

ALUMINUM CORP OF CHINA LTD  
Form 20-F  
May 24, 2005

ALUMINUM CORPORATION OF CHINA LIMITED

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

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FORM 20-F

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

OR

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

For the fiscal year ended December 31, 2004

OR

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

Commission file number: 001-15264

**(Chinese Characters)**

(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)

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No. 12B Fuxing Road, Haidian District, Beijing, People's Republic of China 100814  
(Address of Principal Executive Offices)

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

Title of each Class  
**American Depositary Shares,  
each representing 100 H Shares  
Class H Ordinary Shares**

Name of Each Exchange on which Registered  
**New York Stock Exchange, Inc.**

**The Stock Exchange of Hong Kong Limited**

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

None  
(Title of Class)

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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, 2004:

Domestic Shares, par value RMB1.00 per share	7,750,010,185
H Shares, par value RMB1.00 per share	3,299,865,968
(including 425,934,600 H Shares in the form of American Depository Shares)	

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  No

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

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## 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 and Exchange Act of 1934, as amended, or the Exchange Act. 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. We wish to caution readers not to 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 prices and demand for our products;

- \* future PRC tariff levels for alumina and primary aluminum;
- \* sales of our products;
- \* the amount and nature of, and potential for, future development;
- \* bauxite reserves potential;

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- \* production forecasts of bauxite, alumina and primary aluminum;
- \* expansion, consolidation or other trends in the aluminum industry;
- \* the effectiveness of our cost-saving measures;
- \* future expansion plans and capital expenditures;
- \* expected production capacity increases;
- \* 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 expected 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 entitled "Item 3. Key Information - 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.

Unless otherwise indicated, statistical and market trend information, as well as statements related to market position and competitive data, are based on our internal statistics and/or estimates gathered from our own research and/or various publicly available sources.

#### CERTAIN TERMS AND CONVENTIONS

Translations of amounts in this annual report from Renminbi into U.S. dollars and vice versa have been made at the rate of RMB8.2765 to US\$1.00, which was the noon buying rate in the New York City for cable transfers in Renminbi per U.S. dollar as certified for customs purposes by the Federal Reserve Bank of New York on December 31, 2004. You should not construe these translations as representations that the Renminbi amounts actually represent U.S. dollar amounts or could be converted into U.S. dollars at that rate or at all. See "Item 3. Key Information - Exchange Rate Information" for information regarding the noon buying rates from January 1, 2000 through April 20, 2005.

We publish our financial statements in Renminbi.

Various amounts and percentages set out in this document have been rounded and, accordingly, are not the exact figures and may not total.

Unless the context otherwise requires, references in this annual report to:

"**A Share**" are to the domestic ordinary shares, with a nominal value of RMB1.00 each;

"**Alcoa**" are to Alcoa International (Asia) Ltd., a company incorporated under the laws of Hong Kong;

"**alumina-to-silica ratio**" are to the ratio of alumina to silica by weight found in bauxite;

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"**aluminum fabrication**" are to the process of taking primary aluminum and converting it into plates, strips, bars, tubes, etc. which can be further converted into consumer or other end products;

"**bauxite**" are to mineral ores whose composition is principally alumina;

"**Bayer process**" are to a refining process employed to extract alumina from ground bauxite with a strong solution of caustic soda at an elevated temperature;

"**brownfield development**" are to development projects at existing plants or facilities;

"**Chalco**," "**our company**," "**we**," "**our**" and "**us**" are to Aluminum Corporation of China Limited and its subsidiaries and, where appropriate, to its predecessors;

"**China**" and the "**PRC**" are to the People's Republic of China, excluding for purposes of this annual report, Hong Kong, Macau and Taiwan;

"**China Cinda**" are to China Cinda Asset Management Corporation, a PRC state-owned financial enterprise established pursuant to PRC government approval;

"**Chinalco**" and the "**ultimate holding company**" are to our controlling shareholder, Aluminum Corporation of China and its subsidiaries (other than Chalco and its subsidiaries) and, where appropriate, to its predecessors;

"**China Orient**" are to China Orient Asset Management Corporation, a PRC state-owned financial enterprise established pursuant to PRC government approval;

"**diasporite**" are to a mineral of bauxite deposits with the chemical composition of  $\text{Al}(\text{2})\text{O}(\text{3}) * \text{H}(\text{2})\text{O}$ ;

"**Exchange Act**" are to The Securities Exchange Act of 1934, as amended;

"**fabricating ingots**" are to the primary aluminum or aluminum alloy ingots that may be used directly in the aluminum fabrication process;

"**gibbsitic**" are to a mineral of bauxite deposits with the chemical composition of  $\text{Al}(\text{2})\text{O}(\text{3}) * \text{hemical composition of Al}(\text{2})\text{O}(\text{3}) * 3\text{H}(\text{2})$

"**greenfield investment**" are to investment projects to construct new plants or facilities;

"**Guangxi Investment**" are to Guangxi Investment (Group) Co., Ltd. formerly known as Guangxi Development and Investment Co., Ltd., a PRC state-owned enterprise established in the PRC and one of our promoters and shareholders;

"**Guizhou Development**" are to Guizhou Provincial Materials Development and Investment Corporation, a PRC state-owned enterprise established in the PRC and one of our promoters and shareholders;

"**HK\$**" and "**HK dollars**" are to Hong Kong dollars, the lawful currency of the Hong Kong Special Administrative Region of the PRC;

"**H Shares**" are to overseas listed foreign shares of par value RMB1.00 each, which are listed on the Hong Kong Stock Exchange and subscribed for and traded in HK dollars;

"**Hong Kong Stock Exchange**" are to The Stock Exchange of Hong Kong Limited;

"**hybrid Bayer-sintering process**" are to the refining process developed in China which involves the application of the Bayer process and the sintering process in combination to extract alumina from bauxite more efficiently;

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"**ingots**" and "**remelt ingots**" are to the international standard primary metal products from an aluminum smelter. Remelt ingots are the aluminum ingots generally remelted before being cast into alloyed products or used for aluminum fabrication;

"**kA**" are to kiloamperes, a unit for measuring the strength of an electric current, with one kiloampere equal to 1,000 amperes;

"**kWh**" are to kilowatt hours, a unit of electrical power, meaning one kilowatt of power for one hour;

"**Lanzhou Aluminum**" are to Lanzhou Aluminum Corporation Limited, our associated company that is a joint stock company established under the PRC law, whose A shares are traded on the Shanghai Stock Exchange;

"**Listing Rules**" are to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange (as amended from time to time);

"**NYSE**" are to New York Stock Exchange;

"**ore-dressing Bayer process**" are to a refining process we developed which involves the treatment of bauxite in order to increase its alumina-to-silica ratio so as to allow the Bayer process to then be applied;

"**provinces**" are to provinces and to provincial-level autonomous regions and municipalities in China, excluding Hong Kong Special Administrative Region, Macau Special Administrative Region, and Taiwan, which are directly under the supervision of the central PRC government;

"**refining**" are to the chemical process required to produce alumina from bauxite;

"**RMB**" are to Renminbi, the lawful currency of the PRC;

"**NDRC**" are to China National Development and Reform Commission;

"**Shandong Aluminum**" are to Shandong Aluminum Industry Co., Ltd., our subsidiary that is a joint stock company established under PRC law, whose A shares are traded on the Shanghai Stock Exchange;

"**sintering process**" are to a refining process employed to extract alumina from ground bauxite by mixing with supplemental materials and burning in a coal fired kiln;

"**smelting**" are to the electrolytic reduction process required to produce molten aluminum from alumina;

"**tonne**" are to the metric ton, a unit of weight, with one metric ton equal to 1,000 kilograms or 2,204.6 pounds;

"**US\$**" are to U.S. dollars, the lawful currency of the United States of America; and

"**WTO**" are to World Trade Organization.

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PART I

ITEM

1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not applicable.

ITEM

2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM

3. KEY INFORMATION

Selected Financial Data

Historical Financial Information

The following tables present our summary income statement data and cash flow data for the years ended December 31, 2000, 2001, 2002, 2003 and 2004; and the summary balance sheet data as of December 31, 2000, 2001, 2002, 2003 and 2004. The summary balance sheet data as of December 31, 2003 and 2004 and income statement and cash flow data for the years ended December 31, 2002, 2003 and 2004 have been derived from, and should be read in conjunction with, the audited financial statements included elsewhere in this report. The summary balance sheet data as of December 31, 2000, 2001 and 2002 and income statement and cash flow data for the years ended December 31, 2000 and 2001 have been derived from our audited financial statements as of and for such dates, which are not included in this annual report.



This financial information reflects the reorganization of China's aluminum industry, following which our company was established and has been prepared as if our current structure had been in existence throughout the relevant periods. In addition, the financial information also includes various other operations retained by Chinalco that were historically associated with Chinalco's alumina and primary aluminum operations. The results of such businesses are not reflected in our statements of income for periods ending after June 30, 2001. Similarly, such businesses and their related balance sheet data are not reflected in our balance sheet as of any date after June 30, 2001. In addition, the financial information included in this annual report may not necessarily reflect our operating performance, financial position and cash flows in the future or what they would have been had we been a separate, stand-alone entity during all of the periods presented. Unless otherwise indicated, the financial statements are prepared and presented in accordance with accounting principles generally accepted in Hong Kong, also known as "HK GAAP." For a reconciliation of our net income and owner's equity to generally accepted accounting principles in the United States, also known as "U.S. GAAP," see Note 34 to our audited financial statements. We have restated our net income for 2002 and owners' equity as of December 31, 2001, 2002 and 2003 under U.S. GAAP to reflect the effect in respect of the recognition of deferred tax assets from revaluation of fixed assets and mining rights. For more information, please see "-- Risk Factors" and "Item 5 - Operating and Financial Review and Prospects - U.S. GAAP Reconciliation".

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## Year Ended December 31,

	2000	2001	2002	2003	2004	2004
	RMB	RMB	RMB	RMB	RMB	US\$( <sup>1</sup> )
	(in thousands, except per share and per ADS data)					
<b>INCOME STATEMENT DATA:</b>						
<b>HK GAAP</b>						
Sales of goods	17,664,069	15,987,913	16,792,766	23,245,858	32,313,076	3,904,196
Cost of goods sold	11,040,061	11,669,557	13,349,514	16,439,534	21,464,189	2,593,390
Gross profit	6,624,008	4,318,356	3,443,252	6,806,324	10,848,887	1,310,806
Other revenues	606,869	621,570	522,875	580,171	708,158	85,562
Expenses related to other revenues	446,828	587,722	459,777	512,220	592,630	71,603
Other revenues, net	160,041	33,848	63,098	67,951	115,528	13,959
Selling and distribution expenses	259,101	335,227	501,829	549,432	647,532	78,237
General and administrative expenses	1,245,083	1,051,104	733,803	1,047,461	1,220,902	147,515

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Research and development expenses	309,477	144,048	131,941	173,359	132,635	16,025
Other (income) expenses, net	16,024	(136,320)	16,089	25,543	3,383	409
Operating income	4,954,364	2,958,145	2,122,688	5,078,480	8,959,963	1,082,579
Finance costs	708,233	549,410	490,614	451,411	408,992	49,416
Operating income after finance costs	4,246,131	2,408,735	1,632,074	4,627,069	8,550,971	1,033,163
Share of income (loss) of a jointly controlled entity	1,007	(125)	(254)	1,193	(3,953)	(0.478)
Income before income tax	4,247,138	2,408,610	1,631,820	4,628,262	8,547,018	1,032,685
Income taxes	1,589,475	756,820	183,393	918,862	2,079,538	251,258
Income after income tax	2,657,663	1,651,790	1,448,427	3,709,400	6,467,480	781,427
Minority interests	134,666	63,713	46,822	157,370	243,540	29,424
Net income for the year	2,522,997	1,588,077	1,401,605	3,552,030	6,223,940	752,001
Dividend	-	178,498	472,496	1,060,788	1,944,778	235,161
Basic and diluted net earnings per share	0.32	0.19	0.13	0.34	0.56	0.07
Basic and diluted net earnings per ADS	31.54	19.55	13.35	33.83	56.37	6.81
U.S. GAAP						
Net income	2,563,151	1,727,763	1,493,582 <sup>(2)</sup>	3,797,175	6,622,916	800,207
Basic and diluted net income per share	0.32	0.22	0.14 <sup>(2)</sup>	0.36	0.60	0.07
Basic and diluted net income per ADS	32.04	22.00	16.00	36.16	59.99	7.25
Segment Operating Income (Loss):						
HK GAAP						
Alumina	4,105,106	2,121,424	1,379,622	5,109,538	9,371,591	1,132,314
Primary aluminum	1,515,904	1,217,439	1,143,658	445,237	(32,200)	(3,891)
Corporate and other services	8,399	(25,680)	(57,933)	(78,337)	(76,906)	(9,293)
Unallocated	(620,011)	(330,649)	(311,729)	(367,677)	(281,431)	(34,003)
Inter-segment elimination	(55,034)	(24,389)	(30,930)	(30,281)	(21,091)	2,548

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Total operating income	4,954,364	2,958,145	2,122,688	5,078,480	8,959,963	1,082,579
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As of December 31,

	2000	2001	2002	2003	2004	2004
	RMB	RMB	RMB	RMB	RMB	US\$( <sup>1</sup> )
	(in thousands)					
<b>BALANCE SHEET DATA</b>						
<b>HK GAAP</b>						
Bank balances and cash	2,419,791	4,495,922	2,342,254	2,596,440	6,223,763	751,980
Total current assets	8,552,055	12,013,524	8,557,975	8,638,566	14,356,588	1,734,624
Total non-current assets	14,756,162	21,383,987	23,361,989	26,439,729	34,623,775	4,183,383
Total assets	23,308,217	33,397,511	31,919,964	35,078,295	48,980,363	5,918,007
Total short-term loans (including current portion of long-term loans)	4,528,622	5,477,549	5,103,274	4,617,130	4,522,568	546,435
Total long-term loans (excluding current portion of long-term loans)	5,566,015	5,391,861	4,949,298	5,412,628	7,391,663	893,090
Owner's equity	5,026,099	14,096,085	15,523,947	18,742,341	27,156,143	3,281,114
Capital employed	13,714,248	21,121,724	23,718,243	26,827,587	34,085,694	4,118,371
<b>U.S. GAAP</b>						
Total assets	23,639,127	31,113,431 <sup>(3)</sup>	29,770,888 <sup>(3)</sup>	33,244,024 <sup>(3)</sup>	47,260,826	5,710,243
Total long-term loans (excluding current portion of long-term loans)	5,566,015	5,391,861	4,949,298	5,412,628	7,391,603	893,090
Owner's equity	5,170,921	11,671,874 <sup>(3)</sup>	13,170,960 <sup>(3)</sup>	16,634,499 <sup>(3)</sup>	25,436,606	3,073,353
Number of shares	-	8,122,482	10,495,863	10,499,900	11,049,876	11,049,876

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	2000	2001	2002	2003	2004	2004
	RMB	RMB	RMB	RMB	RMB	US\$( <sup>1</sup> )
	(in thousands)					
Other Financial Data:						
HK GAAP						
Net cash inflow from operating activities	4,129,737	1,940,969	2,671,759	6,002,006	8,265,203	998,635
Net cash outflow from investing activities	(2,016,872)	(2,575,617)	(3,780,812)	(5,395,259)	(9,055,830)	1,094,161
Net cash (outflow) inflow from financing activities	(2,509,888)	3,108,087	(868,513)	(306,892)	4,417,950	533,794
Capital expenditure						
Alumina	1,147,848	2,457,123	3,192,788	3,831,590	4,976,544	601,286
Primary aluminum	545,756	640,110	700,572	1,471,539	5,020,548	606,603
Corporate and other services	7,024	27,638	49,304	47,259	76,841	9,284
Unallocated	93,794	177,657	29,930	33,030	208,411	25,181
Total capital expenditure	1,794,422	3,302,528	3,972,594	5,383,418	10,282,344	1,242,354

- (1) Translated solely for the convenience of the reader into U.S. dollars at the noon buying rate prevailing on December 31, 2004 of US\$1.00 to RMB8.2765
- (2) The amount has been restated, see Note 33, as restated, to the consolidated financial statements. The effect is to decrease net income under U.S. GAAP by RMB186.3 million, and earnings per share under U.S. GAAP by RMB0.02.
- (3) The amount has been restated, see Note 33, as restated, to the consolidated financial statements. The effect on the years presented is to increase equity under U.S. GAAP by the following amounts: 2001 - RMB1,363.7 million; 2002 - RMB1,156.6 million and 2003 - RMB1,165.4 million.

