenditures and working capital set by banks generally follow guidelines issued by the People's Bank of China. The People's Bank of China regulates the interest rates for commercial loans charged by state-owned banks from time to time as part of the PRC government's efforts to regulate the PRC economy. In 2014, we incurred interest expense (net of capitalized interest) from continuing operations of RMB6,583.6 million on our borrowings.

#### Share of Profits and Losses of Joint Ventures

Our share of profits and losses of joint ventures is the profits attributable to us from our joint ventures, based on our equity interests in such joint ventures. 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.

#### Share of Profits and Losses of Associates

Our share of profits and losses of associates is the profits attributable to us from our associates, based on our equity interests in such associates. An associate is an entity over which we have significant influence but not control.

77

# Consolidated Results of Operations

The following table sets forth certain income and expense items as a percentage of our revenues from continuing operations from our consolidated statements of comprehensive income for the periods indicated:

		Year Ended December 31,					
		2012		2013			2014
	RMB	% (i	RMB n millions, e	% except p	RMB ercentages)	US\$	(%)
Continuing operations							
Revenue	143,437.0	100.0	169,431.2	100.0	141,772.3	22,849.5	100.0
Cost of sales	(143,425.9)	(99.9)	166,679.8)	(98.4)	(141,138.8)	(22,747.4)	(99.6)
Gross profit	11.1	0.1	2,751.4	1.6	633.5	102.1	0.4
Selling and	(1,834.0)	(1.3)	(1,859.2)	(1.1)	(1,753.2)	(282.6)	(1.2)
distribution expenses	(1,034.0)	(1.5)	(1,039.2)	(1.1)	(1,733.2)	(202.0)	(1.2)
General and administrative expenses	(2,750.2)	(2.0)	(2,946.9)	(1.7)	(4,832.2)	(778.8)	(3.4)
Research and development expenses Impairment loss on property,	(184.7)	(0.1)	(193.6)	(0.1)	(293.8)	(47.3)	(0.2)
plant and equipment	(19.9)	(0.0)	(501.2)	(0.3)	(5,679.5)	(915.4)	(4.0)
Government grants	734.9	0.5	805.9	0.5	824.0	132.8	0.6
Other (losses)/gains, net	(17.0)	(0.0)	7,399.3	4.4	356.9	57.5	0.3
Operating (loss)/profit from c o n t i n u i n g operations		(2.8)	5,455.7	3.2	(10,744.3)	(1,731.7)	(7.5)

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Finance income Finance costs Share of profits and	302.3 (4,363.0)	0.2 (3.1)	616.5 (5,849.6)	0.4 (3.5)	1,047.6 (6,717.9)	168.8 (1,082.7)	0.7 (4.7)
losses of joint ventures Share of profits and	37.0	0.0	148.7	0.1	89.5	14.4	0.1
losses of associates	256.1	0.2	511.9	0.3	350.6	56.6	0.2
(Loss) /profit before income tax							
from continuing	(7,827.4)	(5.5)	883.2	0.5	(15,974.5)	(2,574.6)	(11.2)
operations I n c o m e t a x benefit/(expense)	371.1	0.3	(339.5)	(0.2)	(1,074.9)	(173.2)	(0.8)
(Loss) /profit for the							
year from c o n t i n u i n g operations D i s c o n t i n u e d	(7,456.3)	(5.2)	543.7	0.3	(17,049.4)	(2,747.8)	(12.0)
operation (Loss) /profit for the year	(1,187.3)	(0.8)	207.1	0.1		-	
(Loss) /profit for the year	(8,643.6)	(6.0)	750.8	0.4	(17,049.4)	(2,747.8)	(12.0)

Note: Our aluminum fabrication segment is classified as discontinued operation and the operating results of aluminum fabrication segment are presented as discontinued operation in the consolidated statement of comprehensive income for the year ended December 31, 2013. The consolidated statements of comprehensive income for the years ended December 31, 2012 are revised to reflect the reclassification between continuing operations and discontinued operation accordingly.

No customer individually accounted for more than 10% of our total sales for the year ended December 31, 2014. Sales to Chinalco and its subsidiaries, joint ventures, associates and other related parties accounted for approximately 4.8%, 6.1% and 6.6% of consolidated revenues from continuing operations for the years ended December 31, 2012, 2013 and 2014, respectively. For information on related party transactions, see "Item 7 - Major Shareholders and Related Party Transactions - B. Related Party Transactions" and Note 36 to our audited consolidated financial statements.

Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

#### Revenue

Our revenue from continuing operations decreased by 16.3% from RMB169,431.2 million for the year ended December 31, 2013 to RMB141,772.3 million for the year ended December 31, 2014, primarily due to the decrease in selling price and sales volume of our products that resulted from overall competitive factors. Our average selling price of alumina decreased by 1.8% from RMB2,544 per tonne in 2013 to RMB2,498 per tonne in 2014. Our average selling price of primary aluminum decreased by 7.3% from RMB14,612 per tonne in 2013 to RMB13,546 per tonne in 2014.

78

#### Cost of Sales

Our cost of sales from continuing operations decreased by 15.3% from RMB166,679.8 million for the year ended December 31, 2013 to RMB141,138.8 million for the year ended December 31, 2014, primarily due to the decrease in production cost and sales volume of our principal products. In 2014, due to decreases in power and raw material consumption per production unit and decreases in raw materials, fuel and electricity prices, our average cost of alumina per tonne decreased by approximately 5.2% from that in 2013. Our production cost of primary aluminum decreased by 4% from 2013 to 2014, primarily due to decreases in the prices of raw materials, fuel and electricity, and decreases in power and raw material consumption per production unit. In particular, our average annual electricity price decreased by 6.7% from 2013 to 2014.

# Selling and Distribution Expenses

Our selling and distribution expenses from continuing operations decreased by 5.7% from RMB1,859.2 million for the year ended December 31, 2013 to RMB1,753.2 million for the year ended December 31, 2014, primarily due to the decrease in shipping and handling costs for our products, as our sales volume decreased in 2014.

#### General and Administrative Expenses

Our general and administrative expenses from continuing operations increased by 64.0% from RMB2,946.9 million for the year ended December 31, 2013 to RMB4,832.2 million for the year ended December 31, 2014, primarily due to the costs related to the provision of termination

and early retirement benefits to early retired employees and those with termination of labor relationship through negotiation in 2014.

# Research and Development Expenses

Our research and development expenses from continuing operations increased by 51.8% from RMB193.6 million for the year ended December 31, 2013 to RMB293.8 million for the year ended December 31, 2014, primarily because we included the expenses on research and development of the 600kA-grade electrolytic aluminum technology in the research and development expenses in 2014, while we did not included such expenses in the research and development expenses in 2013.

### Impairment Loss on Property, Plant and Equipment

Our impairment loss on property, plant and equipment from continuing operations increased from RMB501.2 million for the year ended December 31, 2013 to RMB5,679.5 million for the year ended December 31, 2014, primarily due to provisions of substantial impairment for certain property, plant and equipment of our Company that resulted from general market factors beyond our control, such as the continuous decrease of aluminum prices and poor market conditions in the photovoltaic and silicon industries that we participate in. The impairments primarily include(i) impairment losses of RMB2,984 million for property, plant and equipment, provided for Chongqing branch with aggregate recoverable amount of RMB3,044 million and impairment loss of RMB110 million for property, plant and equipment for Henan Branch with the recoverable amount of RMB89 million due to operating losses generated at some branches and indicators of impairment are identified for such branches as a result of continuous decrease in the aluminum price, (ii) an aggregate impairment of RMB340 million for property, plant and equipment provided for the six subsidiaries of Ningxia Energy related to photovoltaic industry due to depressed domestic photovoltaic market, with the aggregate recoverable amount of RMB1,382 million, (iii) an aggregate impairment loss of RMB1,140 million for property, plant and equipment relating to silicon industry due to depressed silicon market, with the aggregate recoverable amount of RMB466 million and (iv) an aggregate impairment loss of RMB1,106 million provided for property, plant and equipment that were approved by our Board to be disposed in next year due to no longer being usable, with the aggregate recoverable amount of RMB276 million.

Government grants amounting to RMB824.0 million in the year ended December 31, 2014, slightly increased from RMB805.9 million for the year ended December 31, 2013.

# Other Gains, Net

Our net other gains decreased from RMB7,399.3 million for the year ended December 31, 2013 to RMB356.9 million for the year ended December 31, 2014, primarily because we recognized investment gains from the acquisition of Ningxia Energy, losing control of Jiaozuo Wanfang, and disposal of equity interest in a subsidiary in 2013, all of which were one-off in nature, which we did not recognize such gains in 2014. Our gains in 2014 were primarily gains on future, forward and options contracts and gains on financial products, partially offset by losses on dispoal of property, plant and equipment and land use rights.

## Operating Profit/(Loss) from Continuing Operations

As a result of the foregoing, our operating profit from continuing operations was RMB5,455.7 million for the year ended December 31, 2013, whereas we had an operating loss from continuing operations of RMB10,744.3 million for the year ended December 31, 2014.

#### Finance Income

Our finance income from continuing operations increased significantly by 69.9% from RMB616.6 million for the year ended December 31, 2013 to RMB1,047.6 million for the year ended December 31, 2014, due to an increase in interest income of receiveables from disposal of subsidiaries, businesses and assets in 2013.

#### Finance Costs

Our finance costs from continuing operations increased by 14.8% from RMB5,849.6 million for the year ended December 31, 2013 to RMB6,717.9 million for the year ended December 31, 2014, primarily due to an increase in interest rate of interest-bearing debts.

#### Share of Profits and Losses of Joint Ventures

Our share of profits and losses of joint ventures from continuing operations decreased by 39.8% from RMB148.7 million for the year ended December 31, 2013 to RMB89.5 million for the year ended December 31, 2014, primarily attributable to a decrease in the profits of all of our joint ventures except for Guangxi Huayin and Ningxia Da Tang International Dam Power Co., Ltd. due to general market conditions.

#### Share of Profits and Losses of Associates

Our share of profits and losses of associates from continuing operations decreased by 31.5% from RMB511.9 million for the year ended December

31, 2013 to RMB350.6 million for the year ended December 31, 2014, primarily attributable to a decrease in the profits of all of our associates except for Jiaozuo Wanfang and ABC-CA Fund Management Co., Ltd. due to general market conditions.

80

#### Income Tax

Our income tax expense from continuing operations was RMB339.5 million for the year ended December 31, 2013, whereas we had income tax expense of RMB1,074.9 million for the year ended December 31, 2014. This was mainly attributable to the fact that deferred tax assets recognized in previous years from accumulated losses and deductible temporary differences were written down in this year.

# **Results of Operations**

As a result of the foregoing, our net profit from continuing operations was RMB543.7 million for the year ended December 31, 2013, whereas we had net loss from continuing operations of RMB17,049.4 million for the year ended December 31, 2014.

Our net profit from discontinued operations was RMB207.1 million for the year ended December 31, 2013, whereas we had no profit/loss from discontinued operation for the year ended December 31, 2014.

As a result, we had net profit of RMB750.8 million for the year ended December 31, 2013, whereas we had net loss of RMB17,049.4 million for the year ended December 31, 2014.

Year Ended December 31, 2013 Compared with Year Ended December 31, 2012

#### Revenue

Our revenue from continuing operations increased by 18.1% from RMB143,437.0 million for the year ended December 31, 2012 to RMB169,431.2 million for the year ended December 31, 2013, primarily due to the increase in our external trading volume and the newly added revenue of coal and electricity contributed by Ningxia Energy, partially offset by the decrease in the selling prices of our major products. In 2013, due to an increase in demand, the international alumina prices slightly rebounded. International primary aluminum product prices were volatile from the first quarter to the third quarter in 2013 and moved downward in the fourth quarter. Domestic alumina and aluminum product prices, impacted by continued increase in supply and China's downward

adjustment to economic expectation, continued to decline in 2013. Our average selling price of alumina decreased by 5.1% from RMB2,681 per tonne in 2012 to RMB2,544 per tonne in 2013. Our average selling price of primary aluminum decreased by 6.9% from RMB15,694 per tonne in 2012 to RMB14,612 per tonne in 2013.

# **Discussion of Segment Operations**

We account for our operations on a segmental basis, that is, separately prepare the accounting for our alumina, primary aluminum, trading, energy and corporate and other operating segment. Unless otherwise indicated, also included in these segments are other revenue derived from activities such as supplying electricity, gas, heat and water to our affiliates, selling scrap and other materials and providing services including transportation and research and development to third parties. For additional information relating to our business segments and segment presentation, see Note 5 to our consolidated financial statements.

The following table sets forth a breakdown of our revenues by segment and the contribution of external sales and inter-segment sales for the periods indicated:

81

_			mination of		ent Sales		of Inter- segment Sales
		Year l	Ended Dece	mber 31,			
_	2012	2013	2014	2014	2014	2014	
	RMB	RMB (in millio	RMB ons, except p	US\$ percentages)	%	%	
Revenue from c o n t i n u i n g operations Alumina:							
External sales Inter-segment sales	3,677.0 28,168.9	6,703.7 27,276.2	5,853.7 24,852.3	943.4 4,005.5	3.1	4.1	
Total	31,845.9	33,979.9	30,706.0	4,948.9	16.4		

After Elimination

Primary aluminum						
External sales	34,520.9	31,885.4	30,162.9	4,861.4	16.1	21.3
Inter-segment sales	23,515.5	18,068.0	10,260.0	1,653.6	5.5	
TD + 1	50.026.4	40.052.4	40.422.0	6.515.0	21.6	
Total	58,036.4	49,953.4	40,422.9	6,515.0	21.6	
Trading						
External sales	104,878.9	125,291.6	100,346.2	16,172.9	53.7	70.8
Inter-segment sales	12,416.1	11,991.9	9,761.8	1,573.3	5.2	
Total	117,295.0	137,283.5	110,108.0	17,746.2	58.9	
Energy						
Elicigy						
:						
External sales	69.5	4,897.3	5,094.2	821.0	2.7	3.6
Inter-segment sales	-	261.8	148.1	23.9	0.1	
Total	60.5	5 150 1	5 242 2	944.0	2.0	
Total	69.5	5,159.1	5,242.3	844.9	2.8	
Corporate and others						
External sales	290.7	653.3	315.4	50.8	0.2	0.2
Inter-segment sales	41.8	135.2	32.5	5.2	0.0	
	222 -	<b>-</b> 00 -	2.4	<b>.</b>	0.0	
Total	332.5	788.5	347.9	56.0	0.2	
Total Revenue from						
continuing						
operations before						
inter-segment						
eliminations	207,579.3	227,164.4	186,827.0	30,111.0	100	
Eliminations of	(((4 140 2)	(57.722.2)	(45.054.7)	(7.0(1.5)	24.1	
inter-segment sales	(04,142.3)	(31,133.2)	(45,054.7)	(7,201.5)	24.1	
Consolidated total	143,437.0	169,431.2	141,772.3	22,849.5	75.9	100.0
revenue from		•	•	•		

82

The following table sets forth segment results by segment for the periods indicated:

Year Ended Decer	mber 31,
2012	2014

	2012	2013	2014	2014
	RMB	RMB (in milli	RMB (ons)	US\$
From continuing operations Alumina:				
Revenue	31,845.9	33,979.9	30,706.0	4,948.9
Cost and expenses <sup>(1)</sup>	(35,590.8)	(35,780.9)	(36,674.3)	(5,910.8)
Segment results <sup>(2)</sup>	(3,744.9)	(1,801.0)	(5,968.3)	(961.9)
Primary aluminum:				
Revenue	58,036.4	49,953.4	40,422.9	6,515.0
Cost and expenses <sup>(1)</sup>	(61,121.1)	(52,745.4)	(46,798.1)	(7,542.5)
Segment results <sup>(2)</sup>	(3,084.7)	(2,792.0)	(6,375.2)	(1,027.5)
Trading:				
Revenue	117,295.0	137,283.5	110,108.0	17,746.2
Cost and expenses <sup>(1)</sup>	(116,857.4)	(136,736.4)	(109,449.3)	(17,640.0)
Segment results <sup>(2)</sup>	437.6	547.1	658.7	106.2
Energy:				
Revenue	69.5	5,159.1	5,242.3	844.9
Cost and expenses <sup>(1)</sup>	(115.4)	(4,210.3)	(6,978.7)	(1,124.8)

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Segment results <sup>(2)</sup>	(45.9)	948.8	(1,736.4)	(279.9)
Corporate and others:	332.5	788.5	347.9	56.0
Cost and expenses <sup>(1)</sup>	(1,857.2)	3,379.3	(2,625.4)	(423.1)
Segment results <sup>(2)</sup>	(1,524.7)	4,167.8	(2,277.5)	(367.1)
Elimination <sup>(3)</sup>	135.2	(187.5)	(275.8)	(44.4)
Total profit/(loss) from continuing operations before income tax	(7,827.4)	883.2	(15,974.5)	(2,574.6)

83

Year Ended December 31, 2014 Compared with Year Ended December 31, 2013

Alumina Segment

Revenue.

Total revenue generated by the alumina segment decreased by 9.6% from RMB33,979.9 million for the year ended December 31, 2013 to RMB30,706.0 million for the year ended December 31, 2014, primarily due to decreases in the sales volume and the average selling price of our

<sup>(1)</sup> Consist of cost of sales, operating expenses, other income, other gains, finance income, finance costs and others attributable to each segment.

<sup>(2)</sup> Segment results refer to profit/(loss) before income tax.

<sup>(3)</sup> Elimination refers to the aggregate inter-segment eliminations of segment results of each segment.

alumina products, resulting from general market conditions.

Revenue from external sales of alumina segment decreased by 12.7% from RMB6,703.7 million for the year ended December 31, 2013 to RMB5,853.7 million for the year ended December 31, 2014, primarily due to the decrease in the sales volume and selling price of alumina.

Revenue from inter-segment sales of alumina segment decreased from RMB27,276.2 million for the year ended December 31, 2013 to RMB24,852.3 million for the year ended December 31, 2014.

### Cost and expenses.

The total cost and expenses for our alumina segment increased slightly from RMB35,780.9 million for the year ended December 31, 2013 to RMB36,674.3 million for the year ended December 31, 2014.

# Segment results.

Segment loss for our alumina segment increased by 231.4% from RMB1,801.0 million for the year ended December 31, 2013 to RMB5,968.3 million for the year ended December 31, 2014. This was mainly attributable to the provision of substantial impairment for certain long-term assets of the segment, provision of termination and early retirement benefits expenses in respect of the early retired employees and those with termination of labor relationship through negotiation.

### **Primary Aluminum Segment**

#### Revenue

. Total revenue generated by the primary aluminum segment decreased from RMB49,953.4 million for the year ended December 31, 2013 to RMB40,422.9 million for the year ended December 31, 2014, primarily due to decreases in the sales volume and the average selling price of our primary aluminum products.

Revenue from external sales of the primary aluminum segment decreased from RMB31,885.4 million for the year ended December 31, 2013 to RMB30,162.9 million for the year ended December 31, 2014, primarily due to decreases in the sales volume and average selling price of our primary aluminum products.

Revenue from inter-segment sales of primary aluminum segment decreased by 43.2% from RMB18,068.0 million for the year ended December 31, 2013 to RMB10,260.0 million for the year ended December 31, 2014. Besides the decrease in the selling price and sales volume, this was also attributable to the change in respect of the sales to Chinalco's aluminum fabrication companies from internal trading revenue of 2013 to external trading revenue due to the disposal of aluminum fabrication segments in 2013.

## Cost and expenses.

The total cost and expenses for our primary aluminum segment decreased by 11.3% from RMB52,745.4 million for the year ended December 31, 2013 to RMB46,798.1 million for the year ended December 31, 2014, primarily due to the decreases in prices of raw materials and electricity and sales volume of our primary aluminum products.

### Segment results.

Segment loss for our primary aluminum segment increased by 128.3% from RMB2,792.0 million for the year ended December 31, 2013 to RMB6,375.2 million for the year ended December 31, 2014. This was mainly attributable to the provision of substantial impairment for certain long-term assets of the segment, provision of termination and early retirement benefits costs in respect of the early retired employees and those with termination of labor relationship through negotiation, and the reduction in the selling price of our primary aluminum products of about 7%.

# **Trading Segment**

#### Revenue.

Total revenue generated by the trading segment decreased by 19.8% from RMB137,283.5 million for the year ended December 31, 2013 to RMB110,108.0 million for the year ended December 31, 2014, primarily due to a decrease in volumes of major aluminum products sold through our trading segment.

Revenue from external sales of the trading segment decreased by 19.9% from RMB125,291.6 million for the year ended December 31, 2013 to RMB100,346.2 million for the year ended December 31, 2014. Revenue from external sales of trading segment for the year ended December 31, 2014 included RMB27,973.4 million of external sales of products produced by us and sold through the trading segment and RMB72,372.8 million of external sales of commodities purchased from external sources including alumina, primary aluminum, carbon products, aluminum fabrication products, coal products and non-ferrous metal products.

Revenue from internal sales of the trading segment decreased by 18.6% from RMB11,991.9 million for the year ended December 31, 2013 to RMB9,761.8 million for the year ended December 31, 2014.

#### Cost and expenses.

The total cost and expenses for our trading segment decreased by 20.0% from RMB136,736.4 million for the year ended December 31, 2013 to RMB109,449.3 million for the year ended December 31, 2014, primarily due to the decrease in volumes of major aluminum procured and sold

through our trading segment.

Segment results.

Segment profit for our trading segment increased by 20.4% from RMB547.1 million for the year ended December 31, 2013 to RMB658.7 million for the year ended December 31, 2014.

**Energy Segment** 

Revenue.

Total revenue generated by the energy segment increased from RMB5,159.1 million for the year ended December 31, 2013 to RMB5,242.3 million for the year ended December 31, 2014, primarily due to an increase in the coal production by Ningxia Energy.

Revenue from external sales of the energy segment increased from RMB4,897.3 million for the year ended December 31, 2013 to RMB5,094.2 million for the year ended December 31, 2014.

Revenue from internal sales of the energy segment decreased from RMB261.8 million for the year ended December 31, 2013 to RMB148.1 million for the year ended December 31, 2014.

Cost and expenses.

The total cost and expenses for our energy segment increased from RMB4,210.3 million for the year ended December 31, 2013 to RMB6,978.7 million for the year ended December 31, 2014, primarily due to the provision of substantial impairment loss for assets in the year of 2014.

Segment results.

Segment profit for our energy segment was RMB948.8 million for the year ended December 31, 2013, whereas we had segment loss of RMB1,736.4 million for the year ended December 31, 2014. This was mainly attributable to the provision of substantial impairment loss for assets of silicon and photovoltaic industry subsidiaries in this year.

84

Corporate and other operating segment

Revenue.

Revenue from the corporate and other operating segment decreased by 55.9% from RMB788.5 million for the year ended December 31, 2013 to RMB347.9 million for the year ended December 31, 2014.

Segment results.

Segment profit for the corporate and other operating segment was RMB4,167.8 million for the year ended December 31, 2013, whereas we had segment loss of RMB2,277.5 million for the year ended December 31, 2014, mainly because we recognized significant investment gains from disposal and deemed disposal of subsidiaries in 2013, whereas we did not recognize such gains in 2014.

Year Ended December 31, 2013 Compared with Year Ended December 31, 2012

Alumina Segment

Revenue.

Total revenue generated by the alumina segment increased by 6.7% from RMB31,845.9 million for the year ended December 31, 2012 to RMB33,979.9 million for the year ended December 31, 2013, primarily due to an increase in the sales volume of alumina, partially offset by a decrease in the average selling price.

Revenue from external sales of alumina segment increased by 82.3% from RMB3,677.0 million for the year ended December 31, 2012 to RMB6,703.7 million for the year ended December 31, 2013, primarily due to the change of revenue from product sales to Jiaozuo Wanfang from internal revenue to revenue from external sales and the increase in revenue from other businesses as a result of increased sales volume.

Revenue from inter-segment sales of alumina segment decreased slightly from RMB28,168.9 million for the year ended December 31, 2012 to RMB27,276.2 million for the year ended December 31, 2013.

Cost and expenses. The total cost and expenses for our alumina segment increased slightly from RMB35,590.8 million for the year ended December 31, 2012 to RMB35,780.9 million for the year ended December 31, 2013.

Segment results. Segment loss for our alumina segment decreased by 51.9% from RMB3,744.9 million for the year ended December 31, 2012 to RMB1,801.0 million for the year ended December 31, 2013.

**Primary Aluminum Segment** 

Revenue.

Total revenue generated by the primary aluminum segment decreased from RMB58,036.4 million for the year ended December 31, 2012 to

RMB49,953.4 million for the year ended December 31, 2013, primarily due to the decrease in sales volume of primary aluminum and decrease in the average selling price.

Revenue from external sales of the primary aluminum segment decreased by 7.6% from RMB34,520.9 million for the year ended December 31, 2012 to RMB31,885.4 million for the year ended December 31, 2013, primarily due to a decrease in external sales volume of primary aluminum manufactured by us and decrease in the average selling price of primary aluminum.

Revenue from inter-segment sales of primary aluminum segment decreased by 23.2% from RMB23,515.5 million for the year ended December 31, 2012 to RMB18,068.0 million for the year ended December 31, 2013, primarily due to the change of revenue from product sales to aluminum fabrication segment from internal revenue to revenue from external sales.

Cost and expenses. The total cost and expenses for our primary aluminum segment decreased by 13.7% from RMB61,121.1 million for the year ended December 31, 2012 to RMB52,745.4 million for the year ended December 31, 2013, primarily due to the decrease in prices of raw materials and electricity.

Segment results. Segment loss for our primary aluminum segment decreased by 9.5% from RMB3,084.7 million for the year ended December 31, 2012 to RMB2,792.0 million for the year ended December 31, 2013.

**Trading Segment** 

Revenue.

Total revenue generated by the trading segment increased by 17.0% from RMB117,295.0 million for the year ended December 31, 2012 to RMB137,283.50 million for the year ended December 31, 2013, primarily due to an increase in volumes of major aluminum and other non-ferrous metal and coal products procured and sold through our trading segment.

Revenue from external sales of the trading segment increased by 19.5% from RMB104,878.9 million for the year ended December 31, 2012 to RMB125,291.6 million for the year ended December 31, 2013. Revenue from external sales of trading segment for the year ended December 31, 2013 included RMB31,514.8 million of external sales of products produced by us and sold through the trading segment and RMB93,776.8 million of external sales of commodities purchased from external sources including alumina, primary aluminum, carbon products, aluminum fabrication products, coal products and non-ferrous metal products.

Revenue from internal sales of the trading segment decreased by 3.4% from RMB12,416.1 million for the year ended December 31, 2012 to RMB11,991.9 million for the year ended December 31, 2013. Revenue from internal sales of trading segment for the year ended December 31,

2013 included RMB1,259 million of internal sales of products purchased from our internal sources and RMB10,733 million of internal sales of products purchased from our external sources.

Cost and expenses. The total cost and expenses for our trading segment increased by 17.0% from RMB116,857.4 million for the year ended December 31, 2012 to RMB136,736.4 million for the year ended December 31, 2013, primarily due to the increase in volumes of major aluminum and other non-ferrous metal and coal products procured and sold through our trading segment.

Segment results. Segment profit for our trading segment increased by 25.0% from RMB437.6 million for the year ended December 31, 2012 to RMB547.1 million for the year ended December 31, 2013.

# **Energy Segment**

*Revenue*. Total revenue generated by the energy segment increased significantly from RMB69.5 million for the year ended December 31, 2012 to RMB5,159.1 million for the year ended December 31, 2013, primarily because we generated revenue from sales of electricity generated and coal produced by Ningxia Energy, a subsidiary we acquired in 2013.

Revenue from external sales of the energy segment increased significantly from RMB69.5 million for the year ended December 31, 2012 to RMB4,897.3 million for the year ended December 31, 2013.

Revenue from internal sales of the energy segment increased from nil for the year ended December 31, 2012 to RMB261.8 million for the year ended December 31, 2013.

Cost and expenses. The total cost and expenses for our energy segment increased from RMB115.4 million for the year ended December 31, 2012 to RMB4,210.3 million for the year ended December 31, 2013.

Segment results. Segment loss for our energy segment was RMB45.9 million for the year ended December 31, 2012, whereas we had segment profit of RMB948.8 million for the year ended December 31, 2013.

# Corporate and other operating segment

Revenue. Revenue from the corporate and other operating segment increased by 137.1% from RMB332.5 million for the year ended December 31, 2012 to RMB788.5 million for the year ended December 31, 2013, primarily due to the gain from deemed disposal of equity interest in Jiaozuo Wanfang and gain on disposal of equity interest in Chalco Iron Ore.

Segment results. Segment loss for our corporate and other operating segment was RMB1,524.7 million for the year ended December 31, 2012,

whereas we had segment profit of RMB4,167.8 million for the year ended December 31, 2013.

### B. LIQUIDITY AND CAPITAL RESOURCES

Historically, our primary sources of funding have been cash generated from operating activities, prepayments and deposits from customers, bank and other loans and proceeds from equity or notes and bonds offerings. Our primary uses of funds have been working capital for production, capital expenditures and repayments of short-term, medium-term and long-term borrowings.

As of December 31, 2014, our current assets amounted to RMB63,474.4 million, representing a slight increase of 0.6% from RMB63,065.4 million as of December 31, 2013. As of December 31, 2014, our trade and notes receivable amounted to RMB5,312.6 million, representing a decrease of 13.7% from RMB6,156.6 million as of December 31, 2013. As of December 31, 2014, our restricted cash and time deposit and cash and cash equivalents balance amounted to RMB17,932.2 million, representing an increase of 44.3% from RMB12,425.9 million as of December 31, 2013, primarily due to an increase in cash and cash equivalents. As of December 31, 2014, our other current assets amounted to RMB13,031.7 million, representing a decrease of 37.8% from RMB20,947.0 million as of December 31, 2013, primarily because in 2014 we have received part of proceeds from the disposal of equity interests in Chalco Iron Ore, the disposal of equity interests and assets of aluminum fabrication segment and the disposal of the assets of alumina production line of Guizhou branch in 2013.

As of December 31, 2014, our current liabilities amounted to RMB104,235.6 million, representing an increase of 7.8% from RMB96,737.6 million as of December 31, 2013. Our current liabilities increased primarily due to the issuance of short-term bonds and the increase in amounts payable.

As of December 31, 2014, our net current liabilities amounted to RMB40,761.2 million, representing an increase of 21.1% from RMB33,672.2 million as of December 31, 2013. As of December 31, 2014, our current ratio (current assets/current liabilities) was 0.61, compared with 0.65 as of December 31, 2013. Our quick ratio ((current assets - inventories - prepayments)/current liabilities) was 0.36 as of December 31, 2014, compared with 0.41 as of December 31, 2013.

We have considered our available sources of funds as follows:

- \* Our expected net cash inflows from operating activities in 2015;
- \* As of December 31, 2014, we had total banking facilities of approximately RMB142,051 million, of which RMB65,394 million had been utilized and unutilized banking facilities amounted to RMB76,657 million as of December 31, 2014, among which,

banking facilities of approximately RMB71,660 million will be subject to renewal during the next 12 months from January 1, 2015. We are confident that all banking facilities could be renewed upon their expiration based on our past experience with banks and our good credit standing; and

\* Other available sources of financing from banks and other financial institutions based on our good credit history.

85

We believe that we have adequate resources to continue in operational existence for the foreseeable future not less than 12 months from the date these financial statements were approved. The Board therefore continues to adopt the going concern basis in preparing these financial statements.

# Cash Flows and Working Capital

The following table sets forth a condensed summary of our statement of cash flows for the periods indicated:

<b>T</b> 7	T 1 1	D 1 21
Year	Hnded	December 31,
1 Cai	Liiucu	December 31,

	2012	2013	2014	2014
	RMB	RMB (in millio	RMB	US\$
Net cash flows generated from operating activities Net cash flows used in investing activities	1,122.4 (23,153.1)	8,251.3 (7,686.1)	13,773.0 (4,921.3)	2,219.8 (793.2)
Net cash flows generated from/(used in) financing activities	20,428.9	1,758.5	(3,970.7)	(640.0)
Net (decrease)/increase in cash and cash equivalents	(1,601.8)	2,323.7	4,881.0	786.6

Net Cash Flows Generated from Operating Activities

For the year ended December 31, 2014, we had cash inflows before changes in working capital but after adjustment for non-cash items and non-operating cash outflows of RMB2,844.7 million and net cash generated from operation activities of RMB13,773.0 million. The adjustment consisted primarily of non-cash items such as interest expense of RMB6,707.5 million, impairment loss of property, plant and equipment of 5,679.5 million and depreciation of property, plant and equipment of RMB6,955.4 million and inflows of RMB11,237.1 million for changes in working capital and outflows of income tax of RMB308.7 million. The inflows from changes in working capital consisted primarily of (i) increase in trade and notes payables of RMB3,346.7 million, (ii) decrease in other current assets of RMB3,133.9 million and (iii) increase in other payables and accrued liabilities of RMB2,744.3 million, partially offset by an increase in restricted cash of RMB615.4 million.

For the year ended December 31, 2013, we had cash inflows before changes in working capital but after adjustment for non-cash items and non- operating cash outflows of RMB6,514.4 million and net cash generated from operation activities of RMB8,251.3 million. The adjustment consisted primarily of non-cash items such as interest expense of RMB6,119.7 million and depreciation of property, plant and equipment of RMB6,956.7 million and inflows of RMB2,090.0 million for changes in working capital and outflows of income tax of RMB353.1 million. The inflows from changes in working capital consisted primarily of (i) increase in trade and notes payables of RMB5,762.7 million and (ii) increase in other payables and accrued liabilities of RMB4,005.8 million, partially offset by increase in trade and notes receivables of RMB4,042.5 million and increase in other current assets of RMB2,541.6 million.

For the year ended December 31, 2012, we had cash inflows before changes in working capital but after adjustments for non-cash items and non-operating cash outflows of RMB1,862.8 million and net cash generated from operating activities of RMB1,122.4 million. The adjustment consisted primarily of interest expense of RMB4,913.6 million, depreciation of property, plant and equipment of RMB6,141.0 million, outflows of RMB569.1 million for changes in working capital and outflows of income tax of RMB171.3 million. The outflows from changes in working capital consisted primarily of (i) increase in inventories of RMB1,472.1 million, (ii) decrease in trade and notes payable of RMB1,342.1 million and (iii) increase in other current assets of RMB921.4 million, partially offset by decrease in trade and notes receivable of RMB3,015.9 million.

Net cash flows used in investing activities decreased from RMB7,686.1 million for the year ended December 31, 2013 to RMB4,921.3 million for the year ended December 31, 2014, primarily due to the decrease of investment in property, plant and equipment and receipt of consideration of disposal assets for the last year in the year. Our net cash used in investing activities for the year ended December 31, 2014 consisted primarily of purchase of property, plant and equipment of RMB8,038.3 million and addition of financial products of RMB4,635.6 million, partially offset by proceeds received from the disposal of subsidiaries, businesses and assets in 2013 and interest received from unpaid disposal proceeds of RMB7,095.1 million.

Net cash flows used in investing activities decreased from RMB23,153.1 million for the year ended December 31, 2012 to RMB7,686.1 million for the year ended December 31, 2013, primarily due to the cash inflows related to disposal of discontinued operation, disposal of Alumina Production Line of Guizhou branch and acquisition of Ningxia Energy, whereas we did not have such cash inflows in 2012. Our net cash used in investing activities for the year ended December 31, 2013 consisted primarily of purchase of property, plant and equipment of RMB8,486.6 million, loans to related parties of RMB1,145.3 million and investments in joint ventures and associate of RMB1,841.3 million.

Net cash flows used in investing activities increased significantly from RMB9,714.5 million for the year ended December 31, 2011 to RMB23,153.1 million for the year ended December 31, 2012, primarily due to the increase of cash outflows related to investments in joint ventures and associates and purchases of property, plant and equipment. Our net cash used in investing activities for the year ended December 31, 2012 consisted primarily of investments in joint ventures and associate of RMB13,578.4 million and purchase of property, plant and equipment of RMB9,148.5 million.

#### Net Cash Flows Generated from/Used in Financing Activities

Net cash flows used in financing activities amounted to net outflow of RMB3,970.7 million for the year ended December 31, 2014, representing a decrease of cash inflows of RMB5,729.1 million from the net inflows of RMB1,758.4 million for the year ended December 31, 2013, mainly attributable to the continuous improvement of cash flows from operating activities and decrease in financing scale and repayment of interest-bearing loans and borrowings accordingly. Our net cash used in financing activities for the year ended December 31, 2014 consisted primarily of repayments of short-term and long-term loans of RMB70,052.1 million, repayments of short-term bonds and medium-term notes of RMB26,700.0 million and interest payments of RMB6,750.5 million, partially offset by drawdown of short-term and long-term loans of RMB60,225.9 million, issuance of short-term bonds and medium-term notes of RMB34,893.0 million, and issuance of senior perpetual securities of US\$400 million, equivalent to RMB2,461.8 million.

Net cash flows generated from financing activities decreased significantly from RMB20,429.0 million for the year ended December 31, 2012 to RMB1,758.4 million for the year ended December 31, 2013, primarily due to the increase in the repayments of short-term and long-term loans. Our net cash generated from financing activities for the year ended December 31, 2013 consisted primarily of drawdown of short-term and long-term loans of RMB98,090.9 million, issuance of short-term bonds and medium-term notes of RMB22,936.1 million and issuance of senior perpetual securities of US\$350 million, equivalent to RMB2,122.6 million, partially offset by repayments of short-term and long-term loans of RMB90,426.0 million and repayments of short-term bonds and medium-term notes of RMB24,500.0 million.

Net cash flows generated from financing activities increased significantly from RMB8,842.4 million for the year ended December 31, 2011 to RMB20,429.0 million for the year ended December 31, 2012, primarily due to the increase in the drawdown of short-term and long-term loans and issuance of short-term bonds and medium-term notes during the year. Our net cash generated from financing activities for the year ended December 31, 2012 consisted primarily of drawdown of short-term and long-term loans of RMB74,346.5 million and issuance of short-term bonds and medium-term notes of RMB29,468.1 million, partially offset by repayments of short-term and long-term loans of RMB63,925.1 million and repayments of short-term bonds and medium-term notes of RMB18,000.0 million.

87

#### Loans and Borrowings

During the past years, we engaged in debt financing to fund our operations and business expansion. As of December 31, 2014, our gearing ratio (net debts/total capital attributable to owners of the parent as defined in Note 3.3 to our audited consolidated financial statements) was approximately 83% as compared with approximately 75% as of December 31, 2013.

As of I	December 31,	
2013	2014	2014
RMB	RMB millions)	US\$
(111)	11111110115)	

Short-term loans and borrowings

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Short-term bank and other loans Short-term bonds Current portion of finance lease	47,146.4 15,275.7	40,792.7 23,536.4 269.5	6,574.6 3,793.4 43.4
payable Current portion of medium-term	2,597.5	3,995.8	644.0
notes  Current portion of long-term bank and other loans	8,328.7	6,572.9	1,059.4
Sub-total	73,348.3	75,167.3	12,114.8
Long-term loans and borrowings			
Finance lease payable	-	1,429.4	230.4
Long-term bank and other loans	35,303.3	31,946.3	5,148.8
Medium-term notes and bonds and long-term bonds	21,917.7	22,231.6	3,583.1
Less: Current portion of medium-term notes	(2,597.5)	(3,995.8)	(644.0)
Current portion of long-term bank and other loans	(8,328.7)	(6,572.9)	(1,059.4)
Current portion of finance lease payable	-	(269.5)	(43.4)
Sub-total	46,294.8	44,769.2	7,215.5
Total borrowings	119,643.1	119,936.5	19,330.3
Less: Bank balances and cash	(12,425.9)	(17,932.2)	(2,890.1)
Net	107,217.2	102,004.3	16,440.1

# Bank and Other Loans

The weighted average annual interest rate of short-term bank and other loans for the year end December 31, 2014 was 5.48%. Our short-term bank and other loans will mature within one year.

The weighted average annual interest rate of long-term bank and other loans for the years ended December 31, 2014 was 5.64%. The following table sets forth the aggregate maturities of our outstanding long-term bank and other loans as of December 31, 2014:

	RMB	US\$			
(in millions)					
	6,572.9	1,059.4			

As of December 31, 2014

	KWIB	U34
	(in millions)	
Within 1 year	6,572.9	1,059.4
Between 1 and 2 years	3,331.1	536.9
Between 2 and 5 years	11,784.1	1,899.3
Over five years	10,258.2	1,653.3
Total	31,946.3	5,148.9

As of December 31, 2014, we had secured loans of RMB17,955.0 million (including long-term and short-term loans) and we, on a stand-alone basis, provided guarantees in respect of RMB347.9 million of long-term loans for our subsidiaries. As at December 31, 2014, long-term loans and borrowings amounting to RMB12,446 million (current portion of RMB874 million and non-current portion of RMB11,572 million) were secured by the contractual right to charge users for electricity generated and short-term loans and borrowings amounting to RMB241 million were secured by letters of credit.

As of December 31, 2014, we had foreign currency denominated loans with principal amount of RMB24 million in Japanese Yen and RMB4,957 million in U.S. dollars.

### Notes and Bonds

The following table sets forth the face value, maturity, effective interest rate and outstanding amount of our outstanding long-term bonds and medium- term notes as of December 31, 2014:

	Face value/	Effective December 31,	
	maturity	interest rate	(RMB in thousand)
2007 long-term bonds 2010 medium-term notes 2010 medium-term notes	2,000,000/2017 1,000,000/2015 1,000,000/2015	4.64% 4.34% 4.20%	1,993,821 998,249 998,040

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5,000,000/2016	6.03%	4,896,842
m		
400,000/2017	6.06%	400,000
2,000,000/2015	5.13%	1,999,473
3,000,000/2017	5.77%	2,989,167
3,000,000/2018	5.99%	2,981,609
2,000,000/2016	6.07%	1,994,753
3,000000/2017	7.35%	2,979,639
		22,231,593
	400,000/2017 2,000,000/2015 3,000,000/2017 3,000,000/2018 2,000,000/2016	400,000/2017 6.06% 2,000,000/2015 5.13% 3,000,000/2017 5.77% 3,000,000/2018 5.99% 2,000,000/2016 6.07%

The following table sets forth face value, maturity, effective interest rate and outstanding amount of our outstanding short-term bonds as of December 31, 2014:

	Face value/ maturity	Effective interest rate	December 31, 2014
			(RMB in thousand)
2014 short-term bonds	2,000,000/2015	6.45%	2,092,959
2014 short-term bonds	3,000,000/2015	5.40%	3,049,586
2014 short-term bonds	3,000,000/2015	5.85%	3,115,170
2014 short-term bonds	3,000,000/2015	5.94%	3,116,780
2014 short-term bonds	3,000,000/2015	5.80%	3,102,335
2014 short-term bonds	3,000,000/2015	4.99%	3,028,864
2014 short-term bonds	3,000,000/2015	4.75%	3,022,213
2014 short-term bonds	3,000,000/2015	5.00%	3,008,483
Total			23,536,390

89

# Senior Perpetual Capital Securities

On October 22, 2013, Chalco Hong Kong Investment Company Limited (the "Issuer") issued US\$350 million senior perpetual securities (the "2013 Senior Perpetual Securities") at initial interest rate of 6.625%. The proceeds from issuance of the 2013 Securities after deduction of issuance costs is RMB2,122.6 million, and has been on-lent to us and any of our subsidiaries for general corporate use. Coupon payments of 6.625% per

annum on the 2013 Senior Perpetual Securities are paid semi-annually in arrears from October 29, 2013 and may be deferred at our discretion unless, during the six-month period ending on the day before the relevant scheduled coupon payment date, we, the Issuer or Chalco Hong Kong has declared or paid a discretionary dividend, distribution or other discretionary payment on or in respect of, or has at its discretion repurchased, redeemed or otherwise acquired, any of its securities of lower or equal rank, subject to certain exceptions. The 2013 Senior Perpetual Securities have no fixed maturity and are callable only at our option on or after October 29, 2018 at their principal amounts together with any accrued, unpaid or deferred coupon interest payments. After October 29, 2018, the coupon rate will be reset every five calendar years to a rate of interest of expressed as a percentage per annum equal to the sum of (a) the initial spread of 5.312 per cent, (b) the U.S. Treasury Rate, and (c) a margin of 5.00 per cent per annum. While any coupon interest payments are unpaid or deferred, we, Chalco Hong Kong, and the Issuer shall not, subject to certain exceptions, declare or pay any discretionary dividends or make distributions or similar discretionary payments in respect of, or at its discretion repurchase, redeem or otherwise acquire for any consideration any of its securities of lower or equal rank.