Exchange Rate Information

The following table sets forth, for the periods indicated, the noon buying rate in New York for cable transfers payable in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York in Renminbi per U.S. dollar:

Period	Noon Buying Rate			
	Period End	Average <sup>(1)</sup>	High	Low

	(expressed in RMB per US\$)			
2000	8.2774	8.2784	8.2799	8.2768
2001	8.2766	8.2772	8.2786	8.2676
2002	8.2800	8.2772	8.2800	8.2699
2003	8.2767	8.2771	8.2800	8.2765
2004	8.2765	8.2768	8.2773	8.2764
November	8.2765	8.2765	8.2765	8.2764
December	8.2765	8.2765	8.2767	8.2765
2005				
January	8.2765	8.2765	8.2765	8.2765
February	8.2765	8.2765	8.2765	8.2765
March	8.2765	8.2765	8.2765	8.2765
April (up to April 20)	8.2765	8.2765	8.2765	8.2765

- (1) Determined by averaging the rates on the last business day of each month during the respective period, except for monthly averages, which are determined by averaging the rates on each business day of the month.

### Risk Factors

We are subject to various changing competitive, economic, political and social conditions in China as well as factors relating to the alumina and aluminum industry. These changing conditions and factors entail certain risks, which are described below.

- \* We price our alumina and primary aluminum products by reference to international and domestic market prices, import cost of alumina, and changes in supply and demand in the domestic market. Each of these factors may fluctuate beyond our control. Historically, the international market prices for alumina and primary aluminum products have been volatile. Because most of our costs are fixed and we may not be able to respond quickly to any sudden decrease in alumina or primary aluminum prices, any significant decline in international market prices could materially adversely affect our business, financial condition and operating performance.
- \* Our plans to upgrade and expand our alumina and primary aluminum plants will require capital expenditures of approximately RMB16,000 million in the years 2005 and 2006. See "Item 4. Information on the Company - Property, Plants and Equipment - Our Expansion and Profit Improvement Plan." We may also need further funding for debt servicing, working capital, investments, potential acquisitions and joint ventures and other corporate requirements. We cannot assure you that cash generated from our operations will be sufficient to fund these

development plans, or that our actual capital expenditures and investments will not significantly exceed our current planned amounts. If either of these conditions arises, we may have to seek external financing to satisfy our capital needs. Our ability to obtain external financing at reasonable costs is subject to a variety of uncertainties. Failure to obtain sufficient external funds for our development plans could adversely affect our business, financial condition and operating performance.

- \* Our planned expansion, cost reduction and technical improvement projects could be delayed or adversely affected by, among other things, failures to receive regulatory approvals, difficulties in obtaining sufficient financing, technical difficulties, or human or other resource constraints. Moreover, the cost of these projects may exceed those originally contemplated. Costs savings and other economic benefits expected from these projects may not materialize as a result of any such project delays, cost overruns or changes in market circumstances. Failure to obtain intended economic benefits from these projects could adversely affect our business, financial condition and operating performances.
- \* Our business has grown rapidly. Our ability to manage growth effectively will require us to continue to implement and improve our operational, financial and management systems, continue to develop the management skills of our managers, and continue to train, motivate and manage our employees. Failure to manage our growth effectively could adversely affect our operating performance. In addition, we are in the process of establishing an overseas joint venture company to produce alumina in Brazil. We have also participated in discussions or bidding for bauxite mining projects in Australia and Vietnam to explore overseas bauxite resources. We could encounter unforeseen problems due to our unfamiliarity with local laws and regulations, or suffer foreign exchange losses in connection with overseas investments. We cannot assure you that our overseas expansion or investments will be successful.
- \* We face competition from both domestic and international primary aluminum producers. Our principal competitors in the primary aluminum business are domestic smelters, some of which are expanding their production capacity. These smelters pose competitive challenges to our primary aluminum operations in production costs, product quality and price. We also face increasing competition from international primary aluminum suppliers as China continues to open up its aluminum industry to international trade. After China's accession to the WTO on December 11, 2001, competition from international suppliers of alumina may increase as tariff and non-tariff barriers for imported alumina are significantly reduced. The standard tariff on imports of alumina into China has been reduced from 18% as of December 31, 2001 to its current level of 8% as of December 31, 2004 following China's accession to the WTO. Intensified competition may result in reductions in our prices or sales volume and may have a material adverse effect on our financial condition and operating performance. If we are not successful in reducing our costs, we may not be able to maintain or increase our current share of China's primary aluminum market or continue to achieve profitability.

- \* Before 2004, the export of primary aluminum enjoyed a 15% tax refund. The tax refund rate has been reduced to 8% in 2004. Pursuant to the notice issued by State Administration of Taxation of the PRC dated December 22, 2004 and No. 46 notice issued by Customs General

Administration of the PRC in December 2004, exports of primary aluminum are currently subject to a 5% export tax, and no export tax refund is available.] We believe the cancellation of export tax refund will affect the allocation of domestic and export sales by aluminum producers in China and may result in an increase in domestic sales. The increase in domestic sales is expected to further intensify the competition in domestic primary aluminum market, where we conduct most of our primary aluminum business. The intense competition in domestic primary aluminum market could have adverse impact on the price and margins of our primary aluminum products, as well as our market share.

- \* Bauxite is the most important raw material for alumina production. We obtain our bauxite from three major sources, including our own mines, jointly operated mines, and other suppliers, which primarily consist of small independent mines. For information with respect to these sources, see "Item 4. Information on the Company - Business Overview - Business Operations - Alumina - Raw Materials - Bauxite." Each of these sourcing methods raises security of supply or cost issues. The average price of bauxite supplied by small independent mines in 2004 has increased by 31.2% as compared with 2003, primarily due to increasing market demand. Alumina is the most important raw material for our primary aluminum production. We source alumina internally at prices close to market price. Due to rising demand, the average market price of alumina has increased significantly from RMB2,407.7 per tonne in 2003 to RMB3,229.7 per tonne in 2004. Mainly due to the increases in material costs, the production cost of our primary aluminum products increased by 26.5% from 2003 to 2004. If we are unable to obtain a steady supply of key raw materials externally and internally at a competitive price, our operating performance may be adversely affected.
- \* The smelting of primary aluminum employs an electrolytic reduction process that requires a large and continuous supply of electricity. Interruptions of electricity supply can result in lengthy production shutdowns, increased costs associated with restarting production and waste of production in progress. In extreme cases, interruptions of electricity supply can also cause damage to or destruction of the equipment and facilities. We encountered severe shortages of electric power supply in 2003 and 2004. We do not expect any significant improvement of this situation until late 2006 when a number of national power generation projects are scheduled for completion.
- \* Electricity cost is the principal production cost component of our primary aluminum production. All of our five smelters benefit from various policies that allow them to purchase electricity at reduced prices. However, despite such preferential treatment, our electricity prices are expected to continue to be higher than those of major international primary aluminum producers. Pursuant to a notice issued by the PRC NDRC on December 21, 2003, as a part of the macro-economic control measures, the PRC government terminated an exemption from urban public utilities surcharges levied on our smelters. In addition, our electricity costs increase due to severe shortage of electric power in recent years. In 2004, the electricity shortage led to an increase of average electricity price by approximately 10.6% compared with 2003, which in turn caused our unit production cost for primary aluminum to increase by approximately 4.1%. If any other preferential treatment policies are cancelled by the PRC government or not renewed upon expiration, or if electricity prices or charges were to increase for any reason, it would increase our unit production cost for primary aluminum and have an adverse effect on our financial condition and operating performance.

- \* Our alumina products are mainly delivered by rail or truck, and our primary aluminum products are transported to our customers mostly by rail. We faced significant constraints in our use of railway for products delivery in 2004 due to lack of nationwide rail transportation capability by the railroad operators. Constraints in capacity of public transportation, including railway systems, have caused an increase in our overall transportation costs. In some instances, we need to pay additional fees for express delivery as an alternative to the regular delivery method, such as transportation by truck. Such expenses amounted to RMB16.2 million in 2004. If we are unable to make on-time delivery due to transportation problems, or if the costs of transportation continue to rise, our operating performance will be significantly affected,
- \* A main objective of our research and development projects is to develop new methods and processes to improve efficiency in the refining of bauxite with relatively low alumina-to-silica ratios. A potential decline in China's supply of bauxite with high alumina-to-silica ratios, failure to achieve technological improvements or to implement such improvements in commercial applications could impede our efforts to reduce unit production costs and to compete with major international producers.
- \* The bauxite reserve data on which we base our production, revenue and expenditure plans are estimates we have developed internally and may be inaccurate. There are numerous uncertainties inherent in estimating quantities of reserves, including many factors beyond our control. If these estimates are inaccurate or indicated tonnages are not recovered, it could have a material adverse effect on our business, financial condition and operating performance.
- \* We rely on short-term borrowings for financing needs. If we fail to achieve timely rollover, extension or refinancing of our short-term debt, we may be unable to meet our obligations in connection with debt service, accounts payable and/or other liabilities when they become due and payable. In addition, we may be exposed to changes in interest rates. If interest rates increase substantially, our results of operations could be adversely affected.
- \* Our primary sources of funding are cash generated by operating activities, prepayments and deposits from customers, short-term and long-term borrowings, and proceeds from shares offerings. In 2004, we required our long-term customers to make deposits or prepayments for purchases of alumina. The total amount of deposits and prepayments was RMB1,507.4 million as of December 31, 2004. We have relied on prepayments and deposits received from customers as a source of our liquidity. In the event that demand for alumina declines, we may not be able to require such prepayments and deposits from customers, in which case this source of liquidity would not be available to us.
- \* Chinalco, a state-owned enterprise, currently owns 42.14% of our issued share capital and is our largest shareholder. The interests of Chinalco may conflict or even compete with our interests and the interests of our public shareholders. Chinalco may take actions that favor the interests of its subsidiaries and associates over our interests and the interests of our public shareholders. In addition, Chinalco and some of its subsidiaries and associates provide a range of services to us, including engineering and construction services, social services, land leasing and supply of raw and supplemental material. Some of the services Chinalco provides to us,



such as educational and medical care services for our employees, would be difficult to obtain from other sources. Our cost of operations could increase if Chinalco were unable to perform its agreement to provide such services to us.

- \* Chinalco has substantial financial obligations relating to the businesses, operations and personnel that it retained in the reorganization. While Chinalco generates significant operating revenues and receives government support, it may also rely on dividends received from us as a means of funding these obligations. Subject to the relevant provisions of the PRC Company Law and our articles of association, Chinalco may seek to influence the amount of dividends we pay out in order to satisfy its cash flow requirements. Any resulting increase in our dividend payout would reduce funds available for reinvestment in our businesses.

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- \* Our alumina and aluminum production operations are subject to environmental protection laws and regulations in China, which impose such penalties as waste discharge fees, fines or closure of non-compliant plants. Each of our alumina and primary aluminum production plants has implemented a system to control its emissions and to oversee compliance with PRC environmental regulations. The PRC government, however, has taken steps and may take additional steps, towards more rigorous enforcement of applicable laws, and/or adoption of more stringent environmental standards. If the PRC national or local authorities enact additional regulations or enforce existing or new regulations in a more rigorous manner, we may be required to make additional environmental expenditures, which could have an adverse impact on our financial condition.

- \* We may experience major accidents in the course of our operations, which may cause significant property damage and personal injuries. Significant industry-related accidents and natural disasters may cause interruptions to various parts of our operations, or could result in property or environmental damage, increase in operating expenses or loss of revenues. The occurrence of such accidents and the resulting consequences may not be covered adequately, or at all, by the insurance policies we carry. In accordance with customary practice in China, we do not carry any business interruption insurance or third party liability insurance for personal injury or environmental damage arising from accidents on our property or relating to our operations other than our automobiles. Losses or payments incurred may have a material adverse effect on our operating performance if such losses or payments are not fully insured.

- \* We have

restated the U.S. GAAP reconciliation of owners' equity as of December 31, 2001, 2002 and 2003 and net income for the year ended December 31, 2002 to properly reflect the effect under U.S. GAAP of recognition of a deferred tax asset arising from the revaluation of fixed assets and mining rights that occurred in connection with the Reorganization effective July 1, 2001. Under U.S. GAAP, the deferred tax asset should have been recorded in 2001, applying the statutory tax rate of 33% then applicable to us. We adjusted the deferred tax asset downwards in 2002, at a time when our tax rate had been reduced from 33% to 15% for certain branches by means of various tax preferences available under PRC law. Accordingly, the amount of the deferred tax asset that we recorded in 2002, reflecting the lower tax rate for certain tax preferred entities, was less than the deferred tax asset that should have been recorded under U.S. GAAP in 2001, reflecting the higher rate. Although the deferred tax asset has not been recognized, we have recorded the reversal effects of the deferred tax asset in 2001, 2002 and 2003. The restatement arises as a result of recognizing the initial deferred tax asset in 2001, and the subsequent reduction of the amount of that asset in 2002 at the time our tax preferences for certain tax preferred entities were approved by PRC tax authorities. For more detail, see "Item 5 - Operating and Financial Review and Prospects - U.S. GAAP Reconciliation - Adjustment of Deferred Tax Asset and Restatement of Owners' Equity and Net Income as Reported under U.S. GAAP."

\* We are also subject to a number of risks relating to the PRC, including the following:

- The central and local PRC governments continue to exercise a substantial degree of control and influence over the aluminum industry in China and shape the structure and characteristics of the industry by means of policies in respect of major project approval, preferential treatments such as tax incentives, electricity pricing, and safety, environmental and quality standards. 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 or to maximize our profitability.
- Under current PRC regulatory requirements, the construction of new alumina refineries, the expansions of primary aluminum plants and mining projects in excess of RMB500 million require PRC government approval. If any of our important projects required for our growth or cost reduction are not approved, or not approved on a timely basis, our financial condition and operating performances could be adversely affected.

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- Substantially all of our business, assets and operations are located in China. The economy of China differs from the economies of most developed countries in many respects. The economy of China has been transitioning from a planned economy to a market-oriented economy. Although in recent years the PRC government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets and the establishment of sound corporate governance in business enterprises, a substantial portion of productive assets in China is still owned by the PRC government. In addition, the PRC government continues to play a significant role in regulating industry by imposing industrial policies. It also exercises significant control over China's economic growth through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies. Some of these measures benefit the overall economy of China, but may have a negative effect on us.
- Since 1994, the conversion of Renminbi into foreign currencies, including Hong Kong 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. Since 1994, the official exchange rate for the conversion of Renminbi to U.S. dollars has generally been stable. Any devaluation of Renminbi, however, may adversely affect the value of, and dividends payable on, our H shares and ADSs in foreign currencies since we receive our revenues and denominate our profits in Renminbi. Our financial condition and operating performance may also be affected by changes in the value of certain currencies other than Renminbi in which our earnings and obligations are denominated. In particular, a devaluation of the Renminbi

could increase the portion of our cash flow required to satisfy our foreign currency-denominated obligations.

- Since 1979, many new laws and regulations covering general economic matters have been promulgated in China. Despite this activity to develop the legal system, China's system of laws is not yet complete. Even where adequate law exists in China, enforcement of existing laws or contracts based on existing law may be uncertain and sporadic, and it may be difficult to obtain swift and equitable enforcement or to obtain enforcement of a judgment by a court of another jurisdiction. The relative inexperience of China's judiciary in many cases creates additional uncertainty as to the outcome of any litigation. In addition, interpretation of statutes and regulations may be subject to government policies reflecting domestic political changes.

See also "Item 4. Information on the Company - Business Overview," "Item 5. Operating and Financial Review and Prospects," "Item 7. Major Shareholders and Related Party Transactions - Related Party Transactions," "Item 8. Financial Information" and "Item 11. Quantitative and Qualitative Disclosures About Market Risks."

## ITEM

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### INFORMATION ON THE COMPANY

#### History and Development of the Company

##### Overview

We were incorporated as a joint stock limited company under PRC laws on September 10, 2001. Our scope of business includes bauxite mining, the production of alumina, primary aluminum and ancillary products, and provision of engineering and construction services. Pursuant to a reorganization agreement effective as of July 1, 2001 among Chinalco, Guangxi Development, Guizhou Development and us and a mining rights agreement between Chinalco and us, substantially all of Chinalco's alumina and primary aluminum production operations, operations of the Research Institute, as well as mining operations and mining rights of eight bauxite mines and other related assets and liabilities were transferred to us upon our formation.

We are currently the largest producer of alumina and primary aluminum in terms of production and sales volume in China, one of the fastest growing major aluminum markets in the world. Alumina and primary aluminum are our principal products. Alumina is refined from bauxite through a chemical process and is the key raw material for producing primary aluminum, which in turn is a widely used metal and the key raw material for aluminum fabrication. In addition to alumina and primary aluminum, we also produce and sell a comparatively small amount of carbon products (principally carbon anodes and cathodes), alumina hydrate and alumina chemicals.

We produced approximately 6.8 million tonnes of alumina products (including alumina, alumina hydrate and alumina chemicals) in 2004, supplying approximately 49.4% of all alumina products consumed in China during that year, making us the second largest producer of alumina in the world. Our alumina production has increased rapidly in the past few years, and we expect to continue to capture the growth in China's alumina market through ongoing expansion. From 2001 to 2004, our alumina production grew at a compound annual rate of 13.2%, from 4.7 million tonnes per annum to 6.8 million tonnes per annum.

Our primary aluminum production of 770,000 tonnes in 2004 accounted for approximately 12.8% of China's domestic primary aluminum consumption for 2004. From 2001 to 2004, our primary aluminum production grew from 710,000 tonnes per annum to 770,000 tonnes per annum.

Our key operating assets include four integrated alumina and primary aluminum production plants, another two alumina refineries and one primary aluminum smelter in addition to the integrated production plants and one research institute, which also produces a small amount of products on a pilot run basis. Most of our refineries are located in reasonable proximity to abundant bauxite reserves and, as of December 31, 2004, had annual production capacities ranging from 800,000 to 1.4 million tonnes. Our three largest primary aluminum smelters, in the provinces of Qinghai, Guizhou and Guangxi, had annual production capacities ranging from 139,500 to 311,000 tonnes as of December 31, 2004. According to the China Non-ferrous Metals Industry Association, our smelters in Qinghai and Guizhou are the largest and the third largest smelters in China, respectively, in terms of production capacity. All of our production facilities have been granted ISO9001:2000, OHSAS 18001:1999 and GB/T 28001-2001 accreditations on December 31, 2004.

We entered into a non-binding framework agreement (the "Framework Agreement") with Companhia Vale do Rio Doce ("CVRD"), a corporation duly organized and existing under the laws of the Federative Republic of Brazil, for the establishment of a joint venture company, ABC - Aluminum Brasil China S/A, producing alumina in Barcarena, State of Para, Brazil. We further entered into the first and second amendment (the "Amendments") to the Framework Agreement on November 12, 2004 and January 10, 2005, respectively; to set forth the details and schedule of ABC Project. For more details, see "-Business Overview - Production Facilities." In January 2005, we entered into an agreement with Lanzhou Aluminum Plant to acquire 151,851,442 shares, or 28% of the total share capital in Lanzhou Aluminum in consideration of RMB767.3 million. Lanzhou Aluminum owns one primary aluminum smelting plants with total production capacity at approximately 160,000 tonnes per annum. For more details, see "-Business Overview - Production Facilities."

To secure the bauxite supply, we have participated in several overseas projects in 2004. We submitted a letter of registration to Queensland government in November 2004 for the bidding for a bauxite mining project in Aurukun, Australia. In addition, we joined a mining project led by the PRC and Vietnam governments to explore bauxite resources in Dak Nong province in Vietnam. We have completed the preliminary feasibility study report for this project in January 2005.

Our capital expenditures in 2002, 2003 and 2004 were RMB3,972.6 million, RMB5,383.4 million and RMB10,282.3 million (US\$1,242.4 million), respectively. We currently expect our capital expenditures to be approximately RMB9,500 million in 2005. For details of our capital expenditures and our future plan, please see "-Our Expansion and Profit Improvement Plan" and "Item 5 -Operating and Financial Review and Prospects - Capital Expenditures".

Our principal executive office is currently located at No. 12B Fuxing Road, Haidian District, Beijing, People's Republic of China 100814. Our telephone number at that office is (86)10 6398 5654 . Our web site is [www.chalco.com.cn](http://www.chalco.com.cn). Information contained on our website does not constitute part of this annual report.

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## Strategic Investor

We and Alcoa agreed in 2001 to develop a long-term strategic relationship. The key components of this relationship involve an investment in our company, and the formation of a joint venture company to own and operate our Pingguo facilities. To establish this strategic relationship, we and Alcoa entered into:

- \* a strategic investor subscription agreement, dated November 5, 2001, or Subscription Agreement, pursuant to which Alcoa agreed to purchase our shares in our initial global share offering in December 2001 at the initial public offering price an amount of shares that would constitute 8.0% of our outstanding share capital immediately following the global offering; and
- \* a memorandum of understanding (the "MOU"), dated November 12, 2001, which sets forth the basis on which we propose to form the Pingguo JV to own and operate the alumina and primary aluminum production facilities at our Pingguo plant, and to jointly undertake a capacity expansion plan at Pingguo.

The primary aspects of our strategic relationship with Alcoa are described below.

### *Investment in Our Company*

Under the Subscription Agreement, as long as Alcoa maintains a strategic stake in our shares, it will be entitled to certain key rights as our strategic partner, including:

- \* the right to appoint one director to our Board of Directors;
- \* the right of first refusal to participate in any future projects we may contemplate undertaking with a foreign partner in bauxite mining, alumina refining or primary aluminum smelting in China; and
- \* the opportunity to establish a second equity joint venture with us in 2005 or 2006 so long as we and Alcoa agree that the initial joint venture company at the Pingguo plant represents a successful beginning to our strategic relationship.

In addition, Alcoa has given us the right of first refusal to participate in any future projects Alcoa may contemplate undertaking with a domestic partner in the PRC in bauxite mining, alumina refining or primary aluminum smelting. Subject to exceptions described under "- Joint Venture at Our Pingguo Plant" below. Should Alcoa wish to sell our H shares or ADSs in the future, we have undertaken to register such H shares or ADSs for sale with the U.S. Securities and Exchange Commission (the "SEC").

As part of our initial public offering, Alcoa acquired 840,209,728 H shares. In our H shares placement on January 6, 2004, Alcoa acquired an additional 43,998,080 H shares. Alcoa currently holds approximately 8.0% of our share capital.

### ***Joint Venture at Our Pingguo Plant***

The MOU sets forth the basis on which we and Alcoa intend to form a limited liability equity joint venture company as equal 50% shareholders at our Pingguo plant for the purpose of mining bauxite, refining alumina and smelting aluminum. The term of the Pingguo JV is proposed to be 50 years.

In April 2004, we received a notification from the NDRC regarding their approval on March 29, 2004 for the establishment of the Pingguo JV. For further information, see "Item 4. Information of the Company - Our Facilities - Pingguo JV". We and Alcoa have completed the expansion projects to increase the alumina and aluminum production capacities at the Pingguo plant. For further information, see "Item 4. Information of the Company - Our Facilities - Pingguo Plant".

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According to the MOU, the Board of Directors of the Pingguo JV will consist of six directors, of which we will appoint three and Alcoa will appoint three. The chairman of the Board of Directors is to be elected from among the directors that we appoint. The vice-chairman is to be elected from among the directors appointed by Alcoa. The day-to-day management of the Pingguo JV will be the responsibility of a general manager nominated by Alcoa and appointed by the board of directors of the Pingguo JV.

Pursuant to the Subscription Agreement, as amended, if the final joint venture agreement for the Pingguo JV is not executed due to the failure of a party to abide by the terms of the MOU, the defaulting party would be obliged to pay US\$7.5 million (equivalent to RMB62.1 million) to the other party as compensation and the restrictions on Alcoa's ability to sell our shares will terminate. We continue to work closely and actively with Alcoa to seek the opportunity of establishing a joint venture.

### **Our Initial Public Offering**

In December 2001, we completed our global initial public offering in which 2,749,889,968 H shares were listed on the Hong Kong Stock Exchange and 409,646,400 H shares in the form of ADSs were sold in the United States and listed on the NYSE under the symbol "ACH".

### **Our H Shares Placement**

On January 6, 2004, we placed 549,976,000 additional H shares, par value of RMB1.00 each, to certain independent professional and institutional investors who are non-U.S. persons outside the United States pursuant to Regulation S of the U.S. Securities Act of 1933 at a price of HK\$5.658 per H share. The net proceeds amounted to RMB3,251.0 million, of which approximately RMB562.0 million was used as capital expenditures in relation to the alumina brown field project in our Shanxi branch. As of December 31, 2004, a portion of the proceeds totaling

RMB2,689 million is deposited with banks. We plan to use the balance of the net proceeds for the funding of any possible acquisitions of domestic primary aluminum projects.

Our share capital structure before and after the placement was as follows:

Holders of Domestic Shares or H Shares	Before Placement		After Placement	
	No. of Shares (in million)	Percentage of issued share capital (%)	No. of Shares (in million)	Percentage of issued share capital (%)
<u> Holders of Domestic Shares </u>				
Chinalco	4,656.3	44.34	4,656.3	42.14
China Cinda	1,610.3	15.34	1,610.3	14.57
China Orient	602.2	5.74	602.2	5.45
China Development Bank	554.9	5.28	554.9	5.02
Guangxi Investment	196.8	1.87	196.8	1.78
Guizhou Development	129.4	1.23	129.4	1.17
<u> Holders of H Shares </u>				
Alcoa	840.2	8.00	884.2	8.00
Other public investors	1,909.7	18.18	2,415.7	21.87

Details of the changes in the Company's share capital are set out in Note 28 to the financial statements.

#### The Proposed A Shares Offering

On March 28, 2005, the Board of Directors resolved that we would apply (i) to the China Securities Regulatory Commission ("CSRC") for the issue of a maximum of 1,500,000,000 A shares to the PRC public, and (ii) to the Shanghai Stock Exchange for the listing of the A shares on the Shanghai Stock Exchange. Such resolution is subject to approval by our shareholders at the annual general meeting to be held on June 9, 2005.

The amount to be raised from the Proposed A shares Issue is currently expected to be not more than RMB8,000 million. The net proceeds are principally to be used to:

- \* fund an alumina brownfield project in our Henan branch;
- \* fund an alumina production line project in our Zhongzhou branch;
- \* fund an alumina brownfield and environmental enhancement project in our Guizhou branch;
- \* invest in Shanxi- Aluminum and Power Company Limited, which investment is expected to be used to fund and develop its aluminum and power generating project;
- \* fund the third phase of an alumina brownfield project in our Guangxi branch;
- \* fund a greenfield project of pseudoboehmite production in our Shandong branch;
- \* fund a greenfield project of zeolite production in our Shandong branch;
- \* fund a limestone improvement project in our Shanxi branch;
- \* fund an alumina improvement project in our Shanxi branch.

#### The Proposed Short-term Debenture Offering

The Board of Directors announces on May 18, 2005 that in accordance with the relevant procedural requirements under applicable PRC laws and regulations and our Articles of Association, and pursuant to Article 60 of our Articles of Association, Chinalco, our parent company and our controlling shareholder holding approximately 42.14% of our issued share capital, has proposed a shareholder's resolution for approving the proposed issuance of a short-term debenture by us in the principal amount of up to RMB5 billion, for shareholders' approval by way of a special resolution at the annual general meeting.

Proceeds from the proposed issuance of the short-term debenture are expected to be used as short term working capital, including for the purchase of raw materials and import of alumina. It is expected that the short-term debenture will be issued to institutional investors in the PRC banking industry and will not be issued to the public investors.

#### Business Overview

##### Our Principal Products

We manage our operations according to our two principal business segments. Our alumina segment includes the production and sale of our alumina-related products, namely, alumina, alumina hydrate, alumina chemicals and gallium. Our primary aluminum segment includes the production and sale of our primary aluminum-related products, namely, primary aluminum (including both ingots and other primary aluminum products) and carbon products. External sales of our alumina and primary aluminum segments accounted for approximately 59.5% and 40.2%, respectively, of our total revenues in 2004. Alumina is refined from bauxite through a chemical process and is the key raw material for producing primary aluminum, which in turn is a key raw material for aluminum fabrication.



Our alumina segment products consist primarily of alumina, which accounted for approximately 93.1% of our total alumina segment output based on total production volume in 2004. Other alumina segment products include alumina hydrate, alumina chemicals and gallium. Alumina hydrate and alumina chemicals are used in the production of chemical, pharmaceutical, ceramic and construction materials. In the process of refining bauxite into alumina, we also produce small amounts of gallium, which is a related product and a high-value rare metal with special uses in the electronics and telecommunications industries.

Our most important primary aluminum product is ingots, which accounted for approximately 85.7% of our total primary aluminum output in 2004. Our standard ingots are 20-kilogram remelt ingots used for general aluminum fabrication primarily for the auto, construction, power and consumer goods industries. Other than ingots, we also produce a small amount of high value-added and high-margin primary aluminum, such as electrical aluminum and aluminum alloys used for special industrial applications. In 2004, we strategically adjusted our product mix to increase the production of high value-added primary aluminum, such as increasing the production of aluminum alloys by approximately 60% compared to 2003, to realize the higher margin of such products. The sales volume of high value-added primary aluminum products increased by approximately 10.8% in 2004 as compared to 2003, while the sales volume of ingots remained at the same level. Our primary aluminum plants produce carbon products (principally carbon anodes and cathodes) used in smelting operations. In addition, in December 2003, we established Shanxi Huatai Carbon Company Limited which leases production equipment and facilities from Chinalco to produce carbon products. The carbon we produce supplies substantially all of the carbon products required for our smelters. We also sell some of our carbon products to smelters outside our company. Currently, aluminum fabrication does not constitute a material part of our business.

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Since 2003, we have started to develop primary aluminum products from recycled materials. In 2004, our Shandong Plant used approximately 8,127 tonnes of recycled materials to produce approximately 6,000 tonnes primary aluminum products. At present, only our Shandong Plant has the capability to produce primary aluminum products from recycled materials.