On April 10, 2014, the Issuer issued US\$400 million senior perpetual securities at an initial interest rate of 6.25% ("2014 Senior Perpetual Securities"). The proceeds from issuance of 2014 Senior Perpetual Securities after deduction of issuance costs is RMB2,461.8 million. The proceeds will be on-lent to us and any of our subsidiaries for general corporate use. Coupon payments of 6.25% per annum on the 2014 Senior Perpetual Securities are paid semi-annually on April 29 and October 29 in arrears from April 17, 2014 and may be deferred at the discretion of the Group. The first coupon payment date was April 29, 2014. The 2014 Senior Perpetual Securities have no fixed maturity and are callable only at our option on or after April 17, 2017 at their principal amounts together with any accrued, unpaid or deferred coupon interest payments. After April 17, 2017, the coupon rate will be reset to a percentage per annum equal to the sum of (a) the initial spread of 5.423 per cent, (b) the U. S. Treasury Rate, and (c) a margin of 5.00 per cent. per annum. While any coupon interest payments are unpaid or deferred, we, the subsidiary 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.

#### Restriction on Cash Dividends

Our PRC subsidiaries are required to set aside a certain amount of their retained profits each year, if any, to fund certain statutory reserves and these reserves may not be distributed as cash dividends. In addition, when our subsidiaries incur debts on their own behalf, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us. Our directors are of the view that we will continue to be able to meet our borrowing payment obligations as they fall due from cash generated from our operating activities.

## Capital Expenditures and Capital Commitments

The following table sets forth our capital expenditures by operating segment for continuing operations and discontinued operation for the years ended 2012, 2013 and 2014, and the capital expenditures of each segment as a percentage of our total capital expenditures for the periods indicated:

Vanr	Ended	December 31	
rear	chaea	December 5 L	_

	2012	2	2013	3	2014	
Continuing operations	RMB	%	RMB	`	RMB\$ llions, excercentage)	ept
Alumina	4,243.3	44.1	4,217.7	42.6	3,518.0	41.8
Primary aluminium	4,604.8	47.8	3,316.5	33.5	2,323.1	27.6
Trading	48.5	0.5	46.3	0.5	119.0	1.4
Energy	90.0	0.9	2,059.9	20.8	2,373.9	28.2
Corporate and others	180.8	1.9	130.6	1.3	82.0	1.0
Discontinued						
operation	458.8	4.8	135.3	1.3	_	-
-						
Total	9,626.2	100.0	9,906.3	100.0	8,416.0	100.0

90

In 2014, we spent approximately RMB7,748 million of our capital expenditures primarily in construction of mining areas, capacity expansion and technology upgrading, energy saving and consumption reduction, environmental governance, resources acquisition and technological research and development.

Our capital expansion plan for 2015 requires a total of approximately RMB9.8 billion in capital expenditures for construction of mining areas, capacity expansion and technology upgrading, which will be spent in Sanmenxia mining project, Wangwa mining project, Mao Chang mining project and Qingzhen aluminua project, among others.

As of December 31, 2014, our capital commitment for investment in property, plant and equipment amounted to RMB46,982.4 million, of which those contracted but not provided for amounted to RMB12,624.0 million and those authorized but not contracted for amounted to

RMB34,358.4 million.

As of December 31, 2014, our commitment under operating leases amounted to RMB19,144.0 million, of which amount payable within one year was RMB 556.7 million, amount payable from one to five years was RMB2,310.4 million and amount payable after five years was RMB16,276.9 million.

As of December 31, 2014, our commitments to make capital contribution to our associates and joint ventures amounted to RMB1,177 million, comprised of the capital contributions of RMB753 million to Guangxi Huazheng Aluminum Co., Ltd., RMB320 million to Huaneng Ningxia Energy Co., Ltd., RMB75 million to Guizhou Chalco Hengtaihe Mining Co., Ltd. and RMB29 million to Shanxi Chalco Taiyue New Materials Co., Ltd., respectively.

We expect to use primarily operating cash flow in meeting such commitments with the shortfall to be satisfied by proceeds of bank loans, short-term and long-term bonds and medium-term notes.

#### C. RESEARCH AND DEVELOPMENT

Our department of science and technology management coordinates the research and development efforts undertaken at our Research Institute and technology centers at our plants. The Research Institute, the only organization in China dedicated to aluminum smelting research, is responsible for the research and development of technologies for our operations. The technology centers at our plants focus on providing engineering solutions and applying our developed technologies. Each of the plants also conducts operational testing and pilot experimentation relating to various research and development topics. Although we collaborate with universities and other research institutions in China on some of our projects, we generally do not outsource our research and development.

Our total expenditure for research and development for continuing operations was approximately RMB184.7 million, RMB193.6 million and RMB293.8 million for 2012, 2013 and 2014, respectively.

91

#### D. TREND INFORMATION

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the period from January 1, 2014 to December 31, 2014 that are reasonably

likely to have a material adverse effect on our revenue, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

#### E. OFF-BALANCE-SHEET ARRANGEMENTS

There are no material off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

## F. TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table summarizes our contractual obligations and commercial commitments for the periods indicated as of December 31, 2014:

	Payment due by period							
	Total	Within 1 year	1 to 2 years	2 to 5 years	Thereafter			
	(RMB in millions)							
Finance lease payable,								
including current portion	1,673.1	318.1	444.1	910.9	-			
Long-term bank and other								
loans,	21.046.2	<i>( 550 0</i>	2 221 1	11.704.1	10.050.0			
including current portion	31,946.3	6,572.9	3,331.1	11,784.1	10,258.3			
Long-term bonds	2,000.0	-	-	2,000.0	-			
Medium-term notes and								
bonds, including current portion	20,300.0	4,000.0	6,900.0	9,400.0				
Short-term bonds	23,000.0	23,000.0	0,900.0	9,400.0	_			
Short-term bank and other	23,000.0	25,000.0	_	_	_			
loans	40,792.7	40,792.7	_	_	_			
Interest payables for	10,752.7	10,752.7						
borrowings	12,383.5	5,783.1	2,516.3	3,488.0	596.1			
Financial liabilities at fair	,	- ,	,	-,				
value								
through profit or loss	29.4	29.4	-	-	-			
Financial liabilities included								
in other current				-				
payables and accrued								
liabilities	8,277.7	8,277.7	-	-	-			
Financial liabilities included								
in other								
non-current liabilities	1,170.2	-	229.7	581.3	359.2			

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Trade and notes payables	15,748.4	15,748.4	-	-	-
Operating leases	19,144.0	556.7	580.6	1,729.8	16,276.9
Subtotal	176,465.3	105,079.0	14,001.8	29,894.1	27,490.5
		-			
~	10 (010	27/1	37/1	27/1	27/4
Capital commitments Commitments for capital	12,624.0	N/A	N/A	N/A	N/A
contribution	1,177.1	N/A	N/A	N/A	N/A
Total	190,266.4				

#### G. Safe Harbor

See "Forward-Looking Statements" at the beginning of this annual report.

92

# ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

### A. DIRECTORS AND SENIOR MANAGEMENT

#### Directors

The fifth session of our Board currently consists of nine directors, including four executive directors, two non-executive director and two independent non-executive directors. In accordance with our Articles of Association, our affairs are managed by our Board. The business address of each of our directors is No. 62 North Xizhimen Street, Hai Dian District, Beijing, People's Republic of China, 100082.

We follow our home country practice in relation to the composition of our Board in reliance on the exemption provided under Section 303A.00 of the NYSE Corporate Governance Rules available to foreign private issuers. Our home country practice does not require a majority of directors of a listed company to be independent directors. As such, the majority of our directors are not independent within the meaning of NYSE Corporate Governance Rules.

The table and discussion below set forth information concerning our directors who served on our Board during the year ended December 31,

2014 and up to date of this Annual Report.

Name	Age	Positions with the Company	
<b>Executive Directors</b>			
		Director and Chairman of the	
Ge Honglin <sup>(1)</sup>	58	Board	
		Director and Chairman of the	
Xiong Weiping <sup>(1)</sup>	58	Board (resigned)	
Luo Jianchuan	51	Director and President	
		Director and Senior Vice	
Liu Xiangmin	52	President	
Jiang Yinggang	51	Director and Vice President	
<b>Non-executive Directors</b>			
Liu Caiming <sup>(2)</sup>	52	Non-executive Director	
Wang Jun	49	Non-executive Director	
		Non-executive Director and	
		Vice Chairman of the Board	
Sun Zhaoxue <sup>(3)</sup>	52	(resigned)	
Independent Non-execu	ıtive		
Directors			
		Independent Director	
Wu Jianchang (4)	75	(resigned)	
Ma Si-hang, Frederick	63	Independent Director	
		Independent Director	
Wu Zhenfang <sup>(5)</sup>	63	(resigned)	
Chen Lijie <sup>(6)</sup>	60	Independent Director	

- (1) On December 18, 2014, Mr. Xiong Weiping resigned as Chairman of the Board and executive director due to job re-designation. On February 26, 2015, Mr. Ge Honglin was elected as the Chairman of the Board and executive director.
- (2) On March 18, 2014, Mr. Liu Caiming resigned as a non-executive director and on February 26, 2015, he was re-elected as a non-executive director.
- (3) At our 2013 annual general meeting on June 27, 2014, Mr. Sun Zhaoxue was elected as a non-executive director at the fifth session of the Board. Due to investigation by the competent authorities, Mr. Sun Zhaoxue resigned from the positions of non-executive director and vice chairman of the Board, with effect from September 16, 2014.

On June 27, 2014, Mr. Wu Jianchang resigned as an independent non-executive director due to his age, with effect from February 26, 2015.

- (5) Mr. Wu Zhenfang was subject to an investigation by the competent authority on April 2, 2015. Mr. Wu Zhengfang promptly resigned from the position as independent non-executive director and member of the audit committee, member of the nomination committee, chairman of the remuneration committee and member of the developing and planning committee of the Board on April 2, 2015.
- (6) On February 26, 2015, Ms. Chen Lijie was elected as an independent non-executive director.

93

#### **Executive Directors**

#### Ge Honglin,

aged 58, serves as the chairman and executive director of the Board and chairman of the nomination committee of the Board. Mr. Ge has been serving as chairman of the Board since February 26, 2015. Mr. Ge graduated from University of Science & Technology Beijing majoring in metal materials and heat treatment (being engaged in doctoral dissertation research in University of Windsor of Canada from 1987 to 1989) and obtained a doctoral degree in engineering. He is a professor level senior engineer and has more than 20 years of experience in metallurgic industry. Mr. Ge has conducted thorough research on fields such as metal materials, corporate governance and city affairs. He has acquired extensive theoretical knowledge and governmental and corporate working experience. He worked at Shanghai Steel Research Institute and served as vice director of research office, division chief of science research, assistant director and vice director. He acted as vice manager (temporary post) of Shanghai 5th Steel Factory, director and vice president of Shanghai Metallurgical Holding (Group) Company, chairman of the board of Shanghai No. 5 Steel Group Company, director, vice general manager of Shanghai Baosteel Group Corporation, director and officer of the technology centre of Shanghai Baogang Research Institute and director of Group Planning Division, Chairman of the board of Shanghai No. 5 Steel Group Company and vice Mayor, acting Mayor and Mayor of Chengdu Municipal People's Government and chairman of Chinalco.

#### Luo Jianchuan,

aged 51, serves as an executive director on our Board and our president. He has been employed by us since 2001. Mr. Luo graduated from

Kunming University of Science and Technology in 1985, majoring in mining, holds a doctorate degree from Central South University and is a professor-grade senior engineer. He has long engaged in corporate management of non-ferrous metals and thus has extensive professional experience and strong management skills in those fields. Mr. Luo formerly served as an engineer of the Lead and Zinc Bureau of China Non-ferrousn Metals Industry Corporation, the manager of Haikou Nanxin Industry & Commerce Corporation, assistant to the general manager of Jinpeng Mining Development Corporation, deputy general manager and general manager of Beijing Xinquan Tech-trading Corporation, assistant to the general manager of China Non-Ferrous Metals Industry Trading Group Corporation, deputy chief of the Trading Division of China Copper, Lead & Zinc Group Corporation, general manager of China Aluminum International Trading Corporation Limited, and formerly served as the general manager of the Operations and Sales Division, vice president and senior vice president of us.

#### Liu Xiangmin,

aged 52, serves an executive director on our Board and our senior vice president. He has been employed by us since 2001. Mr. Liu graduated from Central South University of Industry in 1982, majoring in non-ferrous metallurgy; he has a doctorate degree from Central South University and is a professor-grade senior engineer. He has long engaged in non-ferrous metal metallurgy and corporate management and has accumulated extensive and professional experience. Mr. Liu had previously served as the deputy head and head of the Alumina branch of Zhongzhou Aluminum Plant, deputy head of Zhongzhou Aluminum Plant, general manager of our Zhongzhou Branch and our vice president.

#### Jiang Yinggang,

aged 51, has served as an executive director on our Board and has been our vice president since 2007. He has been employed by us since 2001. On June 27, 2013, Mr. Jiang was elected as an executive director on our Board. Graduated in 1983 from Central South University of Industry 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. He has long engaged in production operation and corporate management of production enterprises and has extensive 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 general manager and general manager of Qinghai Aluminum Company Limited, and general manager of our Qinghai branch.

#### Non-Executive Directors

#### Liu Caiming,

aged 52, serves as a non-executive Director on our Board. He has been employed by us since 2011. He resigned in 2014 and was re-appointed in 2015. He graduated from Fudan University majoring in political economics and obtained a doctoral degree in Economics. He is a senior accountant and engaged in the financial and accounting industry for more than 30 years. Mr. Liu has extensive experience in corporate management and financial management. He had subsequently served as deputy head and head of the Finance Department of China Non-ferrous Metals Foreign-Engineering Corporation, deputy general manager of China Non-ferrous Metals Construction Group Limited, deputy general manager of China Nonferrous Construction Group Limited, director and deputy general manager of China Non-ferrous Metal Industry's Foreign Engineering and Construction Co., Ltd., and deputy general manager of China Nonferrous Metal Mining and Construction (Group) Co., Ltd. Mr. Liu has also acted as titular deputy head of Department of Finance of Yunnan Province, director of SASAC of Yunnan Provincial People's Government and assistant to the governor of Yunnan Province and director of SASAC Yunnan. From January 2007 to February 2011, Mr. Liu acted as deputy general manager of Chinalco, during which he acted as chairman of Yunnan Copper Industry (Group) Co., Ltd., and president of China Copper Co., Ltd. He acted as our senior vice president and chief financial officer of since February 23, 2011 and as our executive director of since May 31, 2011. Mr. Liu resigned as our executive director, chief financial officer and senior vice president and was re-designated as non-executive Director on March 8, 2013. He resigned as our non-executive director on March 18, 2014 and was re-appointed as non-executive director on our Board on February 26, 2015.

#### Wang Jun,

aged 49, has been serving as a non-executive director on our Board since June 27, 2013. Mr. Wang graduated from Huazhong Institute of Engineering with a degree of industrial and civil construction. He has extensive experience in financial and corporate management. Mr. Wang formerly served as engineer in the engineering department of Babcock & Wilcox Beijing Company Ltd.; deputy manager of the real estate development department of China Yanxing Company; senior deputy manager of equity management department and senior manager of business management department, senior manager, deputy general manager, general manager of custody and settlement department in China Cinda Asset Management Co., Ltd and general manager of the equity management department of China Cinda Asset Management Co. Ltd. Mr. Wang currently serves as the business director of China Cinda Asset Management Co., Ltd.

Independent Non-Executive Directors

# Ma Si-hang, Frederick

, aged 63, has been serving as an independent non-executive director on our Board and the chairman of the audit committee of the Board since June 27, 2013. Mr. Ma graduated from University of Hong Kong with a bachelor's degree in Arts. He served as head of Financial Services and the Treasury Bureau of Hong Kong Special Administrative Region in 2002, head of Commerce and Economics Development Bureau in 2007 and resigned in July 2008. He also previously served as the managing director of Great Britain subsidiary of RBC Dominion Securities Inc., managing director and head of Asia Area of Private Banking Department of Chase Bank, executive president of private banking business of JPMorgan Chase & Co. in Asia Pacific, vice chairman and managing director of Kumagai Gumi (Hong Kong) Co., Ltd., chief financial officer and executive director of PCCW Company Limited, and non-executive director of MTR Corporation Ltd. Mr. Ma was awarded the Gold Bauhinia Star (GBS) by the HKSAR government in 2009, and was appointed non-official Justice of the Peace in 2010 by the HKSAR government.

## Chen Lijie,

aged 60, has been serving as an independent non-executive Director since February 26, 2015. 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 successively 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.

95

#### **Supervisors**

Our supervisors are elected to represent our employees and shareholders and serve a term of three years or until the election of their respective successors, whichever is earlier. Our supervisors currently comprise Mr. Zhao Zhao, Mr. Yuan Li and Mr. Zhang Zhankui. Mr. Zhao Zhao was elected at the 2012 annual general meeting held on June 27, 2013 with a term of office expiring at the conclusion of the annual general meeting for the year 2015. Mr. Yuan Li's and Mr. Zhang Zhankui's terms of office were renewed on June 27, 2013.

The table and discussion below set forth certain information concerning our supervisors who served on our supervisory committee during the year ended December 31, 2014 and up to the date of this Annual Report.

Name	Age	Positions with the Company
		Chairman of Supervisor
Zhao Zhao	52	Committee
Yuan Li	56	Supervisor
Zhang Zhankui	56	Supervisor

#### Zhao Zhao,

aged 52, has been serving as the chairman of our supervisory committee since June 27, 2013. Mr. Zhao obtained a bachelor's degree majoring in roadway engineering from Department of Civil Engineering of Nanjing Institute of Engineering and a Ph.D degree in world economics from Beijing Normal University, School of Economics and Management. Mr. Zhao is a senior political engineer. He has extensive experience in, among others, mass work among youth, supervision and discipline inspection, auditing and etc. He successively served as assistant editor and staff in People's Communication Press, full-time deputy secretary of Y.L.C (Youth League Committee) directly under Ministry of Communications, head of publicity department of Y.L.C of Central Government institutions, head of office of Youth League Working Committee of Central Government institutions, standing deputy head of Guoqing Productivity Center, deputy secretary (assistant inspector) of Youth League Working Committee of Central Government institutions, deputy head of mass work department of Central Enterprises Working Committee, deputy secretary of Central Enterprises Youth League Working Committee, deputy head of Bureau of mass work under State-owned Assets Supervision and Administration Commission of the State Council, secretary of Central Enterprises Youth League Working Committee and president of Central Enterprises Youth Union.

#### Yuan Li,

aged 56, serves as our employee representative supervisor and a general manager of our corporate culture department. Mr. Yuan has been employed by us since 2001 and has extensive administrative and management experience. He had formerly served as the manager of the General Management Office, deputy head of the office and head of Department of Research and Investigation of China Non-ferrous Metals Industry Corporation head of the Secretariat and an assistant inspector of the State Bureau of Non-ferrous Metals Industry; and deputy head of the Department of Political and Labour Affairs and Head of the Political Party Department of Chinalco.

#### Zhang Zhankui,

aged 56, is the head of the finance department of Chinalco and has served as our supervisor since 2006. Mr. Zhang is a postgraduate researcher in

economic management and a senior accountant. Mr. Zhang had formerly served as head of the finance division and then the audit division of China General Design Institute for Non-ferrous Metals, the deputy general manager of Beijing Enfei Tech-industry Group, the head of the accounting division of the finance department and the deputy head of the finance department of China Copper Lead & Zinc Group Corporation, the officer-in-charge of asset and finance at our listing office and the head of the capital division of our finance department and the manager of the general division of our finance department and the deputy head of the finance department of Chinalco.

96

## Senior Management

The table and discussion below set forth certain information concerning other member of senior management during the year ended December 31, 2014 and up to the date of this Annual Report.

Name	Age	Positions with the Company
Oigo Cuiling	16	Vice President
Qiao Guiling	46	Vice President and Chief
Xie Weizhi	50	Financial Officer Vice President and Secretary
Xu Bo	50	to the Board

#### Qiao Guiling,

aged 46, serves as our vice president since 2011. Ms. Qiao holds a master's degree in engineering from Jiaozuo Mining Institute where she studied mechanical engineering. Ms. Qiao is a senior engineer with extensive experience in management. Ms. Qiao has served as the deputy director of Jiaozuo City Cryolite Factory, deputy director of the Economic and Trade Commission of Jiaozuo City Zhongzhan District, general manager of Zhongzhan Taishun Co., Ltd., factory director of a Kaolinite plant in Jiaozuo City, general manager of Henan Zhongzhou Holding Group Co., Ltd., vice mayor of the People's Government of Wen County, chairman and general manager of Jiaozuo Wanfang Aluminum Manufacturing Co., Ltd., chairman of Jiaozuo Wanfang Group Co., Ltd. and the general manager of our Henan Branch.

Xie Weizhi,

aged 50, has served as our vice president and chief financial officer since March 8, 2013. Mr. Xie is a senior accountant, graduated from the Guanghua School of Management, Peking University with a master's degree in business administration. Mr. Xie joined Chinalco in February 2011. He previously served as the deputy chief and chief of the accounting division of the finance department and the deputy manager of the finance department of China Offshore Oil Nanhai West Corporation, deputy general manager and general manager of the finance department, and general manager of the treasury department of China National Offshore Oil Corporation, general manager of CNOOC Finance Corporation Limited, and the president of China National Association of Finance Companies. Mr. Xie has been engaged in financial management of large state-owned enterprises for many years and has substantial experience in finance and business management.