#### Our Current Production Capacity

The following table sets forth the production capacity of alumina and primary aluminum for each of our plants for 2004:

Plant	2004 Production Capacity	
	Alumina	Primary Aluminum
	(in thousand tonnes) <sup>(1)</sup>	
Pingguo plant	850.0	139.5
Zhongzhou plant	1,060.0	-

Qinghai plant	-	311.0
Shanxi plant	1,400.0	-
Guizhou plant	800.0	233.7
Zhengzhou plant	1,300.0	56.0
Shandong plant	1,050.0	75.0
Research Institute	10.0	18.0
	<hr/>	<hr/>
Total	6,470.0	833.2
	<hr/>	<hr/>

- (1) Our production capacity takes into account designed capacity and subsequent modifications. Designed capacity is based on various assumptions including down time for ordinary maintenance and repairs and assumptions as to ore grade of bauxite used.

The following table sets forth, for the periods indicated, information relating to our production volumes of the alumina segment and primary aluminum segment products:

Production Volume by Product	Year Ended December 31,		
	2002	2003	2004
	<hr/>	<hr/>	<hr/>
	(in thousand tonnes, except Gallium)		
Alumina segment			
Alumina	5,108.0	5,632.0	6,351.0
Alumina hydrate and alumina chemicals	302.0	415.0	469.0
Gallium (in tonnes)	8.6	5.6	23.0
Primary aluminum segment			
Primary aluminum <sup>(1)</sup>	751.2	762.0	770.0
Carbon	539.4	556.3	623.0

- (1) Including ingots and other primary aluminum products.

#### Production Process

##### Alumina

Alumina is produced from bauxite, an aluminum-bearing ore, by a chemical refining process. The production process to be used for producing alumina, whether the sintering process, the Bayer process, the hybrid Bayer-sintering process or the ore-dressing Bayer process, is determined by the mineral composition of the bauxite used. Most of the bauxite found in China is diasporite bauxite of a particular mineralogy, with high alumina content but relatively higher silica content, resulting in low

alumina-to-silica ratios. The Bayer process cannot efficiently refine such bauxite unless the alumina-to-silica ratio of the bauxite is raised sufficiently prior to refining. Refining low alumina-to-silica ratio bauxite generally requires the use of either the sintering process or the hybrid Bayer-sintering process that we have developed and improved upon to enable the efficient processing of diasporite bauxite generally found in China.

## Primary Aluminum

Alumina is converted into primary aluminum through a smelting process using electrolytic reduction. This 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 moulds to produce foundry ingots or further refined to form fabricating ingots. Most of the primary aluminum we produce is in the form of ingots.

There are two methods commonly used to produce primary aluminum, the "pre-bake" reduction process and the "soderberg" reduction process. Most modern aluminum production facilities adopt the pre-bake reduction. As of December 31, 2003, all of our primary aluminum capacity used pre-bake anode reduction pot-lines. In the pre-bake reduction process, the anodes are pre-formed in a separate facility where the pollutants can be contained. The cells themselves are enclosed with removable panels, so that the waste gases produced can be extracted using large exhaust fans. These gases are then treated and purified to reduce emissions of dust and fluoride to acceptable levels.

## Production Facilities

### Alumina

Our total annual production capacity for alumina products was approximately 6.5 million tonnes as of December 31, 2004. For 2004, our actual production of alumina products was approximately 6.8 million tonnes. In 2004, we supplied approximately 1.3 million tonnes, or 23.4% of all the alumina we produced, to our own smelters, and sold the rest to other domestic smelters. All of our other alumina segment products we produced in 2004, including alumina hydrate and alumina chemicals, were sold externally, either domestically or exported for chemical, pharmaceutical and other uses.

The following table sets forth the annual production capacity, output of alumina products, the contribution to our total output of alumina products, the utilization rate and the alumina production process of each of our alumina refineries and our Research Institute as of December 31, 2004:

As of December 31, 2004

Annual Production Capacity <sup>(1)</sup>	Alumina Products Production	Percentage of our Total Alumina Output (%)	Utilization Rate <sup>(2)</sup> (%)	Production Process
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(in thousand tonnes, except percentages)

Shanxi plant	1,400.0	1,403.0	20.6	100.2	Hybrid Bayer-sintering
Zhengzhou plant	1,300.0	1,474.0	21.6	113.5	Hybrid Bayer-sintering
Shandong plant	1,050.0	1,039.0	15.2	99.0	Sintering
Guizhou plant	800.0	851.0	12.5	106.4	Hybrid Bayer-sintering
Zhongzhou plant	1,060.0	1,116.0	16.4	105.3	Sintering and Bayer
Pingguo plant	850.0	917.0	13.5	107.9	Bayer
Research Institute <sup>(3)</sup>	10.0	16.0	0.2	160.0	Bayer
<b>Total</b>	<b>6,470.0</b>	<b>6,816.0</b>	<b>100.0</b>	<b>105.3</b>	

- (1) Our production capacity takes into account designed capacity and subsequent modifications. Capacity is based on various assumptions, including down time for ordinary maintenance and repairs and assumptions as to ore grade of bauxite used.

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- (2) The capacity utilization rate is determined by dividing the production output of a particular plant by that plant's production capacity. Rates greater than 100% reflect the higher productivity obtained through the use of higher-grade bauxite than originally contemplated in capacity calculations.
- (3) The alumina hydrate and chemical production facilities of our Research Institute are test facilities for research and development purposes. Our Research Institute's alumina products are alumina hydrate and alumina chemicals. These products are sold commercially, and such sales are included in our total revenues.

On May 24, 2004, we entered into the Framework Agreement with CVRD, a corporation duly organized and existing under the laws of the Federative Republic of Brazil, for the establishment of a joint venture company, ABC Refinery, producing alumina in Barcarena, State of Para, Brazil, adjacent to the existing facilities of Alumina do Norte do Brasil, also known as Alunorte in Brazil. We further entered into the first and second Amendment to the Framework Agreement on November 12, 2004 and January 10, 2005, respectively, to set forth the details and schedule of ABC Project.

It is intended that ABC Refinery will be owned by the joint venture company and shall be established as a first class alumina refinery with high competitiveness globally. The intended alumina capacity of the initial phase of ABC Refinery will be 1,800,000 tonnes per year, and may reach a final capacity of 7,200,000 tonnes per year through phased expansions. The proposed development of the ABC Refinery will involve a series of related transactions involving mining, transportation, shipping and port developments. The total investment for the initial phase of the proposed project is estimated to be

US\$1,000 million. The initial phase of the proposed project is expected to be completed and put into operation in 2008.

We and CVRD have reached agreement on certain essential issues in relation to the ABC Project, including the purchase prices of the alumina produced by ABC Refinery in the future. Pursuant to the Amendments, CVRD has produced a preliminary feasibility studies on March 1, 2005 for our review. We expect to finalize the final feasibility studies by the end of the second quarter of 2005. Both parties will work together to prepare a basic engineering study to facilitate the approval and implementation of this project. We have commenced our technical and economic due diligence and legal due diligence in connection with the ABC Project. Both parties agree to use their respective best effort to commence the construction of ABC Refinery in the forth quarter of 2005.

### Primary Aluminum

We operate five primary aluminum production facilities located in five provinces. Four of these five smelter plants are integrated with alumina refining operations and are self-sufficient with respect to alumina supply. In addition, our Research Institute also operates a test plant that produces primary aluminum in connection with its research and development.

The total production capacity for primary aluminum production of all five of our smelters and our Research Institute in 2004 was 833,200 tonnes. In 2004, we produced approximately 770,000 tonnes of primary aluminum.

The following table sets forth the annual production capacity, output of aluminum products, the contribution to our total output of aluminum products, the utilization rate and the smelting equipment used in each of our aluminum smelters and our Research Institute as of December 31, 2004:

As of December 31, 2004

Plant	Annual Production Capacity <sup>(1)</sup>	Aluminum Output	Percentage of our Total Aluminum Output (%)	Utilization Rate <sup>(2)</sup> (%)	Smelting Equipment
(in thousand tonnes, except percentages)					
Qinghai plant	311.0	286.1	37.2	92.0	60 kA pre-bake
Guizhou plant	233.7	230.0	29.9	98.4	160 kA & 186kA pre-bake
Pingguo plant	139.5	113.0	14.7	81.0	160 kA & 320 kA pre-bake
Shandong plant	75.0	66.5	8.6	88.7	85 kA pre-bake
Zhengzhou plant	56.0	58.1	7.5	103.8	85 kA pre-bake

Research Institute <sup>(3)</sup>	18.0	16.5	2.1	91.7	140 kA & 280kA pre-bake
Total	833.2	770.2	100.0	92.4	

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- (1) Production capacity takes into account designed capacity, subsequent modifications and down time for ordinary maintenance and repairs.
  - (2) The capacity utilization rate is determined by dividing the production output of a particular plant by that plant's production capacity.
  - (3) The primary aluminum production facilities of our Research Institute are experimental facilities for research and development purposes. Primary aluminum produced at the smelter is sold commercially, and such sales are included in our total revenues.

In January 2005, we entered into an agreement with Lanzhou Aluminum Plant to acquire 151,851,442 shares, or 28% of the total share capital in Lanzhou Aluminum in consideration of RMB767.3 million. Lanzhou Aluminum owns one primary aluminum smelting plant with total production capacity at approximately 160,000 tonnes per annum.

## Raw Materials

### Alumina

Bauxite is the principal raw material for the production of alumina. On average, our refineries consume 1.8 tonnes of bauxite to produce one tonne of alumina. We used approximately 9.3 million tonnes, 11.3 million tonnes and 13.6 million tonnes of bauxite in our alumina production in 2002, 2003 and 2004, respectively. In 2004, bauxite cost represented approximately 19.0%, as compared to 21.0% in 2003 of our per unit alumina production costs.

*Supply.* The predominant use of bauxite is for alumina production. We are the largest alumina producer in China and expect to remain so for the foreseeable future. Therefore, we intend to use our dominant market position to obtain bauxite on favorable terms. Except for our Shandong Plant, 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 save transportation costs. We procure our bauxite supply principally from three sources:

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

\* purchases from other suppliers, which principally include small independent mines and, to a lesser extent, mines operated by Chinalco and imports.

We purchase bauxite from a large number of suppliers. We are not dependent on any single supplier or small group of suppliers for our bauxite requirements. We endeavor to explore new bauxite reserves and streamline our bauxite procurement system to support the growth of our alumina production. We established a bauxite mine branch located in Zhengzhou, Henan, on March 25, 2005 to centralize the procurement and make effective allocation of bauxite resources among our plants. According to the establishment proposal, the mine branch will manage nine bauxite mines, with total controllable bauxite reserves of 164,509,300 tonnes, currently owned by us and controlled by our Henan Branch, Zhongzhou Branch, Shandong Branch or Shanxi Branch. In 2004, we increased our bauxite reserves by 120.0 million tonnes as compared to 2003 by acquiring three new mines and entered into contractual arrangements to jointly operate eight new mines. In addition, to further reduce our reliance on small independent mines and to strengthen our control over the steady supply of bauxite, we entered into agreements with eight other parties to operate new jointly operated mines during 2004.

The following table sets forth, for the periods indicated, the proportion of our bauxite requirements supplied by our three sources:

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	Year Ended December 31,					
	2002		2003		2004	
	Total Bauxite Supply	Percentage of Our Total Bauxite Supply (%)	Total Bauxite Supply	Percentage of Our Total Bauxite Supply (%)	Total Bauxite Supply	Percentage of Our Total Bauxite Supply (%)
	(in thousand tonnes)		(in thousand tonnes)		(in thousand tonnes)	
Our owned mines	1,643.6	17.6	1,923.0	17.0	2,237.3	16.4
Jointly operated mines	853.3	9.2	1,799.3	15.9	2,501.3	18.4
Other suppliers	6,823.1	73.2	7,572.0	67.1	8,889.4	65.2
<b>Total</b>	<b>9,320.0</b>	<b>100%</b>	<b>11,294.3</b>	<b>100%</b>	<b>13,628.0</b>	<b>100%</b>

The following table sets forth information regarding our own mines:

		2004	
Mine	Location (Province)	Annual Production Capacity	Bauxite Production
		(in thousand tonnes)	
Pingguo	Guangxi	1,650.0	1784.7
Xiaoyi	Shanxi	1,200.0	136.3
Guizhou No. 2	Guizhou	480.0	136.1
Guizhou No. 1	Guizhou	420.0	31.2
Mianchi	Henan	400.0	0.2
Yangquan	Shandong	150.0	-- <sup>(1)</sup>
Xiaoguan	Henan	300.0	-- <sup>(1)</sup>
Luoyang	Henan	1,000.0	263.0
Total		5,600.0	2,351.5

(1) Less than 0.5 thousand tonnes.

*Owned Mines.* Pursuant to a mining rights transfer agreement between Chinalco and us dated September 10, 2001, we obtained from Chinalco mining rights with varying terms relating to eight mines for a consideration of RMB285 million. These mines supply our refineries located in their general proximity. All of these mines are open-pit mines. As of December 31, 2004, these mines had approximately 180.2 million tonnes of aggregate proven and probable bauxite reserves as such terms are defined by the SEC. This amount of bauxite reserves would be sufficient to sustain our mining operations in excess of 30 years assuming an annual mining output of 5.0 million tonnes. In 2004, we acquired mining rights in respect of three new mines. As none of our mines produce bauxite for sale outside our company, we are assured of full access to the bauxite produced by our own mines. In 2004, we sourced approximately 16.4% of our bauxite from mines that we own and operate.

The respective terms of the mining rights permits are the shorter of the estimated working life of the mine and 30 years beginning 2001. In addition to mining rights permits, in order to operate these mines, we are required to have land use rights over the land relating to these mines. We lease land use rights relating to all these mines from Chinalco pursuant to a land use rights leasing agreement that we entered into upon our formation. Chinalco's land use rights relating to over 90% of our mining properties are for 50-year terms beginning July 1, 2001. The remaining land use rights relating to the mines we own and operate are for shorter terms, some as short as eight years. All of our land use rights leases end on the expiry date of the mining rights or the end of the actual mine life, whichever is earlier. Both the land use rights and their leases are renewable.



*Jointly Operated Mines.* We currently jointly operate 22 bauxite mines, eight of which were newly added during 2004. Jointly operated mines are generally operated pursuant to long-term contractual arrangements in which we typically contribute resources such as funding, equipment, labor and management, and the other parties contribute land and/or mining rights and certain personnel resources. The other parties are also typically responsible for obtaining all relevant certificates or approvals in respect of the lands. 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. As of December 31, 2004, we have obtained mining rights certificates for all of our 22 jointly operated mines.

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Jointly operated mines are typically smaller than our own mines but larger than the small independent mines in terms of reserves and production scales. Our 22 jointly operated mines had approximately 31.5 million tonnes in the aggregate of proven and probable bauxite reserves as such terms are defined by the SEC. Security of supply from jointly operated mines is contingent upon the extension or renewal of the joint operation arrangements and mining rights upon their expiration. Accordingly, we view our jointly operated mines, as a group, to be a stable, long-term source of our bauxite supply, although the particular mines comprising this group are likely to change. Jointly operated mines supplied 18.4% of our bauxite needs in 2004.

*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. However, we also secure a small portion of bauxite from Chinalco and overseas. Bauxite secured from other suppliers accounted for 65.2% of our total bauxite supply in 2004.

- \* *Small Independent Mines.* We purchase bauxite directly from small independent mines or through local distributors that procure bauxite from these mines. Small independent mines are not affiliated with us and generally have annual bauxite production capacities not exceeding 200,000 tonnes. These mines have historically been our important source of bauxite. In 2004, we sourced approximately 65.2% of our bauxite requirements from such mines. Since 2003, the price of bauxite from small independent mines has increased due to high demand. The average price of bauxite from small independent mines increased by 31.2% from 2003 to 2004. We plan to decrease our reliance on those small independent mines in the future to lower the effect of increased material cost.
  
- \* In addition, we also source a small portion of bauxite from Chinalco and from others overseas.