Xu Bo,

aged 50, vice president of the Company and the secretary to the Board, serving the Company since March 2011. Mr. Xu graduated from North China University of Water Resources and Electric Power, majoring in hydraulic structure engineering, and obtained a master's degree in engineering. He also obtained a Ph.D. degree in economics from Renmin University of China. He is a senior engineer. Mr. Xu has extensive experience in mergers and acquisitions, capital operation, corporation management, and enjoys a high reputation in energy sectors such as coal and electric power. He formerly served as deputy head of hydropower and operations department and office manager of Power and Machinery Bureau; general manager and assistant to the head of the bureau in Steel Structure Department of China Huadian Power Station Equipment Engineering Group Corporation; deputy general manager of China Huadian Power Station Equipment Engineering Group Corporation, standing deputy general manager and general manager of China Huadian Engineering Co., Ltd.; deputy general manager of Huadian Coal Industry Group Company Limited; head of China Huadian Corporation Shaanxi Office; general manager of China Huadian Corporation Shaanxi Branch; executive director and general manager of Huadian Shaanxi Energy Company, the assistant to the president of the Company and executive-director and general manager of Chalco Energy Co., Ltd.

97

#### B. COMPENSATION

**Executive Compensation** 

Executive directors are entitled to a director's fee, performance bonuses and welfare benefits provided under the relevant PRC laws and regulations. Non-executive directors are entitled only to a director's fees. The aggregate amount of cash compensation paid by us to our directors in 2014 for services performed in connection with their respective capacities above was approximately RMB3.0 million. The aggregate amount of cash compensation paid by us to our senior management who are not members of our Board in 2014 was approximately RMB1.7 million, respectively. Our executive directors and supervisors who are employees also receive compensation in the form of housing allowances, other allowances and benefits and contributions to their pension plans. Directors receive fees for their services. None of the service contracts of our directors provide benefits to our directors upon their termination.

Details of the emoluments paid to our directors and supervisors during the year ended December 31, 2014 are as follows:

Name of Directors and Supervisors	Fees	Salary	Bonus	Pension	Total
	RMB('000)	RMB('000)	RMB('000)	RMB('000)	RMB('000)
Executive Directors					
Xiong Weiping	-	606.0	-	63.0	669.0
Luo Jianchuan	-	528.0	-	63.0	591.0
Liu Xiangmin	-	515.0	-	63.0	578.0
Jiang Yinggang	-	491.0	-	63.0	554.0
Non-Executive Directors					
Liu Caiming	_	-	-	-	-
Wang Jun	150.0	-	-	-	150.0
Sun Zhaoxue	-	-	-	-	-
Independent Non-Executive Directors					
Wu Jianchang	94.0	_	_	_	94.0
Ma Si-hang, Frederick	189.0	_	_	_	189.0
Wu Zhenfang	189.0				189.0
	622.0	2,140.0		252.0	3,014.0
	022.0	2,140.0			3,014.0
Supervisors Zhao Zhao <sup>(6)</sup>					
Yuan Li	-	450.0	_	64.0	514.0
Zhang Zhankui	-	TJU.U	_	U <del>1</del> .U	J17.U
Zhang Zhunkui					

		450.0		64.0	514.0
Total	622.0	2,590.0	-	316.0	3,528.0

#### Senior Management Incentive System

In order to better provide incentives for our senior management and improve our shareholders' value, we adopted a special compensation system for our senior management designed to align our senior management's financial interests with our operating performance. Under this system, the senior management's compensation consists of the following components:

- \* basic salaries;
- \* performance bonuses;
- \* welfare benefits; and
- \* incentive bonuses.

98

#### C. BOARD PRACTICES

#### **Board of Directors**

All of our directors and supervisors serve a term of three years or until such later date as their successors are elected or appointed. Directors and supervisors may serve consecutive terms. Each of our directors and supervisors has entered into a service contract with us, none of which can be terminated by us within one year without payment of compensation (other than statutory compensation). There were no arrangements providing for benefits upon termination of our directors, supervisors or other senior management personnel. One of the supervisors is an employee representative appointed by our employees and the rest are appointed by the shareholders. The following table sets forth the number of years our current directors have held their positions and the expiration of their current term.

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Name	Held Position Since	Expiration of Term
Ge Honglin	February 26, 2015	June 2016
Luo Jianchuan	June 27, 2013	June 2016
Liu Xiangmin	June 27, 2013	June 2016
Jiang Yinggang	June 27, 2013	June 2016
Liu Caiming	February 26, 2015	June 2016
Wang Jun	June 27, 2013	June 2016
Ma Si-hang, Frederick	June 27, 2013	June 2016
Chen Lijie	February 26, 2015	June 2016

#### **Audit Committee**

As at the date of this Annual Report, our audit committee consists of two independent non-executive directors, namely, Mr. Ma Si-hang, Frederickand and Ms. Chen Lijie. Mr. Ma Si-hang, Frederick is chairman of the audit committee. Mr. Wu Jianchang served as a member of our audit committee before he resigned from this position on February 26, 2015. Mr. Wu Zhenfang served as a member of our audit committee before he resigned from this position on April 2, 2015 when he became subject to an investigation by the competent authority.

Due to Mr. Wu Zhenfang's resignation, the number of members of our audit committee does not satisfy the requirements of Rule 10A-3 of the Exchange Act and NYSE Rule 303A.06 relating to audit committees, which requires that the audit committee shall comprise at least three independent non-executive directors. As the date of this Annual Report, we are in the process of identifying suitable candidate to fill the vacancy in the Board and the audit committee. The primary duties of our audit committee as set out in the committee charter are to review our annual and interim financial reports, review and approve the selection of and remuneration paid to our independent auditors, approve audit and audit-related services, approve related party transactions, supervise our internal financial reporting, including our internal controls and disclosure controls and procedures, supervise our internal and external auditors and review management policies.

#### Remuneration Committee

As at the date of this Annual Report, our remuneration committee consists of one independent non-executive director, Mr. Ma Si-hang, Frederick and a non-executive director, Mr. Liu Caiming. Mr. Liu Caiming served as a member of our remuneration committee before he resigned from the position as a non-executive director on March 18, 2014 and serves as a member of our remuneration committee after he was re-elected as a non-executive director on February 26, 2015. Mr. Wu Zhenfang served as the chairman of our remuneration committee before he resigned from this position on April 2, 2015.

The primary duties of our remuneration committee as set out in the committee charter include reviewing compensation policies and performance appraisals with respect to the directors and senior management. In 2014, the remuneration committee convened at one meeting, to consider and approve remuneration standards for 2014 for our directors, supervisors and other senior management members.

We follow our home country practice in relation to the composition of our remuneration committee in reliance on the exemption provided under NYSE Corporate Governance Rule 303A.00 available to foreign private issuers. Our home country practice does not require us to establish a remuneration committee which must be composed entirely of independent directors.

99

#### **Nomination Committee**

As at the date of this Annual Report, our nomination committee consists of two executive directors, namely Mr. Ge Honglin and Mr. Luo Jianchuan, and two independent non-executive directors, namely Mr. Ma Si-hang, Frederick and Ms. Chen Lijie. Mr. Ge Honglin is the chairman of the nomination committee. Mr. Xiong Weiping served as a member of our nomination committee before he resigned as executive director on December 18, 2014. Mr. Wu Jianchang served as the chairman of our nomination committee before he resigned as non-executive director on February 26, 2015. Mr. Wu Zhenfang served as a member of our nomination committee before he resigned from this position on April 2, 2015.

The primary duties of our nomination committee as set out in the committee charter include reviewing and recommending candidates for independent directors and members of the Board committees, approving the terms of the directors' service contracts and overseeing the appointment and removal of senior executives.

We follow our home country practice in relation to the composition of our nomination committee in reliance on the exemption provided under NYSE Corporate Governance Rule 303A.00 available to foreign private issuers. Our home country practice does not require us to establish a nomination committee which must be composed entirely of independent directors.

**Development and Planning Committee** 

As at the date of this Annual Report, our development and planning committee consists of three executive directors, namely Mr. Ge Honglin, Mr. Luo Jianchuan and Mr. Jiang Yinggang. Mr. Ge Honglin is the chairman of the committee. Mr. Xiong Weiping served as the chairman of our development and planning committee before he resigned as exetutive director on December 18, 2014. Mr. Wu Jianchang served as a member of our development and planning committee before he resigned on February 26, 2015. Mr. Wu Zhenfang served as a member of our development and planning committee before he resigned from this position on April 2, 2015. In accordance with the committee charter, the committee reviews and assesses our strategic plans for development, fiscal budgeting, investment, business operations and investments returns.

#### Occupational Health and Safety and Environmental Committee

Our occupational health and safety and environmental committee consists of two executive directors Mr. Liu Xiangmin and Mr. Jiang Yinggang and one non-executive director, Mr. Wang Jun, with Mr. Liu Xiangmin as the chairman. This committee considers our annual planning on health, environmental protection and safety, supervises our implementation of the planning on health, environmental protection and safety initiatives, inquiries into serious incidents and inspecting and supervising over the handling of such incidents and makes recommendations to the Board on major decisions on health, environmental protection and safety.

#### **Supervisory Committee**

Our supervisory committee consists of three supervisors, with one supervisor being elected from the staff as a representative of the employees. Our shareholder representative supervisors, namely, Mr. Zhao Zhao and Mr. Zhang Zhankui, were appointed at the annual general meeting held on June 27, 2013. Mr. Zhao Zhao serves as chairman of the supervisory committee. In the election of employee representatives held in the same month, Mr. Yuan Li was re-elected as the employee representative supervisor of the fifth session of the supervisory committee. Following are the primary duties of our supervisory committee:

100

- \* inspection of implementation of resolutions of the general meetings;
- \* inspection of legal compliance of our operations;
- \* inspection of our financial activities;

- \* inspection of the utilization of proceeds raised by us;
- \* inspection of the acquisitions and disposals of our assets;
- \* inspection of our connected transactions; and
- \* review of self-assessment report on internal control.

#### D. EMPLOYEES

As of December 31, 2012, 2013 and 2014, we had approximately 97,990, 90,207 and 75,749 employees, respectively. The number of our employees significantly decreased from 2013 to 2014, which was mainly due to the termination of labor relationship through negotiation, retirement and personnel reposition. The table below sets forth the number of our employees by function as of the periods indicated:

As of December 31,

	2012		2013		2014	
	(%)	_	(%)		(%)	
Function						
Alumina production	42,382	43.3	50,970	56.5	31,456	41.53
Primary aluminum						
production	38,437	39.2	29,158	32.3	28,010	36.98
Aluminum						
fabrication(1)	6,306	6.4	-	-	-	-
Mining	4,018	4.1	3,698	4.1	3,106	4.1
Research and						
development	771	0.8	779	0.9	680	0.90
Sales and marketing	706	0.7	659	0.7	561	0.74
Energy	-	-	-	-	7,755	10.24
Management and						
others <sup>(2)</sup>	5,370	5.5	4,943	5.5	4,181	5.51
Total	97,990	100.0	90,207	100.0	75,749	100
	,		,		,	

<sup>(1)</sup> We disposed of substantially all of our aluminum fabrication operations in June 2013.

(2) Excluding our management personnel for alumina production, primary aluminum production and aluminum fabrication.

101

Location	Employees	% of Total
	0.122	12.06
Shandong Shandong	9,133	12.06
Shandong branch	7,144	9.43
Shandong Huayu	1,989	2.63
Henan	14,425	19.04
Henan branch	8,207 5,529	10.84
Zhongzhou branch	5,538	7.31
Research Institute	680	0.9
Guizhou	7,073	9.34
Guizhou branch	4,945	6.53
Zunyi Aluminum	1,041	1.37
Zunyi Alumina	1,087	1.44
Guangxi	4,295	5.67
Guangxi branch	4,295	5.67
Shanxi	12,858	16.97
Shanxi branch	8,448	11.15
Shanxi Huasheng	1,728	2.28
Shanxi Huaze	1,897	2.5
Shanxi Huaxing	785	1.04
Gansu	7,352	9.71
Lanzhou branch	3,295	4.36
Gansu Hualu	1,404	1.85
Liancheng branch	2,653	3.5
Liaoning	1,565	2.07
Fushun Aluminum	1,565	2.07
Qinghai	4,167	5.5
Qinghai branch	4,167	5.5
Chongqing	1,056	1.39
Chongqing branch	1,056	1.39
Inner Mongolia	5,349	7.06
Baotou Aluminum	5,349	7.06
Ningxia	7,755	10.24
Ningxia Energy	7,755	10.24
Others (including employees of branches and		
subsidiaries under construction)	490	0.65
Headquarters	231	0.3

Total 75,749 100.0

We have workers' unions at the plant level that protect employees' rights and welfare benefits, organize educational programs, encourage employee participation in management decisions and mediate disputes between individual employees and us. All employees are union members. We have not experienced any strikes or other labor disturbances that have interfered with our operations, and we believe that we maintain good relationships with our employees.

The remuneration package of our employees includes salary, bonuses and allowances. Employees also receive welfare benefits including medical care, housing subsidies, childcare and education, retirement and other miscellaneous items.

In accordance with applicable PRC regulations, we participate in pension contribution plans organized by provincial and municipal governments, under which each of our plants is required to contribute an amount equal to a specified percentage of its employees' salaries, bonuses and various allowances. The amount of contribution as a percentage of the employees' salary is, on average, approximately 20% depending in part on the location of the plant. We have made all required pension contributions up to December 31, 2014. Retirees who retired prior to the date of the reorganization will have their pensions paid out of the pension plans established by the PRC government. We provide to our employees various social welfare benefits through various institutions owned by Chinalco and its other affiliates or through third parties.

102

#### E. SHARE OWNERSHIP

As of the date of this annual report, none of our directors, supervisors or senior management owns any interest in any shares or options to purchase our shares.

# ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

#### A. MAJOR SHAREHOLDERS

We are a joint stock limited company organized under the laws of the PRC. Our parent company, Chinalco, a state-owned enterprise, beneficially owns 41.33% of our outstanding common shares directly and indirectly through its controlled entities. Chinalco holds a significant portion of our domestic shares in the form of state legal person shares, which do not have voting rights different from our other shares. Chinalco has substantial influence over our management, policies and corporate actions and can exercise all rights as our controlling shareholder subject to the relevant laws, rules and regulations. Approximately 58.67% of our total outstanding common shares are held by public shareholders, of which 29.16% and 29.51% are owned by holders of H Shares and A Shares, respectively. The following table sets forth information regarding ownership of our issued and outstanding capital stock as of December 31, 2014. The table includes all persons who are known by us to own, either as beneficial owners or holders of record, five percent or more of any class of shares.

As of December 31, 2014

Number of shares	% of issued total	% of
(in millions)	share capital <sup>(5)</sup>	respective share class <sup>(6)</sup>
5,589.36(L) <sup>(3)</sup>	41.33(L)	58.34(L)
1,143.58(L)	8.46(L)	29.00(L)
212.20(L)	1.57(L)	5.38(L)
61.43(S) <sup>(4)</sup>	0.45(S)	1.56(S)
	shares (in millions)  5,589.36(L) (3)  1,143.58(L)  212.20(L)	shares total share capital <sup>(5)</sup> 5,589.36(L) <sup>(3)</sup> 41.33(L)  1,143.58(L)  8.46(L)  212.20(L)  1.57(L)

<sup>(1)</sup> Including 5,214,407,195 A Shares held directly by Chinalco, 301,217,795 A Shares held by Baotou Aluminum (Group) Co., Ltd.,

62,472,482 A Shares held by Lanzhou Aluminum Factory, 4,119,573 A Shares held by Guiyang Aluminum Magnesium Design and Research Institute and 7,140,254 A Shares held by Shanxi Aluminum Plant. Baotou Aluminum (Group) Co., Ltd., Lanzhou Aluminum Factory, Guiyang Aluminum Magnesium Design and Research Institute and Shanxi Aluminum Plant are controlled by Chinalco.

- (2) These interests were held directly by various corporations controlled by BlackRock, Inc.. Among the aggregate interests in the long position in H shares, 3,256,000 H shares were held as derivatives. Among the aggregate interests in the short position in H shares, 7,587,975 H shares were held as derivatives.
- (3) The letter "L" denotes a long position.
- (4) The letter "S" denotes a short position.
- (5) The number of our total issued shares is 13,524.49 million.
- (6) The total number of our A shares is 9,580.52 million and the total number of our H shares is 3,943.97 million.

We are not aware of any arrangement that may at a subsequent date result in a change of control of Chalco.

On April 24, 2007, we issued 1,236,731,739 A Shares by way of share exchange with the other shareholders of Shandong Aluminum and Lanzhou Aluminum, including a subsidiary of Chinalco, to acquire the existing issued shares not held by us. On the same date, China Orient Asset Management Corporation, a PRC state-owned financial enterprise, transferred all of its equity interest in us to Chinalco and ceased to be our shareholder. On December 28, 2007, we issued 637,880,000 A Shares to a subsidiary of Chinalco in exchange for 100% equity in Baotou Aluminum.

To the best of our knowledge, as of December 31, 2014, all of the outstanding ADSs were held by 69 United States holders of record.

As an owner of at least 30% of our issued and outstanding shares, the parent company is deemed a controlling shareholder and therefore may not exercise its voting rights with respect to various matters related to our shares in a manner prejudicial to the interests of our other shareholders. See "Item 10. Additional Information - B. Memorandum and Articles of Association." In accordance with our Articles of Association, each share of our capital stock has one vote and the shares of the same class have the same rights. Other than the foregoing restrictions, the voting rights of our major holders of domestic and H Shares are identical to those of any other holders of the same class of shares. Holders of domestic shares and H Shares are deemed to be shareholders of different classes for some matters, which may affect their respective interests. Other than the foregoing,

holders of H Shares and domestic shares are entitled to the same voting rights.

103

#### B. RELATED PARTY TRANSACTIONS

Connected Transactions under Hong Kong Listing Rules

Under the Listing Rules, transactions between connected persons and us, or connected transactions, generally must be reported to the Hong Kong Stock Exchange, announced to the public and/or approved by shareholders unless the foregoing requirement are waived by the Hong Kong Stock Exchange or exempted under the Listing Rules. Each year our independent non-executive directors must review our non-exempt continuing transactions and confirm that these transactions have been entered into:

- (i) in the ordinary and usual course of our business;
- (ii) the terms of the transactions are fair and reasonable as far as our shareholders are concerned;
- (iii) either on normal commercial terms or, if there are not sufficient comparable transactions to judge whether they are on normal commercial terms, on terms no less favorable to us than terms available to or from (as appropriate) independent third parties; and
- (iv) in accordance with the relevant agreement governing them on terms that are fair and reasonable and in the interests of our shareholders as a whole.

Although the definition of connected transactions is not synonymous with the definition of related party transactions, the concepts are sufficiently similar that the description of our connected transactions would satisfy disclosure requirements under U.S. securities laws.

The following table sets forth the details of our material connected transaction for the year ended December 31, 2014:

Agreement	Nature	Term of the Agreement	Transaction Amount in 2014	Annual Cap for 2014
			(RMB in millions)	(RMB in millions)

Continuing
Connected
Transactions

Connected Transactions				
Comprehensive Social and Logistics Services Agreement (Counterparty: Chinalco)		The original agreement was entered on November 5, 2001 and expired on December 31, 2012. Pursuant to the supplementary agreement entered into in 2012, the term was renewed from January 1, 2013 for a term of three years.	313	550
General Agreement on Mutual Provision of Production Supplies and Ancillary Services (Counterparty: Chinalco)	We purchase from Chinalco ancillary production supplies and services which include, among other things, various raw materials required in alumina and primary aluminum production, transportation and loading services and production supporting services.	The original agreement was entered on November 5, 2001 and expired on December 31, 2012. Pursuant to the supplementary agreement entered into in 2012, the term was renewed from January 1, 2013 for a term of three years.	3,314	4,000
	Chinalco purchases from us alumina, primary aluminum, scrap materials, pitch and other similar supplies and supporting services and ancillary		6,586	7,500

services such as

electricity supply, gas, heat and water, repair, measurement, quality testing, spare parts, production transportation, steam and other similar services.

Xinan Aluminum Mutual Provision of Products and Services Framework Agreement (Counterparty: Xinan Aluminum)\*

We purchase from Xinan Aluminum products and services including among other things, supplementary aluminum fabrication products, equipment, water, electricity and gas, maintenance and repair services, unloading, transportation and storage services.

The original agreement was entered on October 20, 2008 and expired on December 31, 2012. Pursuant to the agreement entered into in 2012, the term was renewed from January 1, 2013 for a term of three years.

Xinan Aluminum purchases from us products including among other things, aluminum alloy sheets or rolls, aluminum fabrication scraps and primary aluminum and aluminum alloy ingots.