*Bauxite Procurement.* A procurement center in our headquarters is responsible to control and coordinate the supply of our key raw materials, mainly 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 decide 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. Given the increasing price of bauxite supplied by external

independent mines resulting from high market demand, our management or operational control of our own mines and jointly operated mines generally allows us to adjust the procurement levels from these sources during the course of the year to accommodate market conditions.

*Alumina-to-Silica Ratio.* The production method for alumina refining is determined by the mineral composition of the bauxite, as measured by reference to 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. The average alumina-to-silica ratio of the proven and probable reserves of our own mines is 7.2:1.

## Prices

. There is neither governmental regulation of bauxite prices nor an official trading market for bauxite in China. We negotiate and agree on 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. Because we procure bauxite from three general sources, our total bauxite cost is influenced by the following factors:

- \* the cost of our own 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.

## Primary Aluminum

An average of approximately 2.0 tonnes of alumina and 14,500 kWh of electricity were required to produce one tonne of primary aluminum. Alumina and electricity, the two principal ingredients in the smelting process in terms of volume and cost, accounted for approximately 42.5% and 30.9%, respectively, of our unit primary aluminum production costs in 2004. We also require carbon anodes, carbon cathodes and sodium fluoride in the smelting process.

Alumina is the main raw material in the production of primary aluminum. Our Shandong, Zhengzhou, Guizhou and Pingguo smelters have historically sourced all or substantially all of the alumina they required from their respective integrated refineries. Our Qinghai plant, which does not have alumina refining operations on site, has obtained alumina from our Shanxi, Zhengzhou and Zhongzhou plants. Similarly, our Research Institute, whose alumina test facility produces only alumina hydrate, has obtained alumina from our Zhengzhou plant for its smelting operations. Historically, Lanzhou Aluminum sourced all or substantially all of the alumina they required from our Zhongzhou, Zhengzhou and Shanxi

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plants. In the share transfer agreement entered into on January 19, 2005, we agreed to supply the alumina Lanzhou Aluminum needs for its production at market prices. In 2004, due to the increase of our internal alumina production, we decreased our imports of alumina for self-use and trading purpose from approximately 1.0 million tonnes in 2003 to approximately 0.9 million tonnes in 2004. Pursuant to a notice issued by the Ministry of Commerce of the PRC on October 13, 2004 and effective from January 1, 2005, the PRC government prohibits domestic aluminum smelters whose annual production volume is lower than 100,000 tonnes from directly importing alumina to China for aluminum processing or refinery purposes. We are among a few companies in the PRC that are currently qualified to import alumina directly for our primary aluminum production. As imported alumina will usually be cost effective, we believe our competitiveness is as a result enhanced. The following table sets forth, for the periods indicated, the amount of alumina consumed by each of our smelters:

Plant	Year Ended December 31,		
	2002	2003	2004
	(in thousand tonnes)		
Guizhou plant	465.0	453.7	445.1
Qinghai plant	479.4	523.4	547.9
Pingguo plant	265.8	268.4	216.4
Shandong plant	107.9	83.6	129.3
Zhengzhou plant	112.4	113.0	112.6
Research Institute	30.9	34.0	32.2
	1,461.4	1,476.1	1,483.5

### Supplemental Materials, Electricity and Fuel

#### Alumina

Electricity, coal, alkali (caustic soda or soda ash) and heavy oil are the other principal items required for our alumina production. In the second half of 2003, we established a procurement center in our headquarters to control and coordinate the budgeting and procurement for all major items required for our production. In addition, to raise the efficiency of materials flow, a distribution center was set up at each production facility. Our centralized procurement system enables us to lower our unit production costs. However, our efforts in lowering the unit production cost by the function of centralized procurement system were to a certain extent offset by the significantly increased prices for electricity, coal and fuel items due to strong demand in the second half of 2004.

*Electricity.* Electricity is one of the principal forms of energy used in our refining process. Electricity represented approximately 7.8% of our unit alumina production cost in 2004.

The fuel items (including coal and heavy oil) used by the Shanxi Huaze co-generation facilities are purchased from outside sources at market prices. To the extent that power produced by the co-generation facility is insufficient to meet a refinery's total power requirements, we purchase the shortfall from regional power grids at government-mandated rates pursuant to power supply agreements. Power prices in China can vary, sometimes substantially, from one region to another, based on power production costs in the region as well as the consuming community's ability to pay. Accordingly, power costs for our various plants differ. Most of our electricity supply

agreements are one to three year renewable contracts with regional power grids.

*Coal.* Large quantities of coal are used as a reducing agent and as fuel to make steam and gas in the alumina refining process. The coal we consumed directly in the alumina refining process in 2004 represented 9.1% of our unit alumina production costs. Additional amounts of coal were used to produce steam and electricity in connection with refining for the same periods.

To secure our coal supply, we entered into a joint venture agreement (the "JV Agreement") with Jiaozuo Coal (Group) Co. Ltd. ("Jiaozuo Coal") on April 12, 2004 to establish a joint venture company (the "JV Company") in Henan Province to operate coal mines and manage coal processing business on May 15, 2004. We contributed 30% of the total registered capital in the amount of RMB45.0 million by way of cash and Jiaozuo Coal contributed 70% of the total registered capital in the amount of RMB105.0 million by way of cash and evaluated coal mining rights in respect of Zhaogui mine. Zhaogui mine is currently under construction and is expected to be completed within three years. According to the JV Agreement, we are entitled to all of the slack coal produced by the JV Company.

*Alkali.* Alkali is used as a supplemental material in alumina refining. The sintering process and the hybrid Bayer-sintering process require soda ash while caustic soda is used in the Bayer process. We purchase all of our alkali from outside suppliers. Our refineries require approximately 400,000 tonnes of alkali annually, representing 4.8% of our unit alumina production cost in 2004.

*Heavy Oil.* Heavy oil is used as fuel in the calcination of aluminum hydroxide to make alumina. Most of our refineries use heavy oil. Our annual consumption of heavy oil is approximately 339,400 tonnes. Heavy oil represented approximately 4.0% of our unit alumina production cost in 2004.

There is no governmental regulation of the prices of heavy oil, alkali or coal. The prices are set at market rates or through negotiations. We have not experienced difficulty in obtaining these materials in sufficient quantity and at an acceptable price.

Deliveries of raw materials and supplemental materials are generally made on monthly basis. We arrange for railway transportation of these raw materials by submitting to local bureaus of the Ministry of Railways our annual and monthly transportation plans. These local bureaus then arrange for appropriate rail transportation to transport such raw materials or fuel to our refineries.

#### Primary Aluminum

*Electricity.* Smelting primary aluminum requires a substantial, continuous supply of electricity. Therefore, the availability and price of electricity are key considerations in our primary aluminum production operations. Costs of electricity have increased period by period in the recent years due to severe shortage of electric power in China. In 2004, the average electricity price increased by approximately 10.6% due primarily to electric power shortages in China, which in turn caused our unit production cost for primary aluminum to increase by approximately 4.1% compared to 2003. Due to electric power shortages, our Pingguo plant temporarily shut down a number of smelting pots during 2004. We took the opportunity to accelerate regular maintenance work on the affected production lines

during such shut-down period.

We rely on electricity from the power grids for our smelter operations. Electricity generated by our Shanxi Huaze co-generation facilities, to the extent not used in our alumina production, may also be used at the related smelter plants. We also purchase electricity from regional power grids. Prices for electricity supplied by the power grids under power supply contracts are set by the government based on the power generation cost in the region and the consumers' ability to pay. Industrial users within each region are generally subject to a common electricity tariff schedule, but rates vary, sometimes substantially, across regions. Each regional power grid serves a region comprising several provinces. The regional power grids generally rely on multiple power sources to generate electricity, with coal and hydro power being the two most common sources. We believe that the different types of power sources do not imply different degrees of reliability of supply, and that our power supply from the grids is generally not reliant upon any particular generation facility supplying the grid.

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Electricity purchased from different power grids is subject to different tariff levels. All of our production facilities currently enjoy preferential electricity prices granted by local government authorities. Our smelters' average electricity cost (excluding value-added tax) was RMB0.27/kWh in 2004. Our electricity costs per tonne of primary aluminum for 2004 represented 30.9% of our unit primary aluminum production costs. A major challenge to our strategy of enhancing the competitiveness of our primary aluminum operations is the high price of electricity in China. In 2004, the total electricity used in the smelting operations at our primary aluminum production facilities was 9.3 billion kWh. Compared to 2003, the average electricity price applicable to us increased by approximately 10.6% in 2004.

We have established a joint venture company, Shanxi Huaze Aluminum & Power Co. Ltd., to undertake the construction of a new facility to produce primary aluminum and carbon anodes. The new co-generation facility will include a power plant with two 300 MW coal-fired generators. For more information, see "- Our Expansion and Profit Improvement Plan".

*Carbon Products.* Carbon anodes and cathodes are key elements of the smelting process. For 2004, carbon anodes combined represented 10.4% of our unit primary aluminum production costs for those periods. Each of our smelters produces carbon products other than carbon cathodes, such as carbon anodes. Only our Guizhou plant has a carbon cathode production facility. It supplies all of our smelters with the carbon cathodes required, and sells any excess domestically to outside smelters. Several of our other carbon plants also sell externally carbon anodes not used by our smelters. In December 2003, we established Shanxi Huatai Carbon Company Limited which leases production equipment and facilities from Chinalco to produce carbon products.

#### Suppliers

We rely on our suppliers for the supply of raw materials including bauxite, coal, heavy oil and alkali. The amount of raw materials provided by our five largest suppliers for alumina products and primary aluminum products accounted for 7.9% and 17.5%, respectively of our total cost of raw materials for 2004. Raw materials provided by our largest supplier accounted for 1.9% and 6.6%, of our total cost of raw materials for alumina and primary aluminum, respectively in 2004. All payments to our suppliers are in Renminbi.

## Sales and Marketing

We coordinate our major sales and marketing activities at our corporate headquarters. We set uniform prices for our alumina sales and set minimum prices in each region where our primary aluminum is sold. We have consolidated the networks of our branch offices to eliminate overlapping of administrative support and to reduce sales costs. In addition, we have established subsidiaries in Shanghai City, Foshan City, Guangdong Province and Chongqing City to direct the centralized sales of our primary aluminum and alumina chemicals. Our subsidiaries have played an important role in establishing uniform prices for our primary aluminum ingots, improved our after-sales service and enhanced our influence in the marketplace. We intend to form similar subsidiaries in northern China and to expand our sales network.

Prior to 2003, for large-scale or long-established customers, which represent approximately 70% of our customers, we allowed cash on delivery or credit terms of usually up to 30 days depending on the customers' financial background, years of relationship and payment history. Since 2003, as part of our centralized management program, we require all sales of alumina and primary aluminum to be settled upon delivery. As a result, our trade receivable declined from RMB7.9 million as of December 31, 2003 to RMB2.6 million as of December 31, 2004. We intend to continue to follow this policy. In 2004, we required our long-term customers to make deposits or prepayments for purchases of alumina. The total amount of deposits and prepayments was RMB1,507.4 million as of December 31, 2004. We expect to continue this policy so long as market demand remains strong.

We conduct our business primarily in China. For 2004, only 5.3% of our total revenues derived from primary aluminum export sales. For details for our revenues by segment, please see "Item 5. Operating and Financial Review and Prospect-Discussion of Segment Operations".

## Alumina

We sell a portion of the alumina we produce to our own primary aluminum smelters and a majority of our alumina output to external customers. In 2003, we used approximately 1.4 million tonnes of the approximately 6.1 million tonnes of our total alumina output and output of alumina hydrate and alumina chemicals internally, which represented approximately 23.5% of our total alumina production. In 2004, we used approximately 1.5 million of approximately 6.8 million tonnes of our total alumina output and output of alumina hydrate and alumina chemicals internally, which represented approximately 23.4% of our total alumina production. We sold approximately 5.3 million tonnes of alumina externally in 2004.

### Sales

We coordinate sales of alumina at our corporate headquarters. In the fourth quarter of each year, we organize a national alumina sales conference with our domestic primary aluminum smelter customers in order to match our supply with their requirements for the following year. Based on our production capacity for the coming year, we first reserve the amount of alumina needed for primary aluminum production by our smelters before we determine the amount available for sale to other primary aluminum smelters. Next, we allocate our alumina to smelters with whom we have long-standing relationships and

that have good credit and a good payment history. We consider other smelters only if we have remaining alumina to allocate. Approximately 95% of our sales of alumina are made through these annual conferences.

Based on the sales allocations we make at the annual conference, we and our customers typically enter into one-year sales agreements that set forth their total allocation and delivery schedules. At the time of entering into these one-year sales agreements, prices are left open and determined at or near the time of delivery at the then prevailing market price. We apply uniform prices to alumina sales regardless of where the alumina is produced. If a customer does not accept our price near the time of delivery, it may refuse to take delivery despite the one-year agreement. We began selling a portion of our alumina pursuant to long-term sales contracts in 2001. Since January 1, 2004, we have entered into three-year sales contracts for alumina. The external sales volume under these three-year sales contracts accounts for approximately 20% of the total sales volume in 2004. Under these contracts, the sales volume is fixed, and the price is linked to an index of three-month futures price of primary aluminum quoted at the Shanghai Futures Exchange.

### **Customers**

We sell our alumina to smelters throughout China. Sales to our five largest external customers accounted for 15.1%, 16.3% and 17.7% of our total external alumina revenues for 2002, 2003 and 2004, respectively. Sales to our largest customer accounted for 4.8%, 5.1% and 4.3% of our total external alumina revenues for the same periods. All of these major customers in the last three years were domestic smelters.

### **Pricing**

We set, and adjust as necessary, uniform sales prices for alumina produced by any of our refineries. We made five alumina sales price adjustments in 2004.

We set uniform prices for all our external sales of alumina by following import-parity pricing and adjust the prices from time to time. Our import-parity pricing generally takes into account:

- \* free-on-board Australia prices for alumina exports into China;
- \* transportation costs from Australia;
- \* the current standard PRC import tariff at 8%;
- \* value-added tax at 17%;
- \* import related fees; and

- \* domestic demand and supply conditions.

## Primary Aluminum

Substantially all of our primary aluminum products are sold externally. In 2004, approximately 704,400 tonnes of primary aluminum, or 92.6% of our revenue from primary aluminum sales were domestic sales; and approximately 56,600 tonnes, or 7.4% were export sales. As part of our primary aluminum segment, we derive revenues from domestic and international sales of carbon products, constituting approximately 3.8% and 2.4% of our revenues of the primary aluminum segment in 2003 and 2004, respectively.

### Sales

We sell our primary aluminum through two channels:

- \* Contract sales

. Most of our primary aluminum sales are made pursuant to contracts directly with our established customers. These may be long-term or short-term contracts, and a smelter plant may make deliveries directly or through a branch office.

- \* Sales on the Shanghai Futures Exchange

. As part of our effort to manage market risk, we sell a portion of our primary aluminum products on the Shanghai Futures Exchange through futures contracts of one to six month terms to hedge against a potential decline in primary aluminum prices.

We hold annual regional primary aluminum sales conferences in the fourth quarter of each year to coordinate the production and sales for the following year. We centrally control our product futures sales on the Shanghai Futures Exchange. To help stabilize our sales, we plan to increase the use of long-term supply contracts.

To improve the efficiency of our distribution, we divide our China market into several regions. Set forth below is a list of the major regional markets for our primary aluminum products ranked in terms of the volume of primary aluminum sold in 2004:

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



- \* northeastern China; (including Heilongjiang Province) and

#### Customers

Apart from a small amount of export sales, we sell all of our primary aluminum products to domestic customers. The Chinese market is our core market for primary aluminum, and we expect it to remain so for the foreseeable future. Domestic customers of our primary aluminum products principally consist of:

- \* domestic aluminum fabricators which use our primary aluminum as raw material for further processing; and
- \* aluminum distributors, which resell our primary aluminum products to domestic aluminum fabricators or other purchasers.

Our five largest customers combined accounted for approximately 13.0%, 13.8% and 17.5% of our total primary aluminum revenues for 2002, 2003 and 2004, respectively. Our largest customer accounted for approximately 3.1%, 4.8% and 6.6% of our total primary aluminum revenues during the same periods. All of these customers are fabricators located in China's economically developed southern and eastern regions.

Our export operations consist of ordinary sales of our products to international customers and export sales of primary aluminum from our processing or tolling business. For our processing or tolling business, we are permitted to import alumina at a zero tariff provided that all such alumina is processed into primary aluminum solely for export sales. All export sales of our primary aluminum, whether as ordinary sales or as part of our processing or tolling business, are sold at negotiated prices. Before 2004, exports of our primary aluminum enjoyed a 15% export tax refund. Starting from 2004, the tax refund rate reduced to 8%. Pursuant to the notice issued by State Administration of Taxation of the PRC dated December 22, 2004 and No. 46 notice issued by Customs General Administration of the PRC in December 2004, exports of primary aluminum are subject to a 5% export tax, and no export tax refund is available.

#### Pricing

We establish pricing guidelines for domestic sales of our own primary aluminum products, taking into account three main factors:

- \* the primary aluminum spot prices on the Shanghai Futures Exchange;
- \* our production costs and profit margins; and
- \* market supply and demand dynamics.

As part of our sales integration and centralization efforts, we set minimum prices with respect to each region in China where our primary aluminum is sold. These minimum prices are expressed by reference to the Shanghai Futures Exchange spot price for primary aluminum, not including transportation. The minimum prices may differ from region to region, but all of our primary aluminum sold into a region, regardless of the plant or warehouse from which it originates or is shipped, is sold at or above the minimum price applicable to that region. Our smelter plants filling particular orders are principally involved in discussions with the customer as to the pricing and delivery arrangements for specific transactions. They are required to comply with the minimum pricing guidelines unless prior approval from headquarters has been obtained. In general, we supply each region with products from our nearest smelters to minimize transportation costs as much as possible.

#### Alumina Hydrate, Alumina Chemicals and Gallium

Alumina hydrate, alumina chemicals and gallium are intermediate products of or otherwise related to our alumina production. Our production levels for these products are based on market demand for them. We sell all of our alumina hydrate, alumina chemicals and gallium externally, mostly domestically but some internationally.

Prices for our alumina hydrate, alumina chemicals and gallium are set by agreement with our customers. The prices for alumina hydrate and alumina chemicals are set according to market demand.

#### Delivery

##### Alumina

Delivery of alumina is made from our refineries by rail or truck. Our sales price is normally exclusive of transportation costs. For long-distance delivery, we have spur lines connecting our plants to the national railway routes. We are responsible for the maintenance of these spur lines. Shipping on the national railway system is at prices fixed by the government.

##### Primary Aluminum

Our primary aluminum products are transported to our customers mostly by rail. In view of the substantial distances that separate our smelter plants from southern and eastern China where most of the aluminum fabrication plants are concentrated, we have subsidiaries (often with warehousing capacity leased from third parties) in major cities in eastern and southern China to facilitate deliveries and coordination.

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## Our Facilities

Our core facilities include seven production plants and our Research Institute. Set forth below is a plant-by-plant description of our facilities. Our production operations are organized and managed according to our two business segments, alumina and primary aluminum.

### Pingguo Plant

The Pingguo plant commenced operations in 1994 and is located in the Guangxi Zhuang Autonomous Region in southwestern China, an area rich in bauxite resources. The Pingguo plant is our newest alumina and primary aluminum plant, and is equipped with imported facilities and technology. It is one of the most technologically advanced alumina and primary aluminum plants in China. It is also among the five largest smelters in China in terms of production volume.

Our Pingguo plant is situated within 17 kilometers of our own mines that contain large, easily exploitable high alumina-to-silica ratio bauxite reserves. The Pingguo plant is our only refinery that uses the Bayer method exclusively. With imported European technology and production equipment, our Pingguo refinery features a high level of automation and energy efficiency. Since its inception, we have increased the Pingguo plant's original design capacity by removing production bottlenecks. Through other technological innovations, the Pingguo plant is able to minimize waste water discharges related to its alumina refinery. Most of its alumina output is used in the primary aluminum smelter at Pingguo and the remainder sold to external smelters in the Guangxi Zhuang Autonomous Region. A new production line at our Pingguo refinery with annual capacity of 400,000 tonnes of alumina commenced production in June 2003.

The Pingguo plant also uses advanced 160 kA and 320 kA pre-bake reduction pot-lines, which we developed, for its primary aluminum production. The aluminum ingots it produces are sold primarily in southern China.

### Pingguo JV

We and Alcoa have completed the expansion projects to increase the alumina and aluminum production capacities at the Pingguo plant. We are in negotiations with Alcoa to form the Pingguo JV for bauxite mining, alumina refining and primary aluminum smelting. In April 2004, we received a notification from the NDRC regarding their approval on March 29, 2004 for the establishment of Pingguo JV between us and Alcoa at the Pingguo Plant. We and Alcoa will respectively contribute 50% of the total registered capital of Pingguo JV. We are in the process of finalizing the terms and capital structure of the Pingguo JV under the joint venture agreement, the articles of association of the JV and the electricity supply arrangement. For more details, please see "Item 4. Information on the Company - History and Development of the Company - Strategic Investor".

### Guizhou Plant

Our primary aluminum production facilities in Guizhou Province commenced operations in 1966 and have

undergone numerous upgrades in technology since its establishment. With an annual production capacity of 235,000 tonnes, the Guizhou plant is China's second largest primary aluminum plant in terms of production volume. Its primary aluminum facilities consist of three large-scale pre-bake reduction pot-lines, ranging from 160 kA to 186 kA. As a result of technological innovations and overhauls since its inception, our Guizhou smelter plant is among the most technologically advanced smelters in China. Its primary aluminum products are sold primarily in southwestern China. Guizhou plant is undergoing a brownfield expansion project expected to be completed by the end of 2005, with production at the designed capacity of 170,000 tonnes.

The Guizhou plant also contains a modern carbon production facility. In addition to producing carbon anodes, it is the only facility we operate that produces carbon cathodes. As such, it supplies all of the carbon cathodes required by our five plants and our Research Institute. Its carbon cathodes are also sold externally throughout China.

Our Guizhou alumina refinery commenced operations in 1978 and is as advanced as any facility of its kind in China, as many of its key technologies and equipment are imported. It uses the hybrid Bayer-sintering process for its alumina production and relies on our own mines and outside suppliers for bauxite supply. Bauxite from our own nearby mines is delivered to the refinery by cable cars and train. The plant's alumina output is mostly used in the primary aluminum production at the same plant and the remainder sold to external smelters in Guizhou Province. We completed a technical improvement project at our Guizhou plant in 2002 and have continuously reduced our production costs and expanded capacity during 2004. The project also enables us to reduce our consumption of electricity, steam and heavy oil during the alumina production process.

#### Zhengzhou Plant

Our Zhengzhou plant is located in Zhengzhou, Henan Province, a province rich in bauxite resources. Its alumina and primary aluminum production commenced operations in 1966 and 1967, respectively. The Zhengzhou plant was the first refinery in China to develop the hybrid Bayer-sintering process. We completed the construction of a new alumina production line at our Zhengzhou plant in 2002 and commenced production from February 2004 using the ore-dressing Bayer process that we developed in recent years to refine low alumina-to-silica ratio bauxite. Since inception, Zhengzhou Plant'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 local market purchases. It retains part of its alumina output for its primary aluminum production, and sells the remainder to our other smelters and external customers.

In 2003, we upgraded a portion of the primary aluminum facilities at this plant, which now utilizes 85 kA pre-bake reduction pot-lines. Its products are sold primarily to eastern China and the areas near Beijing. Its carbon plant produces consistently of high quality carbon products for external sale in Henan Province as well as for export, after meeting the needs of our various smelting operations. We commenced the construction of an alumina production facility with a production capacity of 700,000 tonnes of alumina in November 2003. We plan to complete the construction by the end of 2005.

#### Shandong Plant

The Shandong plant commenced operations in 1954 and has both alumina and primary aluminum production capacity. Its refinery was China's first production facility for alumina. Both the refinery and smelter are owned and operated by Shandong Aluminum, a joint stock limited company whose class A ordinary shares have been publicly offered to investors in the PRC and are listed on the Shanghai Stock Exchange. We currently hold a 71.4% equity interest in this listed company.

The plant produces the majority of its alumina through the sintering process, but has a small production line to produce alumina through the Bayer process using imported bauxite. During 2002, the Bayer production line was converted into an ore-dressing sintering operation. Our Shandong plant increased its alumina capacity by 160,000 tonnes and 120,000 tonnes by technical upgrades carried out in 2003 and 2004, respectively. The Shandong plant purchases the majority of its bauxite requirements from small independent mines in Henan and Shanxi Provinces. The refinery supplies all of the alumina needs for the plant's primary aluminum production.

In addition to alumina, the refinery also produces substantial amounts of alumina chemicals. It is the largest and most technologically advanced alumina chemicals production facility, and produces the most varieties of these products, in China. Alumina chemicals produced by our Shandong plant are used in the jewelry, ceramics and other industries. Its alumina chemicals products are sold both domestically and internationally.

Our Shandong plant's primary aluminum operations have undergone technological and equipment upgrades, with the majority of its original equipment having been replaced by more advanced equipment. During 2002, all soderberg reduction pot-lines were converted into 85 kA pre-bake pot-lines.

#### Qinghai Plant

Located in Qinghai Province, our Qinghai plant is a stand-alone primary aluminum production facility and is also China's largest smelter in terms of production volume. This plant commenced operations in 1987 and, together with our Pingguo and Guizhou plants, stands at the technological forefront of primary aluminum smelters in China. It operates automated 160 kA pre-bake anode reduction pot-lines that were developed domestically. It benefits from relatively low electricity costs in Qinghai Province resulting from substantial hydroelectric power stations in the region. Historically, the plant has relied on our Shanxi, Shandong, Zhengzhou and Zhongzhou plants for its alumina supply, as well as imported alumina. Because of its relatively remote location, the plant incurs higher transportation costs for both raw materials and its primary aluminum products. It sells its products in southwestern and southern China. In 2003, our Qinghai plant established a new primary aluminum production facility with an annual capacity of 85,000 tonnes. Currently, the primary aluminum capacity of the new facility has reached 40,000 tonnes. The capacity is expected to reach 85,000 by the end of 2005.

#### Shanxi Plant

This plant commenced operations in 1987 and is located in Shanxi Province, a province with the largest bauxite deposits in China. Our Shanxi plant is a stand-alone alumina plant and is currently China's largest alumina plant in terms of production volume.

The Shanxi plant's production facilities are primarily imported and are technologically advanced compared with other domestic alumina refineries. In addition, we completed the technological upgrades to a portion of our facilities in June 2002. The plant relies on bauxite from our own mines as well as outside purchases principally from Henan Province. In close proximity to large coal mines and substantial water resources, the plant currently has the largest power cogeneration capacity of all of our alumina plants. It has historically sold its output to northern, northeastern and northwestern China. We commenced phase three of the Shanxi alumina expansion project in August 2003 which is expected to come into production by the end of 2005. The total alumina production capacity of our Shanxi plant will be increased by 800,000 tonnes after completion of the expansion project.

On March 30, 2003, we established a joint venture company, Shanxi Huaze Aluminum & Power Co. Ltd., with Shanxi Zhangze Electricity Company Limited to undertake the construction of a new facility for the production of primary aluminum and carbon anodes. The new co-generation facility will include a power plant with two 300 MW coal-fired generators. For more information, see " - Property, Plants and Equipment - Our Expansion and Profit Improvement Plan - Shanxi Huaze Smelter".

#### Zhongzhou Plant

Situated in Henan Province, our Zhongzhou plant is a stand-alone alumina plant, located near bauxite, coal and water supplies. The plant commenced operations in 1993 and is equipped with imported and self-developed technology and has undergone various improvements and upgrades, including improved sintering technology. The 300,000 tonnes ore-dressing alumina project was completed by the end of 2003. We purchase bauxite supplies from Henan and Shanxi Provinces. The plant's alumina and other alumina products are sold mainly within Henan Province and it is also a supplier of alumina to our Qinghai plant.

The rotary kilns we installed in 2002 to improve capacity utilization and energy efficiency came into operation ahead of schedule and are working at full capacity. This first series 300,000-tonne ore-dressing alumina production facility has been completed and began production at the beginning of 2004. The second series of this 300,000-tonne ore-dressing alumina project has largely been completed in January 2005.

#### Research Institute

Established in August 1965 and located in Zhengzhou, Henan Province, the Research Institute specializes in aluminum-related research and development. 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 hydrate, alumina chemicals and primary aluminum. It also provides research and development services to third parties on a contractual basis. Approved by the Ministry of Science and Technology of the PRC in December 2003, Research Institute established National Research Center of Aluminum Refinery Technologies, a research center mainly engaged in the research and development of aluminum refinery technology.

Research Institute's significant achievements in 2004 include:

- \* Implementing and commercializing production technology for the enhancement of alumina product quality;
- \* Commercializing the technology for prolonging smelting pots life span and developing the technology to reinforce electrical currents; and
- \* Obtaining significant breakthrough in development of anti-flotation technology for China's medium- and low-grade diasporite bauxite.

## Competition

### Alumina

As the largest producer of alumina in China and the dominant supplier of alumina to the Chinese market, we currently encounter no competition from domestic producers of alumina and no significant competition from domestic producers of other alumina products. We believe that we will not face significant competition from domestic alumina producers in the immediate future for the following reasons:

- \* the PRC government has set minimum annual capacity thresholds of 300,000-500,000 tonnes (depending on the production method employed) for the establishment of new alumina plants in China, which necessitates a considerable greenfield investment to enter into the Chinese alumina production market;
- \* a new producer would need access to a substantial and stable supply of bauxite; and
- \* we are experienced in alumina production and our production technologies are specifically adapted to the particular chemical composition of bauxite found in China.

The rapid growth of the aluminum industry has caused demand to exceed supply for alumina in China. In 2004, the domestic alumina production in China was approximately 7.0 million tonnes, while the national demand in China reached approximately 13.8 million tonnes. The domestic supply shortfall, which represented nearly 50% of total demand in 2004, needed to be filled by imports. Our alumina faces competition in the China market from imports principally by the major international aluminum companies. This competition has intensified since 2003 as a result of increasing demand in the domestic market. Particularly, in 2004, approximately 5.9 million tonnes of alumina was imported into China, a 4.6% increase over 2003. For the year ended December 31, 2004, our alumina production represented approximately 49.4% of total national consumption.

We believe that we have competitive advantages over our foreign competitors in the China alumina market. As a local supplier situated in close proximity to our customers, we do not incur international transportation and import-related costs and enjoy stable long-term relationships with our customers in a vast and growing market. Our competitive advantages may be reduced if international suppliers of alumina can offer alumina in China at prices below ours. After China's accession to the WTO on December 11, 2001, competition from international suppliers of alumina may increase as tariff and non-tariff barriers for imported alumina are significantly reduced. The standard tariff on imports of

alumina into China has been reduced from 18% as of December 31, 2001 to its current level of 8% as of January 1, 2004 following China's accession to the WTO. However, for processing or tolling business, the primary aluminum producers are permitted to import alumina at a zero tariff provided that all such alumina is processed into primary aluminum solely for export sales.

#### Primary Aluminum

#### Domestic Competition

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Over 90% of our primary aluminum revenues are derived from sales in China. Our competition includes other domestic smelters and international producers that sell primary aluminum into China. For the year ended December 31, 2004, our primary aluminum production represents approximately 12.8% of total national consumption.