845 7,500

7,600

104

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Mineral Supply Agreement (Counterparty: Chinalco)	Chinalco provides us with bauxite and limestone from several mines that it operates. Chinalco must not provide bauxite and limestone to any third parties before meeting our bauxite and limestone requirements.	and expired on December 31, 2012. Pursuant to the supplementary agreement entered		
Provision of Engineering, Construction and Supervisory Services Agreement (Counterparty: Chinalco)	Chinalco provides us with certain engineering, construction and supervisory services at the state guidance price and, where there is no state guidance price, at market price. Such services are mainly provided by subsidiaries of Chinalco including China Aluminum International Engineering Corporation Limited.	The original agreement was entered on November 5, 2001 and expired on December 31, 2012. Pursuant to the supplementary agreement entered into in 2012, the term was renewed from January 1, 2013 for a term of three years.	988	13,000
Land Use Rights Leasing Agreement (Counterparty: Chinalco)	Chinalco leases 470 parcels of land covering an aggregate area of approximately 61.2 million square meters and spanning across eight provinces in the PRC to us.	The original agreement was entered on November 5, 2001 for a term of 50 years, expiring on June 30, 2051.	507	1,100
Buildings and Office Buildings	We lease 59 buildings with an	The original agreement was	55	110

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Leases Agreements (Counterparty: Chinalco)	aggregate gross floor area of 62,189 square meters to Chinalco. Chinalco leases 100 buildings with an aggregate gross floor area of 273,637 square meters to us.	entered on November 5, 2001 for a term of 20 years, expiring on June 30, 2020		
	China Aluminum Development Company Limited, a wholly-owned subsidiary of Chinalco, leases to us an office building with an area of 23,551.43 square meters located at Xizhimen, Beijing, as our headquarters.	The original agreement was entered on October 15, 2011 and expired on December 31, 2012. Pursuant to the supplementary agreement entered into in 2012, the term was renewed from January 1, 2013 for a term of three years.		
Framework Agreement for Aluminum Products Fabrication Services (Counterparty: Chinalco)*	Shandong Aluminum Company and Qinghai Aluminum Company, wholly-owned subsidiaries of Chinalco, provide alumina fabrication and production services to us.	The original agreement was entered on February 28, 2011 and expired on December 31, 2012. Pursuant to the supplementary agreement entered into in 2012, the term was renewed from January 1, 2013 for a term of three years.	76	330
Financial Services Agreement (Counterparty: Chinalco Finance)	Chinalco Finance has agreed to provide us with deposit services, credit services and	The original agreement was entered on August 26, 2011 and expired on August	4,890 (largest amount of daily deposit	5,000 (daily cap of deposit balance during the

25, 2012. Pursuant

agreement entered

supplementary

to the

balance

period

from

during the

period

January 1,

2014 to

from

miscellaneous

to choose the

financial services.

We have the right

#### Note:

<sup>\*</sup> On June 9, 2013, we entered into an equity interest transfer agreement with Chinalco, pursuant to which we intended to transfer the equity interest held by us in eight enterprises engaged in aluminum fabrication to Chinalco. Those aluminum fabrication enterprises ceased to be consolidated into our financial statements on June 27, 2013. Certain aluminum fabrication enterprises mentioned above were actual transaction parties under Xinan Aluminum Mutual Provision of Products and Services Framework Agreement and Framework Agreement for Aluminum Products Fabrication Services, and conducted continuing related party transactions with Chinalco in the capacity of our members under the above framework agreements during the period from January 1, 2013 to June 27, 2013. Since June 27, 2013, these aluminum enterprises have not been our members and have not entered into any transactions with Chinalco pursuant to the above framework agreements.

All transactions with related parties are conducted at prices and terms mutually agreed by the parties involved, which are determined as follows:

- (a) Sales of materials and finished goods comprised sales of alumina, primary aluminum, copper and scrap materials. Transactions entered are covered by general agreements on mutual provision of production supplies and ancillary services. The pricing policy is summarized below:
  - (1) The price prescribed by the PRC government ("State-prescribed price") is adopted;
  - (2) If there is no State-prescribed price, state-guidance price is adopted;
  - (3) If there is neither State-prescribed price nor state-guidance price, then market price (being price charged to and from independent third parties) is adopted; and
  - (4) If none of the above is available, then adoption of a contractual price.
- (b) Utility services, including electricity, gas, heat and water, are supplied at Stated-prescribed price.
- (c) Engineering, project construction and supervisory services were provided for our construction projects. The state-guidance price or prevailing market price is adopted for pricing purpose.
- (d) The pricing policy for purchases of key and auxiliary materials (including bauxite, limestone, carbon, cement and coal) is: For the supplies of bauxite and limestone from Chinalco's 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 for the supplies of bauxite and limestone from jointly operated mines, at contractual price paid by Chinalco to such third parties.
- (e) The pricing policy of the comprehensive social and logistics services agreement between us and Chinalco is the same as that set out in (a) above.

- (f) Pursuant to the land use rights lease agreements entered into between the us and Chinalco Group, operating leases for industrial or commercial land are charged at a rate not higher than prevailing market rent as confirmed by an independent valuer, and shall be reviewed every three years. We also entered into building rental agreement with Chinalco Group and pay rent for our lease of buildings owned by Chinalco, the rent is not higher than prevailing market rent as confirmed by an independent valuer, and shall be reviewed every two years.
- (g) The pricing policy for products processing service is the same as that set out in (a) above.
- (h) The terms for the financial services agreement provision between Chinalco Finance and us 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 us by other financial institutions.

106

During the years ended December 31, 2012, 2013 and 2014, our significant transactions with other state-owned enterprises (excluding Chinalco and its subsidiaries) constituted a large portion of our sales of goods and purchases of raw materials, electricity, property, plant and equipment and services. In addition, substantially all restricted cash, time deposits, cash and cash equivalents and borrowings as of December 31, 2012, 2013 and 2014 and the relevant interest earned or paid during the year are transacted with banks and other financial institutions which are controlled by the PRC government.

We provide the following additional information on material related party transactions during the periods indicated:

(a) significant related party transactions

For the year ended December 31

2012 2013 2014

(RMB in thousands)

Sales of goods and services

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rendered:			
Sales of materials and finished goods to			
Chinalco and its subsidiaries	6,805,794	8,844,205	7,040,457
Associates of Chinalco	53,599	102,723	170,338
Joint ventures of Chinalco	-	-	142
Joint ventures	30,117	52,318	48,903
Associates	9,265	1,400,098	2,146,870
	6,898,775	10,399,344	9,406,710
Provision of utility services to:			
Chinalco and its subsidiaries	341,386	390,368	390,046
Associates of Chinalco	21,420	18,233	17,750
Joint Ventures	1	11,628	113
Associates		10,014	1,977
	262.907	420 242	400 996
	362,807	430,243	409,886
Provision of products processing			
services to:			
Chinalco and its subsidiaries	7,431	1,357	3,169

Purchase of goods and services: Purchases of engineering, construction and			
supervisory services from: Chinalco and its subsidiaries	2,321,386	1,842,045	987,706
Associates of Chinalco	11,365	140	-
	2,332,751	1,842,185	987,706
Purchases of key and auxiliary materials, equipment and finished goods			
from: Chinalco and its subsidiaries	3,839,222	3,799,542	3,009,894

Associates of Chinalco Joint ventures Associates	17,745 976,141 2,618	254 1,076,867 380,255	386,609 1,268,123 762,003
	4,835,726	5,256,918	5,426,629
Provision of social services and logistics services by: Chinalco and its subsidiaries	306,589	243,865	312,626
Provision of utilities services by: Chinalco and its subsidiaries Associates of Chinalco Joint Ventures	359,599 9,918	186,007 - 27	414,745
	369,517	186,034	414,745
Provision of products processing services by Chinalco and its subsidiaries	142,244	64,377	76,075
Rental expenses for buildings and land use rights charged by Chinalco and its subsidiaries	696,874	600,892	561,528
Other significant related party transactions:			
Acquisition of assets from a subsidiary of Chinalco	145,915		
Borrowing from a subsidiary of Chinalco	2,350,000	1,000,000	1,429,000
Interest expense on borrowing from a subsidiary of Chinalco	54,541	40,922	38,772
Entrusted Loan from a subsidiary of Chinalco	-	70,000	70,000

Entrusted loan and other borrowings to:			
Joint ventures	258,900	726,235	764,000
An associate	200,000	26,106	-
Chinalco and its subsidiaries	126,604	393,000	-
	585,504	1,145,341	764,000
Interest income on entrusted loan and other borrowings to:			
Joint ventures	51,106	69,462	60,459
Chinalco and its subsidiaries	2,327	34,923	2,027
An associate		2,518	88
	53,433	106,903	62,574
	1	08	

Disposal of the Aluminum Fabrication Segment and transferred loan to Chinalco and its subsidiaries		10,614,600	
Interest income from the unpaid disposal proceeds from Chinalco and its subsidiaries		250,124	542,811
Disposal of investments in a joint venture and an associate to Chinalco		264,474	
Disposal of a subsidiary to a subsidiary of Chinalco		12,953,368	
Disposal of assets under a sale and leaseback contract to a subsidiary of Chinalco	-	-	300,000

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Finance lease under a sale and leaseback contract from a subsidiary of Chinalco			304,239
Provision of financial guarantees to: Joint ventures An associate	124,900	381,800	345,760 23,710
	124,900	381,800	369,470
Financial guarantees provided by Subsidiaries of Chinalco	42,470	20,000	138,000
Discounted notes receivables to a subsidiary of Chinalco	1,769,819	1,278,907	118,757

109

# (b) Balances with related parties

	As of December 31,	
	2013	2014
	(RMB in thousands)	
Cash and cash equivalents deposited with A subsidiary of Chinalco	3,481,778	4,889,705
Trade and notes receivables		
Chinalco and its subsidiaries	1,129,159	886,532
Associates of Chinalco	2,514	1,922
Associates	3,565	229
Joint ventures	1,005	8,213
	1,136,243	896,896

Less: provision for impairment of receivables	(124,093)	(167,799)
Other current assets	1,012,150	729,097
Chinalco and its subsidiaries Associates Joint ventures	9,745,762 116,138 1,441,699	4,841,266 90,977 1,310,499
Less: provision for impairment of other current assets	11,303,599 (36,208)	6,242,742 (54,516)
Other was assument aggets	11,267,391	6,188,226
Other non-current assets Chinalco and its subsidiaries An associate	12,288,413	8,195,904 111,846
	12,288,413	8,307,750
Borrowings Subsidiaries of Chinalco	740,000	1,402,639
Trade and notes payables Chinalco and its subsidiaries Associates of Chinalco Associates Joint ventures	285,343 538 136,760 2,865	429,809 4 15,520 81,988
	425,506	527,321
Other payables and accrued expenses Chinalco and its subsidiaries Associates of Chinalco Joint ventures	1,688,186 66,681 6,597	1,426,842 880 472

Associates 192,247 91,207

1,953,711 1,519,401

### (c) Compensation of key management personnel

For the year ended December 31,

	2012	2013	2014
	(RMB in thousands)		
Fees	732	689	622
Basic salaries, housing fund, other allowances and benefits in kind	4,604	5,424	4,062
Discretionary bonus	-	-	-
Pension cost-defined contribution schemes	330	319	508
	5,666	6,432	5,192

#### Guarantees

We provided guarantees to our related parties to guarantee their loans during the period from January 1, 2014 to February 28, 2015. The outstanding balance of the loans we guaranteed was RMB369.5 million as of February 28, 2015 and the largest amount outstanding of the loans we guaranteed during the period from January 1, 2014 to February 28, 2015 was RMB405.5 million. The interest rates on such loans are from 6.55% to 6.765%.

Our related parties also provided guarantees to us to guarantee our loans during the period from January 1, 2014 to February 28, 2015. The outstanding balance of the loans guaranteed by our related parties was RMB138 million as of February 28, 2015 and the largest amount outstanding of the loans guaranteed by our related parties during the period from January 1, 2014 to February 28, 2015 was RMB142 million. The interest rates on such loans are from 3.55% to 6.3%.

#### Loans

We provided several entrusted loans to our related parties mainly for the purpose of supplementing working capital during the period from January 1, 2014 to February 28, 2015. The outstanding balance of such entrusted loans was mainly RMB786 million as of February 28, 2015 and the largest amount outstanding of the entrusted loans during the period from January 1, 2014 to February 28, 2015 was RMB200 million. The interest rates on such entrusted loans range from 6% to 10%.

Our related party also provided several loans to us mainly for the purpose of supplementing working capital during the period from January 1, 2014 to February 28, 2015. The outstanding balance of such loans was RMB1.8 billion as of February 28, 2015 and the largest amount outstanding of the loans during the period from January 1, 2014 to February 28, 2015 was RMB500 million. The interest rates on such loans range from 5.32% to 9.2%.

#### C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

#### ITEM 8. FINANCIAL INFORMATION

# A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

We have appended our consolidated financial statements filed as part of this annual report on Form 20-F.

#### Legal Proceedings

We are not currently a party to any pending legal proceedings which are expected to have a significant effect on our financial position or results of operations, nor are we aware of any proceedings that are pending or threatened which may have a significant effect on our financial position or results of operations. We may from time to time become a party to various legal or administrative proceedings arising in the ordinary course of our business.

## **Dividend Policy**

Our Board declares dividends, if any, in Renminbi with respect to H Shares on a per share basis and pays such dividends in HK dollars. Any final dividend for a fiscal year is subject to shareholders' approval. The Bank of New York Mellon, as depositary, converts the HK dollar dividend payments and distributes them to holders of ADSs in U.S. dollars, less expenses of conversion. Under the Company Law of the PRC and our Articles of Association, all of our shareholders have equal rights to

dividends and distributions. The holders of the H Shares share proportionately on a per share basis in all dividends and other distributions declared by our Board.

We believe that our dividend policy strikes a balance between two important goals providing our shareholders with a competitive return on investment and assuring sufficient reinvestment of profits to enable us to achieve our strategic objectives. The declaration of dividends is subject to the discretion of our Board, which takes into account the following factors:

- our financial results;
- \* capital requirements;
- \* contractual restrictions on the payment of dividends by us to our shareholders or by our subsidiaries to us;
- \* our shareholders' interests;
- \* the effect on our creditworthiness;

111

- \* general business conditions; and
- \* other factors our Board may deem relevant.

Pursuant to PRC laws and regulations, dividends may only be distributed after allowance has been made for: (1) recovery of losses, if any and (2) allocations to the statutory surplus reserve. The allocations to the statutory surplus reserve is 10% of our net profit determined in accordance with PRC Generally Accepted Accounting Principles. Our distributable profits for the current fiscal year will be equal to our net profits determined in accordance with IFRSs, less allocations to the statutory surplus reserve. See "Item 10. Additional Information - E. Taxation" for a discussion of the tax consequences of receipt of dividends.

#### B. SIGNIFICANT CHANGES

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements which is included in this annual report.

ITEM 9. THE OFFER AND LISTING

The Shanghai Stock Exchange is the principal trading market for our A Shares, and the Hong Kong Stock Exchange is the principal trading market for our H Shares. The ADSs have been issued by the Bank of New York Mellon, acting as depositary bank, and are listed on the New York Stock Exchange under the symbol "ACH" with each ADS representing 25 H Shares.

The following table sets forth, for the periods indicated, the reported high and low market prices for our shares on the New York Stock Exchange, the Hong Kong Stock Exchange and the Shanghai Stock Exchange:

	NYSE		Hong Kong Exchai	-	Shanghai Stock Exchange	
Calendar Period	High	Low	High	Low	High	Low
	(US\$ per ADS) (%)		(HK\$ per H		(RMB per A Share) (%)	
2010	34.27	18.03	10.66	5.66	15.78	8.42
2011	25.88	10.34	7.98	3.20	12.36	6.23
2012	13.88	9.22	4.45	2.86	7.89	4.55
2013	13.29	7.25	4.21	2.20	5.37	3.01
First Quarter	13.29	9.52	4.21	2.95	5.37	4.11
Second Quarter	10.73	7.25	3.32	2.20	4.47	3.01
Third Quarter	9.59	7.35	3.00	2.28	4.55	3.03
Fourth Quarter	9.92	8.42	3.15	2.63	4.76	3.30
2014	12.6	8.25	3.85	2.54	6.66	2.97
First Quarter	9.53	8.25	2.99	2.54	3.6	3.11
Second Quarter	10.31	8.62	3.23	2.64	3.5	2.97
Third Quarter	12.6	8.99	3.85	2.77	4.27	3.03
Fourth Quarter	11.8	9.73	3.73	3.1	6.66	3.46
September	12.09	10.06	3.8	3.12	4.14	3.56
October	11.23	9.73	3.46	3.1	3.98	3.46
November	11.71	10.5	3.53	3.23	4.36	3.82

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December	11.8	10.36	3.73	3.18	6.66	4.26
2015						
January	13.51	11.11	4.28	3.53	6.97	5.17
February	12.07	10.75	3.78	3.33	5.44	4.73
March	12.82	11.38	4.1	3.52	6.74	5.41
April (through April 2, 2015)	13.43	12.73	4.18	3.87	6.55	6.25

## I T E MADDITIONAL INFORMATION

10.

#### A. SHARE CAPITAL

Not applicable.

112

#### B. MEMORANDUM AND ARTICLES OF ASSOCIATION

A copy of the English translation of our Articles of Association was filed with the SEC as an exhibit to the registration statement on Form F-1 (Registration No. 333-14068) under the Securities Act in connection with a global offering of our H Shares and American depositary shares on December 5, 2001. We filed a copy of the English translation of our Articles of Association as of December 31, 2012 as an exhibit to our annual report on Form 20-F filed on April 25, 2013. From January 1, 2013 to the date of this annual report, we did not make any amendment to our Articles of Association.

The following are summaries of material provisions of our Articles of Association insofar as they relate to the material terms of our shares.

#### Our objects and purposes

Our Articles of Association as amended from time to time are filed with the Hong Kong Companies Registrar. Our business scope can be found in Article 13 of our Articles of Association, as amended at the shareholders' general meeting held on February 28, 2011.

Directors' power to vote on matters in which he or she has an interest

Under Article 169, a director shall not vote in any resolution of the board of directors for approving any contract, transaction or arrangement in which such director or any of his associates (as defined in the applicable

rules governing the listing of securities amended from time to time) is materially interested, and shall not be either counted into the quorum of the meeting. Unless the interested director has disclosed his or her interest to the board of directors in accordance with the Article 169 and the contract, transaction or arrangement has been approved by the board of directors at a meeting in which the interested director is not counted in the quorum and has refrained from voting, a contract, transaction or arrangement in which such director is materially interested is voidable at the instance of our Company except as against a bona fide party thereto acting without notice of the breach of duty by such director.

#### Borrowing powers

Subject to compliance with applicable laws and regulations of the PRC, we have the power to raise and borrow money which power includes (without limitation) the issuance of debentures and the charging or mortgaging of part or whole of our business or properties and other rights permitted. The Articles of Association do not contain any specific provision in respect of the manner in which borrowing powers may be exercised by the directors nor do they contain any specific provision in respect of the manner in which such powers may be varied, other than (a) provisions which give the directors the power to formulate proposals for the issuance of debentures by us; (b) Article 86(2) provides that the issuance of bond must be approved by the shareholders in a general meeting by way of a special resolution; and (c) Article 108(4) provides that the directors have the power to formulate our annual final financial budgets and final accounts which shall be passed by over half of the directors.

#### Age limit for retirement

There is no provision pertaining to the retirement of directors pursuant to an age limit requirement in our Articles of Association.

#### Directors' qualifying shares

Under Article 103, the directors are not required to hold any qualifying shares.

113

#### Dividend rights

Article 54(1) provides that holders of our common shares have the right to receive dividends and distribution of profits in other forms, in proportion to the number of shares held. Under Article 48, when we convoke a

general shareholders' meeting, allocate dividends, liquidates or perform other activities that require the verification of equity rights, the Board or the general meeting convener must specify a date as the equity rights determination date. The shareholders registered in the shareholder roster after closing as at the equity rights determination date are the Company's shareholders entitled to appropriate rights and interests.

#### Voting rights

Article 54(2) provides that holders of our ordinary shares have the right to lawfully request, convene, chair, attend in person or appoint a proxy to attend and vote at general meetings of shareholders in respect of the number of shares held.

### Rights to share profits

Article 60(7) provides that a plan for profit distribution and a plan for making up for losses formulated by the Board in accordance with Article 108(6) must be approved by way of the shareholders' general meeting.

Rights to share surplus in the event of liquidation

Article 54(6) provides that the shareholders have the right to participate in the distribution of our surplus assets in proportion to the number of shares held in the event of the termination or liquidation of us.

Redemption provisions; sinking fund provisions and liability to further capital calls

Article 29 provides that we may repurchase issued shares in accordance with the procedures provided in the Articles of Association and with the approvals from the relevant governing authorities of PRC under the following circumstances: (1) cancellation of shares for the purpose of reducing our capital; (2) amalgamation with other company which owns our shares; (3) granting bonus shares to our employees; (4) shareholders disagreeing with our general meeting's resolution on merger or division and requiring us to acquire the shares in their possession; (5) other purposes permitted by law and administrative regulations.

No securities issued by us are redeemable, entitled to a sinking fund or subject to liability for further capital calls.

Actions necessary to change the rights of holders of our shares or holders of a class of shares

Under Article 86(5), revision of any rights of class shareholders, e.g., rights to dividends, share profits or surplus in the event of liquidation or voting rights, requires a special resolution of the shareholders' general meeting. Under Article 79, a special resolution must be passed by votes representing more than two-thirds of the voting rights represented by the shareholders (including proxies) present at the meeting.

The rights attached to any class of shares may be varied or abrogated only with the sanction of a special resolution passed at the shareholders' general meeting and by holders of shares of the affected class passed at a separate general meeting of the class convened in accordance with the Article 97 to Article 101 respectively. The circumstances which are deemed to be a variation or abrogation of the class rights are set forth under Article 96. Except for the circumstances under Article 88 (1), (9) and (10), shareholders of the affected class, whether or not otherwise having the right to vote at shareholders' general meetings, have the right to vote at class meetings but Interested Shareholders (as defined under Article 97) are not entitled to vote at class meetings.

114

Resolutions of a class meeting shall be passed by two-thirds or more of the shares with voting rights held by the class shareholders who, according to Article 97, are entitled to vote at that class meeting. Written notice must be given to all shareholders who are registered as holders of that class in the register of shareholders 45 days before the date of the class meeting. Such notice must contain the matters to be considered at such meeting, the date and the place of meeting. Those shareholders of the class who intend to attend send the written reply to us 20 days before the class meeting.

The proceedings of a class meetings shall be conducted as nearly as possible as that of a shareholders' general meetings. The provisions in the Articles of Association relating to the proceedings of shareholders' general meetings shall apply to class meetings.

The special procedures for approval by a class of shareholders do not apply where we issue, upon the approval by special resolution of shareholders in general meeting, either separately or concurrently once every 12 months, not more than 20% of each of our existing issued Domestic-Invested Shares and Overseas-Listed Foreign-Invested Shares (as defined under Article 18).

Provisions discriminating against any existing or prospective shareholder as a result of owning a substantial number of shares

Chinalco, as our controlling shareholder, shall not exercise its voting rights in a manner prejudicial to the interest of all or some part of the shareholders when making decision on the following matters:

\* to relieve a director or supervisor of his duty to act honestly in our best interest:

- \* to approve the expropriation by a director or supervisor (for his own benefit or for the benefit of another), our assets, in any manner, including but not limited to an opportunity beneficial to us; or
- \* to approve the expropriation by a director or supervisor (for his own benefit or for the benefit of another) the individual rights of other shareholders, including but not limited to rights to distributions and voting rights save and except our restructuring, submitted for approval by the shareholders in general meeting in accordance with the Articles of Association.

# Conditions governing the manner in which annual general meetings and extraordinary general meetings of shareholders are convoked

Shareholders' general meetings can be held as annual general meetings or extraordinary general meetings. Annual general meetings are held once a year within six months after the end of the preceding fiscal year.

The Board is required to convene an extraordinary general meeting within two months of the occurrence of any of the following circumstances:

- (1) the number of directors falls below the number required by the PRC Company Law or two-thirds of the number required by the Articles of Association;
- (2) our unrecovered losses amount to one-third of the total amount of its paid-in-capital;
- (3) upon the request of shareholder(s) holding 10 percent or more of our shares for more than ninety consecutive days (the number of shares held shall be the figures as of the date of the written request from shareholder); and
- (4) whenever the Board deems necessary or the supervisory committee proposes to convene the same.

115

We shall, within 45 days (inclusive of date of meeting) before the date of meeting, send written notices of the shareholders' general meeting and inform all registered shareholders of the matters to be considered at the meeting and the date and venue of the meeting. Those shareholders who intend to attend the meeting shall send the written reply to the Company 20 days before the meeting.

Motions put forward at the general meeting shall be specific and shall relate to the matters to be considered at a shareholders' general meeting. Motion raised at a general meeting shall satisfy the following requirements:

- (1) be free of conflicts with the provision of laws, administrative regulations and Articles of Association, and fall within our business scope and the terms of the reference of the shareholders' general meeting;
- (2) have definite topics to discuss and specific matters to resolve; and
- (3) be submitted in writing or served to the convener.

Limitations on the rights to own securities

Under Article 18, the shares issued to domestic investors and denominated in Renminbi are Domestic-Invested Shares whereas the shares issued to overseas investors and denominated in foreign currency are Foreign-Invested Shares. Under Article 17, our Domestic-Invested Shares can be held only by PRC shareholders and our Foreign-Invested Shares, such as H Shares and ADSs can be held only by foreign shareholders and other shareholders from regions of Hong Kong, Macau and Taiwan.

Provisions having an effect of delaying, deferring or preventing a change in control

Under Article 111, decisions in respect of market development, merger and acquisition, and investment in a new field, where the consideration to be paid or the assets to be acquired exceed 10% of our total assets, the Board is required to engage relevant professional consultants to provide professional opinions, which shall serve as the key reference for the decision of the Board concerning such investment, merger or acquisition.

Under Article 86(3), division, merger, dissolution and liquidation of us and material acquisitions and disposals by us must be approved by a special resolution at a shareholders' general meeting.

There are no provisions under the Articles of Association pertaining to the ownership threshold above which shareholder ownership must be disclosed.

Conditions governing changes in registered capital

Under Article 108(7), any proposal for the increase or decrease of our registered capital must be formulated by the Board. Article 86(1) further provides that any increase or reduction in share capital requires adoption of a special resolution at a shareholders' general meeting.

### C. MATERIAL CONTRACTS

For the two years immediately preceding the date of this annual report, we have not entered into any additional material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company - History and Development of the Company" and "Item 7. - Major Shareholders and Related Party Transactions - B. Related Party Transactions."

116

#### D. EXCHANGE CONTROLS

The existing foreign exchange regulations have significantly reduced government foreign exchange controls for transactions under the current account, including trade and service related foreign exchange transactions and payment of dividends. We may undertake current account foreign exchange transactions without prior approval from the SAFE by producing commercial documents evidencing such transactions, provided that they are processed through Chinese banks licensed to engage in foreign exchange transactions. The PRC government has stated publicly that it intends to make the Renminbi freely convertible in the future. However, we cannot predict whether the PRC government will continue its existing foreign exchange policy and when the PRC government will allow free conversion of Renminbi to foreign currency.

Foreign exchange transactions under the capital account, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to significant foreign exchange controls and require the approval of the SAFE. These limitations could affect our ability to obtain foreign exchange through debt or equity financing, or to obtain foreign exchange for capital expenditures.

Since 1994, the conversion of Renminbi into HK and U.S. dollars has been based on rates set by the People's Bank of China, which are set daily based on the previous day's PRC interbank foreign exchange market rate and current exchange rates on the world financial markets. From 1994 to July 20, 2005, the official exchange rate for the conversion of Renminbi to U.S. dollars was generally stable. On July 21, 2005, the PRC government introduced a managed floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of currencies. Since then, the PRC government has made, and may in the future make, further adjustments to the exchange rate system. In April 2012, the PRC government took a milestone step in turning the Renminbi into a global currency by doubling the size of its trading band against the U.S. dollar, pushing through a crucial

reform that further liberalizes its financial markets. The PBOC allows the Renminbi to rise or fall 1% from a mid-point every day, effective April 16, 2012, compared with its previous 0.5% limit. The PBOC further allows the Renminbi to rise or fall 2% from a mid-point every day, effective March 17, 2014. The PBOC announces the closing price of a foreign currency traded against the Renminbi in the inter-bank foreign exchange market after the closing of the market on each working day, and makes it the central parity for the trading against the Renminbi on the following working day. Fluctuations in exchange rates may adversely affect the value, translated or converted into U.S. dollars or HK dollars, of our net assets, earnings and any declared dividends. We cannot give any assurance that any future movements in the exchange rate of the Renminbi against the U.S. dollar and other foreign currencies will not adversely affect our results of operations and financial condition.

#### E. TAXATION

#### **PRC** Taxation

The following summary of the material PRC and United States federal income tax provisions relating to the ownership and disposition of H Shares or ADSs held by the investor as capital assets is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change, and does not constitute legal or tax advice. This summary does not deal with all possible tax consequences relating to an investment in our common shares, such as the tax consequences under state, local and other tax laws.

### Dividends Paid to Individual Investors

According to the PRC Individual Income Tax Law, as amended, dividends paid by Chinese listed companies to a domestic individual are ordinarily subject to a PRC withholding tax levied at a flat rate of 20%. According to the "Circular on Issues concerning the Implementation of the Individual Income Tax Policies Pertaining to Dividend Differentiation of Listed Company" issued by the PRC State Administration of Taxation (the "SAT"), the MOF and the CSRC, which becomes effective on January 1, 2013, for shares of listed company held by any person for one month or less, the full amount of dividend proceeds shall be deemed as taxable income; for shares held for more than one month but less than one year (including one year), only 50% of the dividend proceeds will be accounted into taxable income; and for shares held for more than one year, only 25% of the dividend proceeds will be taxable income.

For a foreign individual who is not a resident of China, the receipt of dividends from a company in China is normally subject to a withholding tax of 20% unless specifically exempted by the tax authority of the State Council of China or reduced by an applicable tax treaty. In 2011, the SAT issued the "Circular on the Issues Concerning the Collection and Administration of Individual Income Tax Following the Repeal of Circular 45 (No. 348)", under which dividend paid by a non-foreign-invested and PRC incorporated company listed in Hong Kongwill generally be subject to a withholding tax of 10%, and to be adjusted pursuant to the arrangement for the avoidance of double taxation signed between the PRC and the country where a foreign individual is a resident.

### Dividends Paid to Non-PRC Enterprises

According to the Enterprise Income Tax Law and its implementation rules, which became effective on January 1, 2008, dividends derived from the revenues accumulated from January 1, 2008 and are paid by Chinese companies to non-resident enterprises, which are established under the laws of non-PRC jurisdictions and have no establishment or residence in China or whose dividends from China do not relate to their establishment or residence in China, are ordinarily subject to a Chinese withholding tax levied at a flat rate of 10% unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. Dividends paid by PRC companies to resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose "de facto management body" is located in the PRC, are not subject to any PRC tax, unless the dividends are derived from the publicly traded shares which have been held continuously by the resident enterprises for less than twelve months. However, the withholding tax rate could be reduced under an applicable double-taxation treaty.

#### Tax Treaties

Non-PRC shareholders who are residents or citizens of a country that has entered into a double-taxation treaty with China may be entitled to a reduction in the amount of tax withheld, if any, imposed on the payment of dividends. China currently has such treaties with more than one hundred countries and regions, including:

the United States;
Australia;
Canada;
France;
Germany;

Japan;

- \* Malaysia;
- \* Singapore;
- \* the United Kingdom; and
- \* the Netherlands.

Under most treaties, the rate of withholding tax imposed by China's taxation authorities remains 10%. The double taxation treaty between China and the United States provides that China may tax dividends paid by us to an eligible U.S. holder up to 10% of the gross amount received by such person. Under the treaty, an eligible U.S. holder is a person who, by reason of domicile, residence, place or head office, place of incorporation or any other criterion of similar nature is subject to taxation in the United States, as applicable under the treaty's "treaty shopping provisions."

118

### Capital Gains

According to the Enterprise Income Tax Law and its implementation rules, which became effective on January 1, 2008, capital gains realized by foreign enterprises, which are established under the laws of non-PRC jurisdictions and have no establishment or residence in China or whose capital gains from China do not relate to their establishment or residence in China, are ordinarily subject to capital gains tax at the rate of 10%. The capital gains realized by resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose "de facto management body" is located in the PRC, upon the sales of overseas-listed shares are subject to the PRC enterprise income tax.

With respect to individual holders of H Shares, the Provisions for Implementation of Individual Income Tax Law of China, as amended, stipulated that income tax on gains realized on the sale of equity shares shall be regulated in separate rules to be drafted by the MOF. On March 30, 1998, the MOF and the SAT jointly issued the "Circular of Taxation Regarding the Continued Exemption of Individual Income Taxes Levied on Income Obtained from the Transfer of Shares", which provided that income derived from the transfer of shares issued by listed companies shall not be taxed as income for the purposes of levying individual income taxes after July 1, 1997.

### Additional China Tax Considerations

Under the Provisional Regulations of the PRC Concerning the Stamp Duty,

a stamp duty is not imposed by China on the transfer of shares, such as the H Shares or ADSs, of Chinese publicly traded companies that take place outside of China.

#### United States Federal Income Taxation

Each potential investor is strongly urged to consult its own tax advisor to determine the particular United States federal, state, local, treaty and foreign tax consequences of acquiring, owning or disposing of the H Shares or ADSs.

The following summary describes the principal U.S. federal income tax consequences of purchasing, owning and disposing of the H Shares or ADSs. This summary only applies to U.S. holders, as defined below, who hold the H Shares or ADSs as capital assets within the meaning of Section 1221 of the Internal Revenue Codeof 1986 as amended (the "Code"). This discussion does not address all of the tax consequences relating to the purchase, ownership and disposition of the H Shares or ADSs, and does not take into account U.S. holders who may be subject to special rules including:

- \* financial institutions;
- \* insurance companies;
- \* tax-exempt organizations;
- \* real estate investment trusts, regulated investment companies, grantor trusts;
- \* persons that have a functional currency other than the U.S. dollar;
- \* persons that will own H Shares or ADSs through partnerships or other pass-through entities;
- \* persons that own 10% or more, by vote, of our equity for U.S. federal income tax purposes;

119

- \* dealers or traders in securities or currencies;
- \* certain former citizens or long-term residents of the United States;
- \* persons that will hold the H Shares or ADSs as a position in a "straddle" or as part of a "hedging", or "conversion" or other risk

reduction transaction for U.S. federal income tax purposes;

- \* persons who receive the H Shares or ADSs as compensation for services;
- \* "dual resident" corporations;
- \* persons that generally mark their securities to market for United States federal income tax purposes; or
- \* persons who are residents of the People's Republic of China or who are subject to Hong Kong profits tax.

Moreover, this description does not address United States federal estate, gift or alternative minimum taxes, the U.S. federal unearned income Medicare contribution tax, or any foreign state or local tax consequences of the acquisition, ownership and disposition of the H Shares or ADSs. Each U.S. holder should consult its tax advisor with respect to the U.S. federal, state, local and foreign tax consequences of acquiring, owning and disposing of H Shares or ADSs.

This discussion is based on the Code, its legislative history, final, temporary and proposed U.S. Treasury regulations promulgated thereunder, published rulings and court decisions as in effect on the date hereof, all of which are subject to change, or changes in interpretation, possibly with retroactive effect. In addition, this discussion is based in part upon representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreements will be performed according to its terms.

You are a "U.S. holder" if you are a beneficial owner of H Shares or ADSs and, for U.S. federal income tax purposes are:

- \* an individual citizen or resident of the United States;
- \* a corporation created or organized under the laws of the United States or any political subdivision thereof;
- \* an estate the income of which is subject to United States federal income tax without regard to its source; or
- \* a trust: (i) subject to the primary supervision of a United States court and one or more U.S. persons (within the meaning of the Code) have the authority to control all substantial decisions of the trust; or (ii) that has validly elected to be treated as a United States person under applicable United States Treasury Regulations.

If a partnership (including any entity treated as a partnership for U.S. federal tax purposes) holds H Shares or ADSs, the tax treatment of the partnership and a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. If an investor

is a partner in a partnership that holds H Shares or ADSs, such investor should consult its tax advisor.

In general, if you hold ADRs evidencing H Shares, you will be treated as the owner of the H Shares represented by the ADSs. Exchanges of H Shares for ADRs, and ADRs for H Shares, generally will not be subject to United States federal income tax.

120

INVESTORS SHOULD CONSULT THEIR TAX ADVISORS AS TO THE PARTICULAR TAX CONSIDERATIONS APPLICABLE TO THEM RELATING TO THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE H SHARES OR ADSs, INCLUDING THE APPLICABILITY OF U.S. FEDERAL, STATE AND LOCAL TAX LAWS OR NON-U.S. TAX LAWS, ANY CHANGES IN APPLICABLE TAX LAWS AND ANY PENDING OR PROPOSED LEGISLATION OR REGULATIONS.

#### Distributions on the H Shares or ADSs

Subject to the discussions below under "- Passive Foreign Investment Company", the gross amount of any distribution (without reduction for any PRC tax withheld) we make on the H Shares or ADSs will be includible in income as dividend income when the distribution is actually or constructively received by you. Because we do not calculate earnings and profits in accordance with U.S. tax principles, all distributions by us to U.S. holders will generally be treated as dividends. Any dividend will not be eligible for the dividends-received deduction allowed to certain United States corporations in respect of dividends received from U.S. corporations. The amount of any distribution of property other than cash will be the fair market value of such property on the date of such distribution.

The U.S. dollar amount of dividends received by an individual, trust or estate will be subject to taxation at a maximum rate of 20% if the dividends are "qualified dividends." Dividends paid on H Shares or ADSs will be treated as qualified dividends if (a) certain holding period requirements are satisfied, (b) either (i) we are eligible for the benefits of a comprehensive income tax treaty with the United States that the Internal Revenue Service, or IRS, has approved for the purposes of the qualified dividend rules, or (ii) the dividends are with respect to ADSs readily tradable on a U.S. securities market, and (c) provided that we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a passive foreign investment company, or PFIC. The Agreement Between the Government of the United States of America and the Government of the People's Republic of China for the Avoidance of Double

Taxation and the Prevention of Tax Evasion with Respect to Taxes on Income (the "Treaty") has been approved for the purposes of the qualified dividend rules. We should be considered a qualified foreign corporation with respect to the ADSs because our ADSs are listed on the New York Stock Exchange. Finally, based on our audited financial statements and relevant market data, we believe that we did not satisfy the definition for PFIC status for U.S. federal income tax purposes with respect to our 2014 taxable year. In addition, based on our audited financial statements and our current expectations regarding the value and nature of our assets, the sources and nature of our income, and relevant market data, we do not anticipate becoming a PFIC for our 2015 taxable year or any future year. However, our status in the current year and future years will depend on our income and assets (which for this purpose depends in part on the market value of the H Shares or ADSs) in those years. See the discussion below under "- Passive Foreign Investment Company." Relevant U.S. holders should consult their tax advisors regarding whether such dividends will qualify for the reduced rates provided by the "qualified dividend" rules.

If we make a distribution paid in HK dollars, you will be considered to receive the U.S. dollar value of the distribution determined at the spot HK dollar/U.S. dollar rate on the date such distribution is received actually or constructively by you, regardless of whether you convert the distribution into U.S.dollars. Any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is includible in your income to the date you convert the distribution into U.S. dollars will be treated as ordinary income or loss from U.S. sources. If dividends received in HK dollars are converted into U.S. dollars on the day they are received, the U.S. holder generally will not be required to recognize foreign currency gain or loss in respect of the dividend income.

Dividends paid by us generally will constitute income from sources outside the United States for U.S. foreign tax credit limitation purposes and will be categorized as "passive income" or, in the case of certain U.S. holders as "general category income" for U.S. foreign tax credit purposes. We may be required to withhold PRC income tax on dividends paid to U.S. holders on the H Shares or ADSs. Subject to various limitations, any PRC tax withheld from distributions in accordance with the Treaty will be deductible or creditable against your U.S. federal income tax liability.

121

You may not be able to claim a foreign tax credit (and instead may qualify to claim a deduction) for non-U.S. taxes imposed on dividends paid on the H Shares or ADSs if you (i) have held the H Shares or ADSs for less than a specified minimum period during which you are not protected from risk of loss with respect to such shares, or (ii) are obligated to make payments

related to the dividends (for example, pursuant to a short sale). The rules relating to the U.S. foreign tax credit are complex and U.S. Holders may be subject to various limitations on the amount of foreign tax credits that are available. In addition, if the dividends are taxed as qualified dividend income (as discussed above), the amount of the dividend taken into account for purposes of calculating a U.S. Holder's foreign tax credit limitation will generally be limited to the gross amount of the taxable dividend, multiplied by the reduced tax rate applicable to qualified dividend income and divided by the highest tax rate normally applicable to dividends. U.S. holders should consult their own tax advisors regarding the effect of these rules in their particular circumstance.

### Sale, Exchange or Other Disposition

Subject to the discussions below under "- Passive Foreign Investment Company", upon a sale, exchange or other disposition of the H Shares or ADSs, you will generally recognize capital gain or loss for U.S. federal income tax purposes in an amount equal to the difference between the U.S. dollar value of the amount realized and your tax basis, determined in U.S. dollars, in such H Shares or ADSs. Generally, gain or loss recognized upon the sale or other disposition of H Shares or ADSs will be capital gain or loss, will be long-term capital gain or loss if the U.S. Holder's holding period for such H Shares or ADSs exceeds one year, and will be income or loss from sources within the United States for foreign tax credit limitation purposes. For non-corporate U.S. Holders, the United States income tax rate applicable to net long-term capital gain currently will not exceed 20.0%. The deductibility of capital losses is subject to significant limitations.

With respect to the sale or exchange of H Shares or ADSs, the amount realized generally will be the U.S. dollar value of the payment received determined on (i) the date of receipt of payment in the case of a cash basis U.S. holder and (ii) the date of disposition in the case of an accrual basis U.S. holder. If H Shares or ADSs are traded on an "established securities market", a cash basis taxpayer or, if it so elects, an accrual basis taxpayer, will determine the U.S. dollar value of the amount realized by translating the amount received at the spot rate of exchange on the settlement date of the sale. A U.S. holder will have a tax basis in the foreign currency received equal to the U.S. dollar amount realized. Any currency exchange gain or loss realized on a subsequent conversion of the foreign currency into U.S. dollars for a different amount generally will be treated as ordinary income or loss from sources within the United States. However, if such foreign currency is converted into U.S. dollars on the date received by the U.S. holder, a cash basis or electing accrual basis U.S. holder should not recognize any gain or loss on such conversion.

The rules relating to the U.S. foreign tax credit are complex. U.S. holders should consult their own tax advisors regarding the effect of these rules in their particular circumstance. Any gain or loss will generally be United States source gain or loss for foreign tax credit limitation purposes and as a result of the U.S. foreign tax credit limitation, foreign taxes, if any,

imposed upon capital gains in respect of H Shares or ADSs may not be currently creditable. Under the Treaty, however, if any PRC tax were to be imposed on any gain from the disposition of H Shares or ADSs, the gain could be treated as PRC source income. U.S. holders are urged to consult their tax advisors regarding the tax consequences if a foreign withholding tax is imposed on a disposition of H Shares or ADSs, including the availability of the foreign tax credit under their particular circumstances.

### Passive Foreign Investment Company

A non-U.S. corporation is a PFIC for any taxable year in which, after applying relevant look-through rules with respect to the income and assets of subsidiaries:

122

- \* 75% or more of its gross income consists of passive income, such as dividends, interest, rents, royalties, and gains from the sale of assets that give rise to such income; or
- \* 50% or more of the average quarterly value of its gross assets consists of assets that produce, or are held for the production of, passive income.

Passive income does not include rents and royalties derived from the active conduct of a trade or business. If the stock of a non-U.S. corporation is publicly traded for the taxable year, the asset test is applied using the fair market value of the assets for purposes of measuring such corporation's assets. If we own at least 25% (by value) of the stock of another corporation, we will be treated, for purposes of the PFIC tests, as owning our proportionate share of the other corporation's assets and receiving our proportionate share of the other corporation's income for purposes of the PFIC income and asset tests.

Based on the composition of our assets and income and the current expectations regarding the price of the H Shares and ADSs, we believe that we were not a PFIC for U.S. federal income tax purposes with respect to our 2014 taxable year and we do not intend or anticipate becoming a PFIC for any future taxable year. However, the determination of PFIC status is a factual determination that must be made annually at the close of each taxable year and therefore, there can be no certainty as to our status in this regard until the close of the current or any future taxable year. Changes in the nature of our income or assets or a decrease in the trading price of the H Shares or ADSs may cause us to be considered a PFIC in the current or any subsequent year. If we were a PFIC in any year during a U.S. holder's

holding period for the H Shares or ADSs, we would ordinarily continue to be treated as a PFIC for each subsequent year during which the U.S. holder owned the H Shares or ADSs.