There are over 140 primary aluminum smelting companies operating in China, all of which sell all or substantially all of their products in China. We are the largest primary aluminum producer in China and our Qinghai and Guizhou plants operate two of the five largest smelters in China. Our smelters as a total accounted for 11.5% of the domestic primary aluminum production for 2004. Currently, 23 smelters in China have annual production capacities of 100,000 tonnes or more and only six smelters in China (including Chalco) have annual production capacities of 200,000 tonnes or more. The remaining smelters are smaller, and some smelters use older, more polluting and less efficient technologies and have higher per unit production costs. It is the PRC government's industrial policy to consolidate the Chinese aluminum industry into one consisting of larger, less polluting and more efficient producers. Accordingly, the larger smelters are being granted favorable treatment, including priority in the allocation of raw materials and electricity supplies and prices. These preferential treatments, especially discounts in electricity prices, represent the strongest competitive advantage large domestic smelters have over small domestic smelters. In addition, since January 1, 2005, the PRC government prohibits domestic aluminum smelters whose annual production volume lower than 100,000 tonnes from directly importing alumina to China for aluminum processing or refinery purposes. We are among a few companies in the PRC that are currently qualified to directly import alumina for our primary aluminum production. As imported alumina will usually be cost effective, we believe our competitiveness is enhanced as a result.

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

- \* Scale of production

- . With five primary aluminum facilities, we can achieve significant economies of scale. In addition, our scale of production enables us to achieve high production volumes in order 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 employ more sophisticated and efficient technology than most of our domestic competitors. Our Pingguo, Guizhou and Qinghai plants are among the most technologically advanced smelting facilities in China. In addition, our technological support and research and development capabilities are superior to other domestic smelters.

\* Vertical integration

. As the only integrated alumina and primary aluminum producer in China, we are able to supply alumina internally to our four integrated 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 our smelting operations of a stable supply of alumina.

\* Quality

. The quality of our primary aluminum compares favorably with the primary aluminum produced by most of our domestic competitors. The primary aluminum produced by four of our five smelters has satisfied the quality standards of the London Metal Exchange ("LME") and we are registered for trading on the LME.

#### International Competition

The current tariff rate for primary aluminum imports is 5%. In 2004, the rapid growth of the aluminum industry has caused supply to exceed demand for primary aluminum in China. China had a net export of approximately 710,000 tonnes of primary aluminum in 2004, representing 11.8% of the total primary aluminum consumption in 2004. With the new tariff rate in effect, competition from international suppliers of alumina and primary aluminum is expected to increase. Such competitors are likely to be large, efficient international companies, which generally have lower production costs than us. 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, other PRC governmental policies directed at fostering the growth of larger domestic smelters are likely to be retained after China enters the WTO, such as tax benefits, preferential electricity tariffs, and subsidies for research and development. We expect that international competition will accelerate the process of consolidation and closure of smaller domestic smelters.

#### Research and Development

Our research and development efforts over the years have helped to expand our production capacity and reduce our unit production costs. We have successfully commercialized our previous research and development results in various technologies.

As of December 31, 2004, we owned 244 patents. The major registered patents relate primarily to technologies and know-how, equipment and new products. Once registered, a patent in China for a new invention is valid for 20 years and for a new function or a new design is valid for 10 years from the date of the patent application.

As of December 31, 2004, we owned 28 trademarks, which are used to identify our businesses and products. The trademarks have a term of 10 years. We have entered into a Trademarks License Agreement with Chinalco for the non-exclusive use by Chinalco of two of our trademarks relating to aluminum fabrication.

Although the PRC has been promulgating and amending its patent, trademark, and license laws to comply with various international agreements, its laws are still evolving. In its current form, Chinese intellectual property law differs from United States intellectual property law in significant ways. For instance, the PRC patent administration may grant a compulsory license on a patent if it is unable to obtain a license from the patent owner for reasonable terms and within a reasonable time frame. Chinese patent law also provides immunity from damages for an entity that uses or sells a patented product without knowing that it was made or sold without the patentee's permission so long as it proves that the infringing product was obtained from a legitimate source. United States patent law does not offer such provisions. Chinese law also awards patents on a first-to-file system as opposed to the United States' first-to-invent system. Chinese trademark law is similarly based on a first-to-register system as opposed to the United States' first-to-use system.

Moreover, the PRC government and its courts have limited experience in enforcing its intellectual property laws. Modern PRC patent and trademark laws have only existed for approximately 20 years. Courts in China have not reached the same level of experience in enforcing and interpreting intellectual property laws as have the courts in the United States. However, the PRC government has created administrative bureaus specifically for patent and trademark infringement disputes as an alternative to judicial resolution. These administrative bureaus have the power to order an infringing party to stop and desist from such violations.

We do not regard any single patent, license, or trademark to be material to our sales and operations as a whole. We have no material patents, licenses, or trademarks the duration of which cannot, in the judgment of our management be extended as necessary. We are neither involved in any material intellectual property disputes against us nor are we pursuing any material intellectual property rights against any party.

#### Environmental Protection

We are subject to PRC national environmental laws and regulations as well as environmental regulations promulgated by the local governments where we operate. These include regulations on waste discharge, land repair, emissions disposal and mining control. For example, national regulations promulgated by the PRC government set discharge standards for emissions into the air and water. They also promulgate schedules of discharge fees for various waste substances. These schedules usually provide for discharge fee increases for each incremental increase of the amount of discharge up to a specified level set by the PRC government or the local government. For any discharge exceeding the specified level, the relevant PRC government agencies may order any of our facilities to rectify certain behavior causing environmental damage, and subject to PRC government approval, the local government has the authority to order any of our facilities to close for failure to comply with existing regulations.

Our bauxite mining operations are subject to relevant environmental laws and regulations promulgated by national and local governments, including regulations on waste discharge, land repair, emission management and mining control.

The pollutants discharged from our alumina refining process include red mud, waste water and waste emission of gases and dust. Our primary aluminum production process generates fluorides, pitch fume and dust, which are illegal to be released into the atmosphere without first being processed. Once processed, the amount of pollutants that can be released is subject to national or local discharge limits.

Each of our alumina refineries and primary aluminum smelters has its own waste treatment facilities on site or has developed other methods to dispose of the industrial waste.

Our total capital expenditures for environmental protection was RMB248.2 million, RMB30.5 million and RMB52.4 million for the years ended December 31, 2002, 2003 and 2004, respectively. The significantly higher environmental protection expenditures in 2002 was due to the undertaking of various environmental projects as part of the technological upgrade of existing production facilities at our Guizhou and Shandong plants. We have been granted ISO14001:1996 accreditations issued by The International Certification Network on December 31, 2004. We believe that our operations are substantially in compliance with currently applicable national and provincial environmental regulations.

#### Insurance

We currently maintain insurance coverage on our property and plants, our fixed assets, our transportation vehicles and various assets that we consider to be subject to significant operating risks.

We paid a total of RMB44.8 million in insurance premiums in 2004.

We are covered under the injury and accidental death insurance provided by the local government labor departments and do not purchase separate insurance policies from commercial insurers with respect to such risks. We also participate in the medical care program provided under the government's social welfare plans or provided by a related party and do not purchase medical insurance policies provided by medical insurance companies.

Consistent with what we believe to be the customary practice in China, we do not generally carry any third party liability insurance to cover claims in respect of personal injury, environmental damage arising from accidents on our property or relating to our operations (other than our automobiles) or business interruption insurance. More extensive insurance is either unavailable in China or would impose a cost on our operations that would reduce our competitiveness with other producers.

#### Seasonality

Our business is not seasonal.

#### 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 two agencies of the PRC government:

- \* the NDRC, which sets and implements the major policies concerning China's economic and social development policies, approves investments exceeding certain capital expenditure amounts, including approval of Sino-foreign joint venture projects, coordinates economic development of state-owned enterprises and oversees their reform, formulates industrial policies and investment guidelines for all industries including the aluminum industry; and

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- \* the Ministry of Land and Resources, which has the authority to grant land use licenses and mining right permits.

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

#### Requirements for New Entrants and Other Capital Investments

The constructions of new alumina refineries, the expansions of primary aluminum smelters and mining projects in which the amount of total investment exceeds RMB500 million require prior approval by the NDRC, the important projects among which shall be approved by the State Council. Any nonferrous metals projects and rare earths mining projects in which the amount of total investment exceeds RMB5,000 million shall be approved by the NDRC and filed with the State Council for record. All other projects shall be filed with the local competent investment authorities for record disregarding the scale of such projects. Moreover, in order to obtain governmental approval for its establishment, a new alumina refinery must have an annual production capacity of at least 500,000 tonnes if it uses the sintering process, 400,000 tonnes if it uses the hybrid Bayer-sintering process or 300,000 tonnes if it uses the Bayer process. Effective September 1, 1999, the State Economic and Trade Commission, has prohibited construction of any new smelter with less than 100,000 tonnes in annual primary aluminum production capacity. All legal and regulatory requirements for new projects and other capital investments in the alumina and aluminum industries apply equally to us. Accordingly, we are required to obtain all necessary governmental approvals for our capital expenditure plans.

Any capital markets financing activities, for example, to finance a capital project, are subject to approval by securities regulatory authorities and other relevant authorities in China, regardless of whether the funds are raised in China or on the international capital markets. An issuer of equity securities or equity-linked securities in the PRC must obtain prior approval from the CSRC. For the issuance of equity or equity-linked overseas securities, the issuer is also required to obtain approval from the NDRC. Offerings of debt, such as debentures, are subject to approval from the People's Bank of China, as well as

the NDRC. For all international financing activities through bank borrowing or issuance of debt, the issuer must obtain prior approval from the State Administration of Foreign Exchange and register with it after the completion of the transaction.

Foreign investment in the production of alumina and primary aluminum is encouraged by the PRC government subject to various conditions. Wholly foreign-owned companies may conduct bauxite mining operations in the western region of China, but bauxite mining activities in other regions of China may only be conducted jointly with PRC entities in the form of a joint venture. Foreign investment in the aluminum industry in China, if permitted and approved, is eligible for favorable tax treatment and other incentives available under PRC law to encourage foreign investment in China.

### 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, except for electricity, the price of which is described below. Freight transportation on the national railway system is subject to government mandated pricing.

### Electricity Supply and Price

The State Power Supervision Commission 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 and related rules and regulations govern electricity supply and distribution. Currently, China's two 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.

### Regulations Concerning Imports and Exports of Alumina and Primary Aluminum

Imports of alumina into China are subject to import tariffs. The current standard tariff rate for alumina is 8%. Imports of primary aluminum into China are also subject to import tariffs currently at the rate of 5%. Pursuant to China's commitment under its WTO agreement, tariff rates for alumina imports will be further reduced. There are no governmental restrictions on exports of alumina or primary aluminum.

### Environmental Protection Laws and Regulations

The State Environmental Protection Administration of China is responsible for uniform supervision and control 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 and above are responsible for environmental protection within their areas of jurisdiction.

Environmental regulations require companies to file an environmental impact report with the environmental bureau in the relevant county 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 is satisfied 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.

Remedial measures for breaches of the Environmental Protection Law include a warning, payment of damages or imposition of a fine. 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 and may be fined. Criminal liability may be imposed for a material violation of environmental laws and regulations that causes loss of property or personal injuries or death.

#### 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 and relevant local authorities. Upon approval, a mining permit is issued by the relevant administrative authorities, which are responsible for supervision and inspection of mining exploitation in their jurisdiction. Annual reports are required to be filed by the holders of mining rights with the relevant administrative authorities.

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 protected reserves. 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 law.

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.

### Organizational Structure

We are organized as a joint stock limited company under PRC law. Chinalco, China Cinda, China Orient, China Development Bank, Guangxi Investment, Guizhou Development and our public shareholders (not including Alcoa) own 42.14%, 14.57%, 5.45%, 5.02%, 1.78%, 1.17% and 21.87%, respectively, of our issued share capital. Alcoa owns approximately 8.0% of our issued share capital.

Shandong Aluminum, a significant subsidiary incorporated in the PRC and located in Shandong Province, in which we hold a 71.4% interest, is a joint stock limited company established under PRC law. Its A shares are traded on the Shanghai Stock Exchange.

Lanzhou Aluminum, our associate company incorporated in the PRC and located in the Gansu Province, in which we hold 28% interest, is a joint stock limited company established under the PRC law. Lanzhou Aluminum's A shares were listed on the Shanghai Stock Exchange.

### Property, Plants and Equipment

#### Land

Chinalco leases to us 453 pieces or parcels of land, which are located in six provinces, covering an aggregate area of approximately 58.3 million square meters for the purposes of all aspects of our operations and businesses. The leased land consists of:

- \* 433 pieces of allocated land with an area of approximately 57.8 million square meters, for which Chinalco has obtained authorization from the relevant administrative authorities to manage and lease the land use rights. Chinalco has obtained land use rights certificates in respect of 423 parcels of allocated land, with an aggregate area of approximately 56.4 million square meters, and land entitlement certificates in respect of the remaining ten parcels of land leased to us with an aggregate area of approximately 1,480,025 square meters; and
  
- \* 20 pieces of granted land with an area of approximately 488,586.3 square meters for which Chinalco has paid the land premiums and has been granted the 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, the leased term for each shall end on the expiry date of the mining rights or at the end of the actual mine life, whichever is earlier); and
- \* granted land: until expiry of the relevant land use right permits.

The land entitlement certificates relating to the ten pieces of land held by Chinalco with an aggregate area of approximately 1.5 million square meters expired on December 31, 2001. Chinalco has, in accordance with its undertaking in the Land Use Rights Leasing Agreement, applied for land use right certificates for the ten pieces of land from the relevant land administrative bureaus on or before December 31, 2001. Chinalco has also undertaken to pay all costs arising from such application, to be responsible for any disputes, claims, damages, proceedings, arbitration, payments, costs and expenses arising from those land use rights and to indemnify for all of our losses or damages which we may suffer as a result of these circumstances. The land use rights certificates for the ten pieces of land has been obtained during 2004.

See "Item 3. Key Information - Risk Factors."

## Buildings

Our principal executive offices, which we lease from Chinalco, are located at No. 12B Fuxing Road, Haidian District, Beijing, People's Republic of China 100814.

Pursuant to the reorganization, Chinalco transferred to us, among other operating assets, ownership of the buildings and properties for the operation of our core businesses, with Chinalco retaining the remaining buildings and properties for Chinalco's remaining operations. The buildings transferred to us comprise 4,631 buildings with an aggregate gross area of approximately 4.2 million square meters.

The buildings transferred to us pursuant to the reorganization, which are located on land leased from Chinalco, 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 effect 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 of buildings for offices, dormitory, canteen and storage purposes. We lease 59 buildings to Chinalco, with an aggregate gross area of approximately 62,819 square meters. Chinalco leases 100 buildings to us, with an aggregate gross area of approximately 273,637 square meters. The leased terms of all these buildings are 20 years commencing from July 1, 2001. Chinalco has obtained proper land and building title certificates for all of the buildings it leases to us by the end of 2004.



For environmental issues in relation to the utilization of our assets, please refer to "Item 4. Environmental Protection".

#### Our Expansion and Profit Improvement Plan

Our capital expansion plan for 2005 and 2006 requires a total of RMB16,000 million in capital expenditures. Of this amount, RMB7,680 million is designated for investment in our alumina segment. We plan to use RMB8,320 million for primary aluminum segment projects. For more information, see "Item 5. Operating and Financial Review and Prospectus - Capital Expenditure Plan."