If we were a PFIC in any taxable year that you held the H Shares or ADSs, you generally would be subject to special rules with respect to "excess distributions" made by us on the H Shares or ADSs and with respect to gain from your disposition of the H Shares or ADSs. An "excess distribution" generally is defined as the excess of the distributions you receive with respect to the H Shares or ADSs in any taxable year over 125% of the average annual distributions you have received from us during the shorter of the three preceding years, or your holding period for the H Shares or ADSs. Generally, you would be required to allocate any excess distribution or gain from the disposition of the H Shares or ADSs ratably over your holding period for the H Shares or ADSs. The portion of the excess distribution or gain allocated to a prior taxable year, other than a year prior to the first year in which we became a PFIC, would be taxed at the highest U.S. federal income tax rate in effect for such taxable year, and you would be subject to an interest charge on the resulting tax liability, determined as if the tax liability had been due with respect to such particular taxable years. The portion of the excess distribution or gain that is not allocated to prior taxable years, together with the portion allocated to the years prior to the first year in which we became a PFIC, would be included in your gross income for the taxable year of the excess distribution or disposition and taxed as ordinary income.

These adverse tax consequences may be mitigated if the U.S. holder is eligible to and does elect to annually mark-to-market the H Shares or ADSs. If a U.S. holder makes a mark-to-market election, such holder will generally include as ordinary income the excess, if any, of the fair market value of the H Shares or ADSs at the end of each taxable year over its adjusted basis, and will be permitted an ordinary loss in respect of the excess, if any, of the adjusted basis of the H Shares or ADSs over their fair market value at the end of the taxable year (but only to the extent of the net amount of income previously included in income as a result of the mark-to-market election). Any gain recognized on the sale or other disposition of the H Shares or ADSs will be treated as ordinary income. The mark-to-market election is available only for "marketable stock," which is stock that is traded in other than de minimis quantities on at least 15 days during each calendar quarter on a qualified exchange or other market, as defined in the applicable Treasury regulations. The H Shares or ADSs may qualify as "marketable stock" because the ADSs are listed on the New York Stock Exchange.

A U.S. holder's adjusted tax basis in the H Shares or ADSs will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. If a U.S. holder makes a mark-to-market election it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the H Shares or ADSs are no longer regularly traded on a qualified exchange or the IRS consents to the revocation of the election. U.S. holders are urged to consult their tax advisors about the availability of the mark-to-market election, and whether making the election would be advisable in their particular circumstances. However, the stock of any of our subsidiaries that were PFICs would not be eligible for the mark-to-market election.

Alternatively, a timely election to treat us as a qualified electing fund could be made to avoid the foregoing rules with respect to excess distributions and dispositions. You should be aware, however, that if we become a PFIC, we do not intend to satisfy the record keeping requirements that would permit you to make a qualified electing fund election.

If we were regarded as a PFIC, a U.S. holder of H Shares or ADSs generally would be required to file an information return on IRS Form 8621 for any year in which the holder received a direct or indirect distribution with respect to the H Shares or ADSs, recognized gain on a direct or indirect disposition of the H Shares or ADSs, or made an election with respect to the H Shares or ADSs, reporting distributions received and gains realized with respect to the H Shares or ADSs. In addition, pursuant to recently enacted legislation, if we were regarded as a PFIC, a U.S. holder would be required to file an annual information return (also on IRS Form 8621) relating to the holder's ownership of the shares or ADSs. This requirement would be in addition to other reporting requirements applicable to ownership in a PFIC.

U.S. holders should consult their tax advisers concerning the U.S. federal income tax consequences of holding the H Shares or ADSs if we were considered to be a PFIC.

## Backup Withholding and Information Reporting

In general, information reporting requirements will apply to dividends in respect of the H Shares or ADSs or the proceeds of the sale, exchange, or redemption of the H Shares or ADSs paid within the United States, and in some cases, outside of the United States, other than to various exempt recipients, including corporations. In addition, you may, under some circumstances, be subject to "backup withholding" with respect to dividends paid on the H Shares or ADSs or the proceeds of any sale, exchange or transfer of the H Shares or ADSs, unless you

- \* are a corporation or fall within various other exempt categories, and, when required, demonstrate this fact; or
- \* provide a correct taxpayer identification number on a properly completed IRS Form W-9 or a substitute form, certify that you are

exempt from backup withholding and otherwise comply with applicable requirements of the backup withholding rules; or

\* provide a properly completed IRS Form W-88EN, certifying your status as a non-US holder.

Any amount withheld under the backup withholding rules generally will be creditable against your U.S. federal income tax liability provided that you furnish the required information to the IRS in a timely manner.

Certain U.S. Holders may be required to report information with respect to such holder's interest in "specified foreign financial assets" (as defined in Section 6038D of the Code), including stock of a non-U.S. corporation that is not held in an account maintained by a financial institution, if the aggregate value of all such assets exceeds certain dollar thresholds. Persons who are required to report specified foreign financial assets and fail to do so may be subject to substantial penalties. U.S. Holders are urged to consult their own tax advisers regarding the foreign financial asset reporting obligations and their possible application to the holding of H Shares or ADSs.

124

#### Hong Kong Taxation

The following discussion summarizes the material Hong Kong tax provisions relating to the ownership of H Shares or ADSs held by you.

## Dividends

Under current Hong Kong Inland Revenue Department practice, no Hong Kong tax is payable by the recipient in respect of dividends paid by us.

#### **Taxation of Capital Gains**

Hong Kong profits tax is currently charged at the rate of 16.5% for corporations and at a maximum rate of 15% for individuals.

No Hong Kong tax is imposed on capital gains arising from the sale of property (such as H Shares) acquired and held as investment assets. However, if a person carries on a business in Hong Kong that includes trading and dealing in securities, and derives trading gains from that or business from Hong Kong sources, Hong Kong profits tax will be payable. Gains from sales of H Shares effected on the Hong Kong Stock Exchange are considered to be from a Hong Kong source for this purpose. The source of gains from off exchange transactions is less clear and, generally,

will depend on whether the purchase and sale contracts were negotiated and, in substance, concluded. Tax exemption will apply for certain classes of taxpayers, including non-residents who do not otherwise carry on business in Hong Kong, subject to compliance with various other requirements.

The Hong Kong tax position with respect to gains from the disposal of ADSs is similar. However, no Hong Kong tax will apply on trading gains arising from the sale of ADSs where the purchase and sale were effected on the NYSE.

Hong Kong Stamp Duty

Hong Kong stamp duty is payable by each of the seller and the purchaser for every sold note and every bought note created for every sale and purchase of the H Shares. Stamp duty is charged at the total rate of 0.2% of the value of the H Shares transferred (the buyer and seller each paying half of such stamp duty). In addition, a fixed duty of HK\$5 is currently payable on an instrument of transfer of H Shares. If one of the parties to a sale is a non-resident of Hong Kong and does not pay the required stamp duty, the stamp duty not paid will be assessed on the instrument of transfer (if any), and the transferee will be liable for the full payment of such stamp duty.

If the withdrawal of H Shares when ADSs are surrendered or the issuance of ADSs when H Shares are deposited results in a change of beneficial ownership in the H Shares under Hong Kong law, Hong Kong stamp duty at the rate described above for sale and purchase transaction will apply. The issuance of ADSs for deposited H Shares issued directly to the depositary or for the account of the depositary should not lead to a Hong Kong stamp duty liability. Holders of the ADSs are not liable for the Hong Kong stamp duty on transfers of ADSs outside of Hong Kong so long as the transfers do not result in a change of beneficial interest in the H Shares under Hong Kong law.

#### F. DIVIDENDS AND PAYING AGENTS

Not applicable

#### G. STATEMENT BY EXPERTS

Not applicable

125

#### H. DOCUMENTS ON DISPLAY

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file an annual report under Form 20-F no later than four months after the close of each of our fiscal years, which is December 31, for fiscal years ended after December 15, 2011. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the SEC's public reference room located at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC- 0330. The SEC also maintains a website at www.sec.gov that contains reports and other information regarding registrants that make electronic filings with the SEC using its EDGAR filing system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders of ours are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

### I. SUBSIDARY INFORMATION

Not applicable

# I T E MQUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT 11. MARKET RISK

We are exposed to various types of market risks, including credit risk relating to financial assets and changes in foreign exchange rates, interest rates and the prices of alumina and primary aluminum, in the normal course of business.

We borrow short-term, medium-term and long-term funds, including variable rate debts, principally denominated in Renminbi. We hedge a limited amount of our sales through the trade of futures contracts on the SHFE and LME. Our hedging activities are subject to policies approved by our senior management. Substantially all of the financial instruments we hold are for purposes other than trading.

The following discussion, which contains "forward-looking statements" that involve risks and uncertainties, summarize our market-sensitive financial instruments. Such discussions address markets risk only and do not present other risks, which we face in the normal course of business.

#### Credit Risk

Credit risk arises from balances with banks and financial institutions, short-term investments, trade and notes receivables, other current and non-current receivables as well as credit exposures of customers, including outstanding receivables and committed transactions. We also provide

financial guarantees to certain subsidiaries and a joint venture. The carrying amounts of these receivables and amounts of financial guarantees represent our maximum exposure to credit risk in relation to our financial assets and guarantees.

We maintain a significant majority of our bank balances and cash and short-term investments in several major state-owned banks in the PRC. The directors are of the opinion that these assets are not exposed to significant credit risk.

With regard to receivables, the marketing department assesses the credit quality of the customers and related parties, taking into account their financial positions, past experience and other factors. We perform periodic credit evaluations of our customers and believe that adequate provisions for impairment of receivables have been made in the financial statements. Management does not expect any further losses from non-performance by these counterparties.

126

We hold collateral for some entrusted loans. In 2011, we entered into an agreement with Shanxi Jiexiu to provide a three year entrusted loan to Shanxi Jiexiu totaling RMB1,000 million with annual interest rate of 10%. Pursuant to the agreement, the 51% equity interests of Xinyugou Coal held by Shanxi Province Jiexiu Luxin Coal Gas Co. Ltd was pledged as collateral for this entrusted loan. As of December 31, 2014, we provided RMB500 million in the form of entrusted loan to Xinyugou Coal. We do not hold any other collateral as security for these receivables.

In 2014, we have receivables from Chinalco and its subsidiaries arising from the disposal of equity interests and assets of the Aluminum Fabrication Segment, the disposal of alumina production line of Guizhou branch and the disposal of the equity interests of Chalco Iron Ore. We have received certain receivables from Chinalco and its subsidiaries in accordance with the payment terms. Therefore, we believe that there is no material credit risk related to these receivables.

For the years ended December 31, 2012, 2013 and 2014 none of our customers individually accounted for more than 10% of our total revenue. Therefore, we believe that we were not exposed to any significant concentration of credit risk as of December 31, 2012, 2013 and 2014.

Foreign Exchange Rate Risk

We conduct our business primarily in Renminbi, which is our functional and reporting currency. We convert a portion of our Renminbi revenues into other currencies to meet foreign currency obligations and to pay for imported equipment and materials.

Many foreign currency exchange transactions involving Renminbi, including foreign exchange transactions under our capital account, are subject to foreign exchange controls and require the approval of the SAFE. Actions taken by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates. On July 21, 2005, the People's Bank of China announced a reform of its exchange rate system. Under the reform, the RMB is no longer effectively linked to the U.S. dollar but instead is allowed to fluctuate within a narrow and managed band against a basket of foreign currencies, according to market demand and supply conditions. In April 2012, the PRC government took a milestone step in turning the Renminbi into a global currency by doubling the size of its trading band against the U.S. dollar, pushing through a crucial reform that further liberalizes its financial markets. The People's Bank of China allows the Renminbi to rise or fall 1% from a mid-point every day, effective on April 16, 2012, compared with its previous 0.5% limit. The People's Bank of China allows the Renminbi to rise or fall 2% from a mid-point every day, effective on March 17, 2014, compared with its previous 1% limit. Any appreciation of the Renminbi will increase the prices of our export sales denominated in foreign currencies and reduce the Renminbi equivalent value of our trade and notes receivable denominated in foreign currencies, which may adversely affect our financial condition and results of operations. Our financial condition and operating performance may also be affected by changes in the value of currencies other than Renminbi in which our earnings and obligations are denominated.

Our bank balances and cash on hand as of December 31, 2014 amounted to RMB17,932.2 million, including Renminbi balances and foreign currency deposits of U.S. dollar, HK dollar, Euro, Australian dollar and Indonesian Rupiah, which translated into RMB3,055.3 million, RMB4.9 million, RMB6.4 million, RMB2.8 million and RMB0.06 million, respectively. Most of our sales are domestic and as such we have a limited amount of foreign currency denominated trade and notes receivable. As of December 31, 2014, we had foreign currency denominated loans with principal amount of RMB24 million in Japanese Yen and RMB4,957 million in U.S. dollars. In addition, as of December 31, 2014, our receivables from disposal of Chalco Iron Ore denominated in U.S. dollars amounted to RMB7,587 million and deposits paid to suppliers amounting to RMB1,836 million and an amount included in other terms amounting to RMB1,562 million.

As of December 31, 2014, if RMB had appreciated/weakened by 5% against US dollar with all other variables held constant, profit for the year would have been approximately RMB238 million higher/lower, mainly as a result of foreign exchange gains on translation of US dollar-denominated borrowings. Profit is less sensitive to fluctuations in the exchange rate between RMB and US dollar in 2014 than 2013, mainly due to the decrease in US dollar-denominated borrowings.

As the assets and liabilities denominated in foreign currencies other than US dollar are minimal relative to our total assets and liabilities, our directors are of the opinion that we are not exposed to any significant foreign currency risk arising from such foreign currency denominated assets and liabilities as of December 31, 2012, 2013 and 2014.

#### Interest Rate Risk

We have no significant interest-bearing assets except for bank deposits, entrusted loans and receivables arising from disposal of subsidiaries, balances and assets and a prepayment paid to a supplier. 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 our treasury closely monitors the fluctuation on such rates periodically. The interest rates of entrusted loans and a deposit paid to a supplier are fixed. The interest rate of the receivables from disposal of subsidiaries, business and assets to Chinalco is the rate of one-year bank loan determined by People's Bank of China at payment date and the interest rate of the receivables from disposal of an entity to a subsidiary of Chinalco is LIBOR plus 0.9%. As the interest rates applied to the deposits and receivables from disposal of subsidiaries, business and assets were relatively low and the interest rates applied to the entrusted loans and a prepayment paid to a supplier were fixed, our directors are of the opinion that we were not exposed to any significant interest rate risk for its financial assets held as at December 31, 2014 and 2013.

We are exposed to interest rate risk resulting from fluctuations in interest rates on our debts, primarily on our long-term debt obligations. Our debts consist of fixed and variable rate debt obligations with original maturities ranging from one to ten years. We undertake debt obligations to support general corporate purposes including capital expenditures and working capital needs. Upward fluctuations in interest rates increase the cost of new debts and the interest cost of outstanding variable rate borrowings. We do not currently use any derivative instruments to modify the nature of our debts so as to manage our interest rate risk. Instead, our treasury department closely monitors the market interest rates and maintains proper portfolio of variable rate and fixed rate debts in order to reduce the exposure to any one form of interest rate risk.

As at December 31, 2014, if interest rates had been 100 basis points higher/lower for bank and other loans borrowed at floating interest rates with all other variables maintain constant, our net profit for the year would have been RMB546 million lower/higher, mainly as a result of higher/lower interest expense on floating rate borrowings.

Our fair value interest rate risk mainly arises from long-term bonds, 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, we are not exposed to any significant fair value interest rate risk for our fixed interest rate borrowings held.

#### Commodity Price Risk

We are exposed to fluctuations in the prices of alumina, primary aluminum and other products. We import a portion of our alumina supply from suppliers outside China. Such purchases are made at market prices. In addition, all our sales of alumina, primary aluminum and other products are made at market prices. Therefore, fluctuations in the prices of alumina and primary aluminum have a significant effect on our operating performances.

We use mainly futures contracts and option contracts traded on the Shanghai Futures Exchange and London Metal Exchange to hedge against fluctuations in primary aluminum prices. We use the futures contract for hedging other than speculation. With reference to the hedging of primary aluminum production, our production companies hedge the output of primary aluminum and Chalco Trading hedges the quantities of buyout and self-supporting. As of December 31, 2014, the fair value of outstanding future contracts amounting to RMB121 million and RMB4 million was recognized in financial assets and liabilities at fair value through profit or loss, respectively. As of December 31, 2014, the fair value of outstanding option contracts in the amount of RMB25 million was recognized in financial liabilities at fair value through profit or loss.

128

The fair value of futures contracts are based on quoted market prices. As of December 31, 2013 and 2014, our position in futures contracts was as follows:

As of December 31, 2013			As of December 31, 2014				
Tonnes	Contract Value	Market Value	Maturity	Tonnes	Contract Value	Market Value	Maturity
	(RMB	in thousands)			(RMB i	n thousands)	

Futures Contracts:

Primary

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aluminum								
- Short	8,875	125,608	124,637	January 2014	121,860	1,703,565	1,571,999	February-March 2015
- Long	7,850	109,372	109,643	April-January 2014	44,535	600,762	591,871	January-May 2015
Zinc								
- Short	1,300	19,701	19,729	February-March 2014	460	7,700	7,672	January-May 2015
- Long	-	-	-	-	1,000	16,444	16,723	January-May 2015
Copper								
- Short	9,275	468,289	471,606	January-April 2014	-	-	-	-
- Long	-	-	-	-	8,900	384,072	379,780	January-March 2015
Lead								
- Short	80	1,151	1,148	January 2014	25	340	308	January 2015
Silver		,	,	•				Ž
- Short	3,900	16,217	16,130	January-June 2014	-	-	-	-
Coal								
- Short	18,000	19,427	17,424	January-May 2014	52,000	51,148	51,996	September 2015
- Long	-	-	-	-	90,000	68,568	67,140	January-May 2015

## Liquidity risk

We monitor rolling forecasts of our liquidity requirements to ensure we have sufficient cash to meet operational needs while maintaining sufficient headroom on our undrawn committed borrowing facilities at all times so that we do not breach borrowing limits or covenants (where applicable) on any of our borrowing facilities. Such forecast takes into consideration of our debt financing plans, covenant compliance, compliance with internal balance sheet ratio targets and, if applicable, external regulatory or legal requirements. Our management also monitors rolling forecasts of our liquidity reserve on the basis of expected cash flows.

As of December 31, 2014, we had total banking facilities of approximately RMB142,051 million, of which RMB65,394 million had been utilized and unutilized banking facilities amounted to RMB76,657 million as of December 31, 2014, among which, banking facilities of approximately RMB71,660 million will be subject to renewal during the next 12 months from January 1, 2015. Our directors are confident that all banking facilities could be renewed upon their expiration based on our past experience with banks and our good credit standing. In addition, as of December 31, 2014, we had credit facilities through our futures agent at LME amounting to US\$120 million, of which approximately US\$57 million has been utilized.

The futures agent has the right to adjust the related credit facilities.

129

The following table sets forth the maturity profile of our financial liabilities as of December 31, 2014:

	Within 1 year 1 to 2 years 2 to 5 years			Over 5 years	Total
	(RMB in millions			ns)	
Finance lease payable, including current portion Long-term bank and other loans, including	318,103	444,022	910,926	-	1,673,051
current portion Long-term bonds Medium-term notes and	6,572,862	3,331,060	11,784,104 2,000,000	10,258,318	31,946,344 2,000,000
bonds, including current portion Short-term bonds Short-term bank and other	4,000,000 23,000,000	6,900,000	9,400,000	-	20,300,000 23,000,000
loans	40,792,689	-	-	-	40,792,689
Interest payables for borrowings Financial liabilities at fair value through profit or	5,783,078	2,516,312	3,488,030	596,089	12,383,509
loss Financial liabilities included in other payables and accrued liabilities.	29,384	-	-	-	29,384
excluding accrued interest Financial liabilities included in other	8,277,693	-	-	-	8,277,693
non-current liabilities Trade and notes payables	15,748,351	229,704	581,265	359,264	1,170,233 15,748,351
	104,522,160	13,421,098	28,164,325	11,213,671	157,321,254

## I T E MDESCRIPTION OF SECURITIES OTHER THAN EQUITY

## 12. SECURITIES

### A. DEBT SECURITIES

Not applicable.

#### B. WARRANTS AND RIGHTS

Not applicable.

### C. OTHER SECURITIES

Not applicable.

## D. AMERICAN DEPOSITARY SHARES

The following table summarizes the fees and charges that a holder of our ADSs may have to pay, directly or indirectly, in connection with the ownership of Chalco's American Depositary Receipts.

Persons depositing orFor: withdrawing shares must pay:

\$5.00 (or less) per 100 ADSs\* (or portion of 100 ADSs\$.02 (or less) per ADS

Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property

- \* Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
- \* Any cash distribution to ADS registered holders

130

A fee equivalent to the fee that would be payable if securities distributed to you had Distribution of securities distributed to holders of deposited securities

\$.02 (or less) per ADS per \* calendar year
Registration or transfer fees

\*

Depositary services

Transfer and registration of shares on our share register to or from the name of the depositary or its agent when

you deposit or withdraw shares

Expenses of the depositary

Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement)

\*

Converting foreign currency to U.S.

dollars

Taxes and other governmental \* charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes

As necessary

Any charges incurred by the \* depositary or its agents for servicing the deposited securities

As necessary

The Bank of New York Mellon, as depositary, has agreed to reimburse certain expenses related to the administration and maintenance of our ADR program and incurred by us in connection with the program. From January 1, 2014 to December 31, 2014, we received from the depositary reimbursements of US\$152,756.1 for our continuing annual stock exchange listing fees and our expenses incurred in connection with investor relationship programs. The depositary has also agreed to waive certain standard out-of-pocket administrative, maintenance and shareholder services expenses related to our ADR program. From January 1, 2014 to December 31, 2014, the total amount of the fees that were waived was US\$130,148.24.

#### **PART II**

I T E MDEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES 13.

None.

I T E MMATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY

14. HOLDERS AND USE OF PROCEEDS

None.

# I T E MCONTROLS AND PROCEDURES 15.

Our management, with the participation of our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15(d)-15(e) of the Exchange Act) as of the end of the period covered by this annual report, have concluded that, as of such date, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the consolidated financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

131

Under the supervision of and with the participation of the principal executive officer and principal financial officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2014 based on the framework in

Internal Control- Integrated Framework (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission in May 2013. Based on our evaluation under the framework in Internal Control-Integrated Framework (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission, our management concluded that, as of December 31, 2014, our internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRSs.

The effectiveness of our internal controls over financial reporting as of December 31, 2014 has been audited by Ernst & Young, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

During 2014, there have been no material changes in our internal control over financial reporting that occurred during the fiscal year covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## I T E MAUDIT COMMITTEE FINANCIAL EXPERT 16A.

Our audit committee members are Mr. Ma Si-hang, Frederick and Ms. Chen Lijie. Our Board has determined that Mr. Ma Si-hang, Frederick, the chairman of the audit committee, qualifies as an "audit committee financial expert" as defined in Item 16A of Form 20-F and is the financial expert serving on our audit committee. See "Item 6. Directors, Senior Management and Employees."

# I T E MCODE OF ETHICS 16B.

We have adopted a code of ethics that applies to our chief executive officer, chief financial officer, other directors, independent non-executive directors, senior management and employees. We have posted our code of ethics on our website: www.chalco.com.cn. A hard copy of this code of ethics is available to investors free of charge upon written request to the address on the cover of this annual report on Form 20-F.

## I T E MPRINCIPAL ACCOUNTANT FEES AND SERVICES 16C.

Ernst & Young served as our independent auditor for the fiscal years ended December 31, 2013 and 2014. A description of the fees billed to us by Ernst & Young for professional services in each of the last two fiscal years is set forth below:

	2013	2014		
	(RMB in thousands			
Audit fee <sup>(1)</sup> and audit-related fees <sup>(2)</sup> Tax fees <sup>(3)</sup>	25,221 28	22,210		
	132			

- (1) "Audit fee" represents fee obtained from annual audit work.
- (2) "Audit-related fees" represent aggregate fees charged by Ernst & Young for permissible professional services rendered in connection with assisting the Company to transition from COSO 1992 Internal Control Framework to COSO 2013 Internal Control Framework, issuance of USD senior perpetual securities and issuance of subsequent letter for additional issuance of A Shares according to the requirement of CSRC.
- (3) "Tax fees" represent fees charged by Ernst & Young for permissible tax advisory services related to planned and completed acquisitions and other tax advisory service.

Our audit committee pre-approves all audit and audit-related services and tax advisory services performed by our principal accountants, Ernst & Young, for the years ended December 31, 2013 and 2014.

## I T E MEXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT 16D. COMMITTEES

Not applicable.

# I T E MPURCHASE OF EQUITY SECURITIES BY THE ISSUER AND 16E. AFFILIATED PURCHASERS

We do not have an equity securities repurchase program and did not repurchase any of our equity securities during the year ended December 31, 2014.

## I T E MCHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT 16F.

Not applicable.

# I T E MCORPORATE GOVERNANCE 16G.

The NYSE has imposed a series of corporate governance listing standards for companies listed on the NYSE in Section 303A of its listing rules. However, the NYSE provides that listed companies that are foreign private issuers, subject to certain limitations and conditions, are permitted to follow "home country" practice in lieu of the provisions of Section 303A of the NYSE Listed Company Manual. As a foreign issuers listed on the NYSE, we are required to disclose a summary of the significant differences between our domestic corporate governance rules and NYSE corporate governance rules that apply to U.S. domestic issuers.

NYSE Listed Company Manual

Requirements on

Corporate Governance Our Practice

Majority of independent directors

NYSE requires that the board of aOur Board currently listed company must comprise comprises two independent a majority of independent directors.directors and six

There is no identical non-independent directors corporate governance requirementwhich is not in compliance in the PRC. PRC securities with the requirement by the regulatory authorities require that PRC securities regulatory the board of a listed company shall authorities. As the date of comprise at least one-third of this Annual Report, we are independent directors. in the process of

identifying suitable candidate as independent director to fill the vacancy of the Board.

Compensation Committee

NYSE requires U.S. domesticWe have a remuneration issuers to have a compensation committee that consists of committee composed entirely of an independent director and independent directors. As a foreign a non-independent director. private issuer, we are not subject to

such requirement.

Nominating Committee

NYSE requires U.S. domesticWe have a nomination issuers to have only independent committee that consists of directors two non-independent on their nominating committees. Asdirectors and two a foreign private issuer, independent directors. we are not subject to such

requirement.

Corporate governance committee

NYSE requires a listed company toLike most of the other establish a corporate governance companies incorporated in committee which comprises entirelythe PRC, we believe that of independent directors. corporate governance

The corporate governancemeasures are of critical committee shall be co-established importance and should be with the nomination committee and implemented by the Board. have a written charter. We accordingly do not The corporate governanceseparately maintain a committee is responsible corporate governance (i) for recommending to the board acommittee. accordingly do not separately maintain a set of corporate governance guidelines applicable to the corporation; and (ii) supervising the operation of the board and the management. The corporate governance committee shall also be subject to evaluation annually. There is no identical corporate governance requirement in the PRC.

133

### I T E MMINE SAFETY DISCLOSURE 16H.

As of the date of this annual report, we did not own or operate any mine in the United States. For details of the mining safety control of our bauxite mines in China, see "Item 4. Information on the Company - B. Business Overview - Raw Materials - Alumina - Own Mines."

### **PART III**

### I T E MFINANCIAL STATEMENTS

17.

We have elected to provide the financial statements and related information specified in Item 18 in lieu of Item 17.

### I T E MFINANCIAL STATEMENTS

18.

Our consolidated financial statements are included at the end of this annual report on Form 20-F.

### I T E MEXHIBITS

19.

### E x h i b i tDescription

### Number

13.1\*

1.1 English translation of Articles of Association of Aluminum Corporation of China Limited (incorporated by reference to Exhibit 1.1 of our annual report on Form 20-F (file No. 001-15264) filed with the Securities and Exchange Commission on April 25, 2013) 2.1 Registrant's Specimen American Depositary Receipt (incorporated by reference to Exhibit 2.1 of our annual report on Form 20-F/A (file No. 001-15264) filed with the Securities and Exchange Commission on October 9, 2012) 2.2 Registrant's Specimen Certificate for H Shares (incorporated by reference to Exhibit 2.2 of our annual report on Form 20-F/A (file No. 001-15264) filed with the Securities and Exchange Commission on October 9, 2012) 2.3 Deposit Agreement among the Registrant, The Bank of New York, as depositary, and Owners and Beneficial Owners of the American Depositary Receipts (incorporated by reference to Exhibit 2.3 of our annual report on Form 20-F/A (file No. 001-15264) filed with the Securities and Exchange Commission on October 9, 2012) 4.1 English translation of Form of Employment Contract (incorporated by reference to Exhibit 4.1 of our annual report on Form 20-F/A (file No. 001-15264) filed with the Securities and Exchange Commission on October 9, 2012) 8.1\* List of Subsidiaries of Aluminum Corporation of China Limited as of December 31, 2014 Certification by the Chief Executive Officer pursuant to Section 302 12.1\* of the Sarbanes-Oxley Act of 2002 Certification by the Chief Financial Officer pursuant to Section 302 12.2\* of the Sarbanes-Oxley Act of 2002

134

13.2\* Certification by the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

of the Sarbanes-Oxley Act of 2002

Certification by the Chief Executive Officer pursuant to Section 906

15.1 Letter from PricewaterhouseCoopers (incorporated by reference to

Exhibit 15.1 of our annual report on Form 20-F (file No. 001-15264) filed with the Securities and Exchange Commission on April 25, 2013)

\* Filed with this annual report on Form 20-F

#### **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on this Form 20-F on its behalf.

## ALUMINUM CORPORATION OF CHINA LIMITED

By: /s/GE Honglin

Name: GE Honglin

Title: Chairman of the Board

Date: April 15, 2015

135

### ALUMINUM CORPORATION OF CHINA LIMITED AND ITS SUBSIDIARIES

**Consolidated Financial Statements** 

For the Years Ended December 31, 2012, 2013 and 2014

Together with Reports of Independent Public Accounting Firm

F-1

## INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS ALUMINUM CORPORATION OF CHINA LIMITED

Pages
Reports of the Independent Registered Public Accounting Firm
F3-F5
Consolidated Statements of Financial Position as of December 31,
2013 and 2014
F6-F7

Consolidated Statements of Comprehensive Income for the Years Ended

December 31, 2012, 2013 and 2014

F8-F9

Consolidated Statements of Changes in Equity for the Years Ended

December 31, 2012, 2013 and 2014

F10-F12

Consolidated Statements of Changes in Cash Flows for the Years Ended

December 31, 2012, 2013 and 2014

F13-F14

Notes to the Consolidated Financial Statements

F15-F185

F-2

Report of Independent Registered Public Accounting Firm on Consolidated Financial Statements

The Board of Directors and Shareholders of Aluminum Corporation of China Limited (Incorporated in the People's Republic of China with limited liability)

We have audited the accompanying consolidated statements of financial position of Aluminum Corporation of China Limited and its subsidiaries (the "Group") as of December 31, 2013 and 2014, and the related consolidated statements of comprehensive income, statements of changes in equity and statements of cash flows for each of the three years in the period ended December 31, 2014. These consolidated financial statements are the responsibility of the Group's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States) and International Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Group at December 31, 2013 and 2014, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2014, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Aluminum Corporation of China Limited's internal control over financial reporting as of December 31, 2014, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated April 15, 2015 expressed an unqualified opinion thereon.

/s/ Ernst & Young

Hong Kong April 15, 2015

F-3

Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting

The Board of Directors and Shareholders of Aluminum Corporation of China Limited (Incorporated in the People's Republic of China with limited liability)

We have audited Aluminum Corporation of China Limited's internal control over financial reporting as of December 31, 2014, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Aluminum Corporation of China Limited's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying "Management's Report on Internal Control over Financial Reporting". Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Aluminum Corporation of China Limited maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014, based on the COSO criteria.

F-4

## Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting (Continued)

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) and International Standards on Auditing, the consolidated statements of financial position of Aluminum Corporation of China Limited as of December 31, 2013 and 2014, and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2014 of Aluminum Corporation of China Limited and our report dated April 15, 2015 expressed an unqualified opinion thereon.

/s/ Ernst & Young

Hong Kong April 15, 2015

F-5

# ALUMINUM CORPORATION OF CHINA LIMITED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION As of December 31, 2013 and 2014 (Amounts expressed in thousands of RMB unless otherwise stated)

		December 20	December 31, 2014	
	Note	RMB'000	RMB'000	USD'000
ASSETS				
Non-current assets				
Intangible assets	7	10,852,397	10,977,959	1,769,326
Property, plant and equipment	8	100,605,972	94,032,375	15,155,268
Land use rights and leasehold land	9	2,743,966	3,274,428	527,742
Investments in joint ventures	10(a)	2,314,841	2,525,747	407,076
Investments in associates	10(b)	4,587,818	4,840,968	780,222
Available-for-sale financial investments	11	82,112	74,850	12,064
Deferred tax assets	12	1,793,310	952,057	153,444
Other non-current assets	13	13,461,217	12,479,204	2,011,283
Total non-current assets		136,441,633	129,157,588	20,816,425
Current assets				
Inventories	14	23,535,948	22,441,448	3,616,905

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Trade and notes receivables	15	6,156,605	5,312,575	856,231
Other current assets	16	20,946,992	13,031,669	2,100,324
Financial assets at fair value through profit or loss	3.2	23	120,901	19,486
Available-for-sale financial investments	11	-	4,635,600	747,123
Restricted cash and time deposits	17	1,044,158	1,663,590	268,122
Cash and cash equivalents	17	11,381,695	16,268,600	2,622,022
Total current assets		63,065,421	63,474,383	10,230,213
Total assets		199,507,054	192,631,971	31,046,638

F-6

### ALUMINUM CORPORATION OF CHINA LIMITED

### CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (CONTINUED)

As of December 31, 2013 and 2014

(Amounts expressed in thousands of RMB unless otherwise stated)

		Decemb	er 31,	December 31,	
		201	3	2014	
	Note	RMB'000	RMB'000	USD'000	
EQUITY AND LIABILITIES					
EQUITY					
Equity attributable to owners of the parent					
Share capital	18	13,524,488	13,524,488	2,179,752	
Other reserves	19	19,505,450	19,640,292	3,165,441	

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Retained earnings/(accumulated losses)				
<ul><li>proposed final dividend</li><li>others</li></ul>	34	11,327,787	(4,889,093)	(787,979)
			<del></del> .	
		44,357,725	28,275,687	4,557,214
Non-controlling interests		9,344,394	11,353,155	1,829,796
Total equity		53,702,119	39,628,842	6,387,010
LIABILITIES				
Non-current liabilities				
Interest-bearing loans and borrowings	20	46,294,828	44,769,211	7,215,487
Other non-current liabilities	22	1,684,376	2,937,087	473,372
Deferred tax liabilities	12	1,088,150	1,061,265	171,045
Total non-current liabilities		49,067,354	48,767,563	7,859,904
Current liabilities				
Financial liabilities at fair value through profit or loss	3.1/3.2	1,947	29,384	4,736
Interest-bearing loans and borrowings	20	73,348,346	75,167,251	12,114,762
Other payables and accrued liabilities	23	10,860,109	13,211,160	2,129,253
Trade and notes payables	24	12,401,650	15,748,351	2,538,173
Income tax payable		125,529	79,420	12,800
Total current liabilities		96,737,581	104,235,566	16,799,724

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Total liabilities	145,804,935	153,003,129	24,659,628
Total equity and liabilities	199,507,054	192,631,971	31,046,638
Net current liabilities	33,672,160	40,761,183	6,569,511
Total assets less current liabilities	102,769,473	88,396,405	14,246,914

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

Ge Honglin
Director

Xie Weizhi Chief Financial Officer

F-7

### ALUMINUM CORPORATION OF CHINA LIMITED

### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the years ended December 31, 2012, 2013 and 2014

(Amounts expressed in thousands of RMB unless otherwise stated)

		2012	2013	20	14
	Note	RMB'000	RMB'000	RMB'000	USD'000
Continuing operations					
Revenue	5	143,436,995	169,431,235	141,772,292	22,849,546
Cost of sales		(143,425,940)	(166,679,798)	(141,138,806)	(22,747,447)
Gross profit		11,055	2,751,437	633,486	102,099
Selling and distribution expenses	27(a)	(1,833,983)	(1,859,220)	(1,753,234)	(282,570)

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General and administrative expenses	27(b)	(2,750,222)	(2,946,879)	(4,832,156)	(778,802)
Research and development expenses	<b>-</b> /(0)	(184,683)	(193,620)	(293,766)	(47,346)
Impairment loss on property,		(104,003)	(173,020)	(273,700)	(47,540)
plant and equipment	8	(19,903)	(501,159)	(5,679,521)	(915,373)
Government grants	28(a)	734,852	805,882	823,986	132,802
Other (losses) /gains, net	28(b)	(16,989)	7,399,252	356,935	57,528
Finance income	29	302,346	616,576	1,047,607	168,844
Finance costs	29	(4,362,970)	(5,849,646)	(6,717,945)	(1,082,736)
Share of profits of:					
Joint ventures	10(a)	37,040	148,749	89,510	14,426
Associates	10(b)	256,081	511,869	350,575	56,502
(Loss)/profit before income tax from continuing					
operations	26	(7,827,376)	883,241	(15,974,523)	(2,574,626)
T					
Income tax benefit/(expense) from continuing operations	32	371,092	(339,551)	(1,074,910)	(173,244)
(Loss)/profit for the year		(7.456.004)	5.42.600	(17.040.422)	(2.747.070)
from continuing operations		(7,456,284)	543,690	(17,049,433)	(2,747,870)
Discontinued operation					
(Loss)/profit for the year					
from discontinued operation	6	(1,187,299)	207,144	-	-
(Loss)/profit for the year		(8,643,583)	750,834	(17,049,433)	(2,747,870)
(Loss)/profit attributable to:					
Owners of the parent		(8,233,754)	975,246	(16,216,880)	(2,613,687)
Non-controlling interests		(409,829)	(224,412)	(832,553)	(134,183)

(8,643,583) 750,834 (17,049,433) (2,747,870)

F-8

### ALUMINUM CORPORATION OF CHINA LIMITED

### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (CONTINUED)

For the years ended December 31, 2012, 2013 and 2014

(Amounts expressed in thousands of RMB unless otherwise stated)

		2012	2013	201	14
	Note	RMB'000	RMB'000	RMB'000	USD'000
(Loss)/Profit attributable to owners of the parent arising from:					
Continuing operations		(7,163,361)	739,333	(16,216,880)	(2,613,687)
Discontinued operation		(1,070,393)	235,913	-	-
		(8,233,754)	975,246	(16,216,880)	(2,613,687)
Other comprehensive income /(loss), net of tax:					
Other comprehensive income /(loss) to be reclassified to profit or loss in subsequent periods:					
Exchange differences on translation of foreign operations		18,752	(234,019)	64,102	10,331

Net other comprehensive income /(loss) to be reclassified to profit or loss in subsequent periods		18,752	(234,019)	64,102	10,331
Total other comprehensive income /(loss), net of tax		18,752	(234,019)	64,102	10,331
Total comprehensive (loss) /income for the year		(8,624,831)	516,815	(16,985,331)	(2,737,538)
Total comprehensive (loss) /income for the year attributable to:					
Owners of the parent		(8,215,002)	741,227	(16,152,778)	(2,603,355)
Non-controlling interests		(409,829)	(224,412)	(832,553)	
		(8,624,831)	516,815	(16,985,331)	
Basic and diluted (loss)/earnings per share attributable to ordinary equity holders of the parent					
(expressed in RMB per share)					
From continuing operations	33	(0.53)	0.05	(1.20)	(0.193)
From discontinued operation	33	(0.08)	0.02	-	-

(0.61)0.07 (1.20)(0.193)

Details of the dividends payable and proposed for the year are disclosed in Note 34 to the consolidated financial statements.

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

F-9

### ALUMINUM CORPORATION OF CHINA LIMITED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

For the years ended December 31, 2012, 2013 and 2014

(Amounts expressed in thousands of RMB unless otherwise stated)

### Attributable to owners of the parent

		Capital r	eserves						
	Share capital (Note 18)	Share premium	Other capital reserves	•	Special reserve	Exchange fluctuation reserve	Retained earnings	Total	conti
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RM
At January 1, 2012	13,524,488	12,846,728	945,777	5,867,557	90,780	(36,134)	18,586,803	51,825,999	6,32
Loss for the year	-	-	-	-	-	-	(8,233,754)	(8,233,754)	(40
Other comprehensive income for the year:									
-	-	-	-	-	-	18,752	-	18,752	

Exchange differences on translation of foreign operations									
Total comprehensive income/(loss) for the year						18,752	(8,233,754)	(8,215,002)	(409,83
Release of deferred government			202 200			ŕ			
subsidies Acquisition of non-controlling interests	-	(7,946)	203,299	-	-	-		203,299 (7,946)	8,5 7,9
Capital injection from non-controlling shareholders	-	-	_	-	-	-	_	_	4,104,3
Other appropriation	_	-	_	_	(877)	_	_	(877)	2,3
Share of reserves of associates	-	-	-	-	2,290	-	-	2,290	8,2
Transfer from other capital reserves to									
share premium	-	258,335	(258,335)	-	-	-	-	-	
Dividends paid by subsidiaries to									
non-controlling shareholders relating to 2011	-	-	-	-	-	-	-	-	(86,8
At December 31, 2012	13,524,488	13,097,117	890,741	5,867,557	92,193	(17,382)	10,353,049	43,807,763	9,963,3

### F-10

# ALUMINUM CORPORATION OF CHINA LIMITED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (CONTINUED)

For the years ended December 31, 2012, 2013 and 2014

(Amounts expressed in thousands of RMB unless otherwise stated)

### Attributable to owners of the parent

						1			
		Capital reserves							
	Share capital (note 18) RMB'000	Share premium RMB'000	Other capital reserves RMB'000	Statutory surplus reserve RMB'000	Special reserve RMB'000	Foreign currency translation reserve RMB'000	Retained earnings RMB'000	Total RMB'000	No controllin interes RMB'00
At January 1,									
2013	13,524,488	13,097,117	890,741	5,867,557	92,193	(17,382)	10,353,049	43,807,763	9,963,38
Profit/(loss) for the year	-	-	-	-	-	-	975,246	975,246	(224,41
O t h e r comprehensive loss for the year:									
Exchange differences on translation of foreign									
operations	-	-	-	-	-	(234,019)	-	(234,019)	
	-	-	-	-	-	(234,019)	975,246	741,227	(224,41

T o t a l comprehensive (loss)/income for the year									
Release of deferred government subsidies	-	-	11,800	-	-	-	-	11,800	
Acquisition of subsidiaries	-	-	-	-	-		-	-	3,801,88
Disposal of discontinued operation	-	-	-	-	-	-	-	-	(324,53
Disposal and deemed disposal of subsidiaries	-	965	(257,529)	-	(49)	-	(508)	(257,121)	(6,170,47
Issuance of senior perpetual securities, net of issuance costs (note 39)	_	_	_	_	-	_	_	_	2,122,60
C a p i t a l injection from non-controlling shareholders	-	-	-	-	-	-	-	-	193,90
O t h e r appropriation	-	-	-	-	38,220	-	-	38,220	(73
Share of reserves of a joint venture and associates (note 10)	-	_	_	_	15,836	_	_	15,836	9,08
Dividends paid by subsidiaries t o non-controlling shareholders					-,0			-,0	2,30
relating to 2012		-							(26,32

13,524,488 13,098,082 645,012 5,867,557 146,200 (251,401) 11,327,787 44,357,725 9,344,35

Αt	December
31,	2013

F-11

# ALUMINUM CORPORATION OF CHINA LIMITED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (CONTINUED)

For the years ended December 31, 2012, 2013 and 2014

(Amounts expressed in thousands of