The following table shows the expected aggregate effects of our expansion and improvement plans for our alumina and primary aluminum production facilities for 2005 and 2006:

	Planned Capital Investment for 2005 and 2006	December 31, 2004 Production Capacity	Proposed Additions to Production Capacity		2006 Total Capacity
			2005	2006	
	(RMB in millions)	(in thousand tonnes)	(in thousand tonnes)		(in thousand tonnes)
Alumina	7,580	6,470	2,030	910	9,410
Primary aluminum	8,290	833	667	0	1,500

Capital investments in our expansion and improvement plan are expected to reduce our unit production costs by:

- \* reducing the cost of our own mining operations; developing and implementing energy-saving technologies for alumina refining;
- \* removing bottlenecks in our refining processes by adding equipment, replacing outdated equipment and/or updating technology; and

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- \* further improving the sintering, Bayer and hybrid Bayer-sintering technologies used in our operations to lower raw material and energy consumption rates.

In addition, we intend to reduce our unit production costs, as well as maximize the benefits we gain through expansion of our facilities, by capitalizing on our newly established centralized management system. This system will

allow us to apply best practices uniformly throughout our production facilities, and enable cost saving measures and process improvements developed in any of our facilities to be shared by and incorporated into the operations of each of our other facilities. Further, our centralized management system will enable us to make effective production allocation decisions among our facilities as their production capacities are expanded through the application of our capital investments.

All capital expenditures to be incurred by the Pingguo JV following its formation will be borne equally by Alcoa and us. Unless otherwise specified, the information herein about capital expenditures and otherwise does not take into account this potential joint venture.

During 2004, we were engaged in the following expansion or technical improvement projects:

1. Shanxi equipment improvements

. We began construction of phase three of our Shanxi refinery in August 2003. This project is expected to cost RMB2,980 million and increase the alumina production capacity of our Shanxi plant by 800,000 tonnes when the facility is fully operational. The construction is expected to be completed by the end of 2005.

2. Henan Project

. We commenced the construction of an alumina production facility with a production capacity of 700,000 tonnes of alumina in November 2003. The project is expected to cost RMB2,755 million. The construction is expected to be completed by the end of 2005.

3. Zhongzhou Project

. This first series 300,000-tonne ore-dressing alumina production facility has been completed and began production at the beginning of 2004. The project cost RMB1,300 million. Construction in the second production line of this 300,000-tonne ore-dressing alumina project commenced in April 2004, and has largely been completed in January 2005. The total investment of this production line is RMB1,020 million; a portion of the investment will be financed by the proceeds from our proposed A share offering.

4. Guangxi Alumina Project.

We have established a joint venture company, Guangxi Huayin Aluminum Co., Ltd., with Guangxi Aluminum Development and Investment Stock Co., Ltd. ("Guangxi Associate") and China Minmetals Non-ferrous Metals Co., Ltd. on February 18, 2003 to undertake the construction of an alumina plant to exploit the discovery of a bauxite deposit in western Guangxi Province. We have conducted feasibility studies and we are now preparing to construct an alumina plant with an annual output of 1,600,000 tonnes. The feasibility study report has been submitted to the relevant government authorities for approval.

5. On May 24, 2004, we entered into the Framework Agreement with CVRD for the establishment of ABC Refinery to produce alumina in Barcarena, State of Para, Brazil ("ABC Project"). We further entered into the first and second Amendment to the Framework Agreement on November 12, 2004 and January 10, 2005, respectively; to set forth the details and schedule of ABC Project. It is intended that ABC Refinery will be owned by the joint venture company and shall be established as a first class alumina refinery with high

competitiveness globally. The intended alumina capacity of the initial phase of ABC Refinery will be 1,800,000 tonnes per year, and may reach a final capacity of 7,200,000 tonnes per year through phased expansions. The total investment for the initial phase of the proposed project is estimated to be US\$1,000 million. The initial phase of the proposed project is expected to be completed and put into operation in 2008. For more details, please refer to "Item 4 - Information on the Company - Business Overview - Production Facilities."

6. Other projects in our alumina segment include environmental projects (e.g. waste treatment and disposal, facilities improvement for environmental protection), projects to improve alumina and alumina chemicals product quality, maintenance projects for bauxite mines, equipment replacement and other projects to sustain our existing production capacity.

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7. Shanxi Huaze smelter

. We established a joint venture company, Shanxi Huaze Aluminum & Power Co. Ltd., with Shanxi Zhangze Electricity Company Limited ("Shanxi Zhangze") on March 30, 2003 to undertake the construction of a primary aluminum plant and a power co-generation facility. The projected annual production capacity of the facility is 280,000 tonnes of primary aluminum and 160,000 tonnes of carbon anodes. The new facility will include a power plant with two 300 MW coal-fired generators. The total investment is projected to be RMB6,014 million. We will contribute RMB900 million for a 60% equity interest and Shanxi Zhangze would contribute RMB600 million for a 40% equity interest. The total investment amount above the RMB1,500 million in capital contributed by the joint venture parties will be financed from external sources, including possibly debt guaranteed by Shanxi Zhangze and us in proportion to our equity interests. The term of the joint venture is 30 years from March 30, 2003. We have commenced the construction of the smelter and power plant in September 2003 and expect to complete the project by the end of 2005.

8. Guizhou fourth series

. We have commenced construction of this primary aluminum smelter in August of 2003. The project is expected to cost RMB1,780 million. We expect to complete this brownfield project, with production at the designed capacity of 175,000 tonnes of primary aluminum by the end of 2005

We intend to fund these capital expenditures through a combination of internal funds derived from our own operations, the expected proceeds from the proposed A Share Offering, proceeds from the H shares placement and bank financing. See "Item 4. Information on the Company - The Proposed A Share Offering" for details.

The preceding paragraphs provide a summary of our current capital expenditure plans for our major projects. These plans have been developed based on facts currently known to us, assumptions we believe to be reasonable and our estimates of market and other conditions. They may change as circumstances change, and may be modified as our business plans evolve. Other than as required by law, we do not undertake any obligation to publish updates of our plans or their implementation status.

ITEM 5.

The following discussion and analysis should be read in conjunction with our audited financial statements, and selected historical financial data, in each case together with the accompanying notes, included elsewhere in this annual report. Our audited financial statements have been prepared in accordance with HK GAAP, which differ in certain material respects from U.S. GAAP. Note 33 to our audited financial statements provides a reconciliation of our financial statements to U.S. GAAP in accordance with Item 18 of Form 20-F.

The Reorganization

Prior to the reorganization conducted in preparation for the global offering, we did not exist as a separate legal entity. Our operations were conducted by Chinalco and its predecessors. As part of the reorganization, Chinalco transferred to us assets and liabilities related to seven alumina and primary aluminum production plants and our Research Institute. Because Chinalco controlled these operations prior to the reorganization and still controls us, our financial statements included in this annual report, which are related to periods prior to the reorganization on July 1, 2001, have been prepared on the basis of a reorganization under common control in a manner similar to a pooling of interests. Accordingly, in those financial statements, the assets and liabilities transferred to us have been stated at historical amounts and the results of our operations have been presented as if our operations had already been transferred to us from Chinalco. In addition, those financial statements also reflect the assets, liabilities, revenues and expenses of operations retained by Chinalco in the reorganization, including one bauxite mine, two limestone quarries and a carbon plant, which were directly related to our alumina and primary aluminum operations. In addition, because of the asset reorganization and the related carve-out accounting, those financial statements reflect various historical payments as distributions to Chinalco that are not expected to be indicative of future practices or results.

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Since July 1, 2001, our financial statements as included in this annual report have been prepared using the acquisition accounting method having given effect to our incorporation and the reorganization. Accordingly, the assets and liabilities transferred to us have been restated at fair value and the assets, liabilities, revenues and expenses of operation retained by Chinalco are not reflected. Since July 1, 2001, all transactions have been recorded at government guidance price, market price or at contractual price (cost plus a margin).

Critical Accounting Policies

Our significant accounting policies under HK GAAP and U.S. GAAP which are presented in Note 1 and Supplementary Information to our audited financial statements, respectively, are essential to the understanding of our operating results and financial condition. Some of our accounting policies require our management to make significant judgments relating to estimates and assumptions about the effects of circumstances to reported amounts in our financial statements. We have established procedures and processes to facilitate the making of such judgments in the preparation of our financial statements.

The following is a summary of our critical accounting policies. In each area, management has identified areas of uncertainty and the variables most important in making the necessary estimates. 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 financial statements.

## Goodwill

Goodwill represents the excess of purchase consideration over the fair values ascribed to the separable net assets of entities acquired. Under HK GAAP, it is recognized as an intangible asset and amortized on a straight-line basis over its estimated useful economic life of not more than 20 years. The gain or loss on disposal of an entity includes the unamortized balance of goodwill relating to the entity disposed of. Whenever an indication of impairment exists, the carrying amount of goodwill is assessed and written down immediately to its recoverable amount.

Under U.S. GAAP, the evaluation of the impairment of goodwill must be performed at least annually and involves comparing the current fair value of the business and estimated future cash flows generated by the reporting units. Management made a number of significant assumptions and estimates in the application of the discounted future cash flow model to forecast operating cash flows, including business prospects, market conditions, selling prices and sales volumes of products, costs of production and funding sources. Management considers both past data and all currently available information at the time the valuations of its businesses are performed. Results in actual transactions could differ from those estimates used to evaluate the impairment of goodwill.

## Property, Plant and Equipment

The carrying amounts of long-lived assets are reviewed whenever events or changes in circumstances indicate that the book value of the assets may not be recoverable. An impairment exists when the carrying amount of an asset exceeds its recoverable amount. The recoverable amount is measured at the higher of net selling price or value in use, calculated based on discounted future pre-tax cash flows related to the asset or the cash generating unit to which the assets belong. A cash generating unit is the smallest identifiable group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or group of assets. Estimates of future cash flows include the cash inflows from continuing use of the asset and cash outflows to prepare the asset for use that can be directly attributed, or allocated on a reasonable and consistent basis, to the asset. If applicable, estimates also include net cash flows to be received (or paid) for the disposal of the asset at the end of its useful life. Management made a number of significant assumptions and estimates in the application of the discounted future cash flow model to forecast operating cash flows, including business prospects, market conditions, selling prices and sales volume of products, costs of production and funding sources. If there is an indication of impairment, the carrying value of such assets is written down to its recoverable amount. Results in actual transactions could differ from those estimates used to evaluate the impairment of such long-lived assets.

## Provisions for Accounts and Other Receivables

Provision is made against accounts and other receivables when future collections are considered doubtful. In assessing the timing and amounts for these provisions, management must make a number of significant assumptions and estimates in the application of aging and specific identification analysis using past history and collections' experience, potential events and circumstances affecting future collections

and the credit status of specific customers, which are monitored on a regular basis. Management's assessment of future collections of receivables may differ from the timing and amounts of the actual collections in future periods.

## Income Tax

Income taxation charged to the results consist of current and deferred tax. Current tax is calculated based on the taxable income at the applicable rates of taxation of such year. Deferred taxation is provided for under the liability method, at the current taxation rate, in respect of temporary differences between profit as computed for taxation purposes and profit as stated in the financial statements to the extent that a liability or an asset is expected to be payable or recoverable in the foreseeable future. In forming a conclusion about whether a tax asset is recoverable in the foreseeable future, the management makes judgment in assessing the potential events and circumstances affecting future recoverability while at the same time considering past experience. If the management's interpretations or judgments differ from those of tax authorities with respect to the utilization of tax losses carried forward, the income tax provision may vary in future periods.

## Revised Hong Kong Financial Reporting Standards and Hong Kong Accounting Standards

The Hong Kong Institute of Certified Public Accountants has issued a number of new and revised Hong Kong Financial Reporting Standards and Hong Kong Accounting Standards ("new HKFRSs") which are effective for accounting periods beginning on or after January 1, 2005. We have not early adopted these new HKFRSs in the financial statements for the year ended December 31, 2004. We are in the process of making an assessment of the impact of these new HKFRSs. The effect of some of the more significant differences between new HKFRSs and current accounting policies that are expected to affect us are stated in Note 33(i) to our audited financial statements beginning on page F-66.

## Overview

We are the largest producer of alumina and one of the largest producers of primary aluminum in China. We are also the second largest producer of alumina in the world in terms of production volume for the year ended December 31, 2004. We are engaged primarily in alumina refining and primary aluminum smelting operations. We report our financial results according to the following business segments:

- \* Alumina segment, which consists of mining and purchasing bauxite and other raw materials, refining bauxite into alumina, and selling alumina both internally to our primary aluminum smelters and externally to customers outside of our company. To a lesser extent, this segment also includes the production and sale of alumina hydrate, alumina chemicals and gallium.
- \* Primary aluminum segment, which consists of procuring alumina and other raw materials (including recycled aluminum), supplemental materials and electricity, smelting alumina to produce primary aluminum, and selling substantially all our primary aluminum products to external customers. To a lesser extent, this segment includes production and sales of carbon products.

\*

Corporate and other services segment, which includes our headquarters' operations, research conducted by our research institutes and provision of our research and development services to third parties.

#### Factors Affecting Our Operating Performances

Although we were incorporated on September 10, 2001 as a result of the reorganization, our financial statements and this discussion present our operating performances:

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- \* as if we had been in existence throughout the relevant periods; and
- \* as if our operations and businesses (and various other operations including a carbon plant, one bauxite mine and two limestone quarries which were retained by Chinalco in the reorganization which took effect on July 1, 2001) were transferred to us as of January 1, 1998 and were conducted by us throughout the period ended June 30, 2001.

Our operating performances and the period-to-period comparability of our financial results are affected by a number of external factors. Our financial statements may not be indicative of our future earnings, cash flows or financial position for numerous reasons including those described below.

#### Alumina Prices

We set uniform prices for all our external sales of alumina by following import-parity pricing and adjust the prices from time to time. Our import-parity pricing generally takes into account:

- \* free-on-board Australia prices for alumina exports into China;
- \* transportation costs from Australia;
- \* the current standard PRC import tariff at 8%;
- \* value-added tax at 17%;
- \* import related fees; and
- \* domestic demand and supply conditions.

The international market prices for alumina have been volatile from time to time, and this volatility affects the price of our alumina, which tracks changes in the international market prices. In 2004, the

market prices of international and domestic alumina increase dramatically due to the substantial rise in global demand for aluminum and consequently demand for alumina. The highest spot price during 2004 reached US\$530 per tonne. The annual average price of alumina reached US\$348 per tonne, representing an increase of 42.0% over 2003. In 2004, the supply shortfall of domestic alumina further widened, which led to a sustained increase in domestic alumina prices in line with the rising imported price. The annual average spot price of domestic alumina in 2004 was RMB3,779 per tonne, representing an increase of 34.1% over 2003. The price increase from 2003 to 2004 is mainly attributable to the substantial rise in demand for alumina in China and a shortage of supply resulting from low global production capacity.

In 2004, total domestic alumina output was approximately 7.0 million tonnes, representing an increase of 15.2% over 2003, making China the second largest alumina producing country in the world. In 2004, annual domestic consumption was approximately 13.8 million tonnes, representing an increase of 16.1% over 2003. Strong demand for alumina in China resulted in a substantial rise in the import of alumina. The volume of imports reached 5.9 million tonnes in 2004, representing an increase of 4.6% over 2003.

Internationally, the customary practice for alumina pricing under long-term contracts is by reference to the LME prices for primary aluminum. Since April 2001, we have entered into a number of domestic long-term alumina sales contracts with two-year terms, under which the sales price is set as a percentage of the three-month primary aluminum prices on the Shanghai Futures Exchange. As a result, fluctuations of primary aluminum prices on the Shanghai Futures Exchange can affect our alumina sales under these long-term contracts, and such effects may increase as we increase the proportion of alumina sales under long-term contracts. We have entered into three-year alumina sales contracts with third parties since January 1, 2004 and we expect to sell approximately 1.1 million tonnes of alumina under these contracts.

#### Primary Aluminum Prices

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Like most primary aluminum producers in China, we price our primary aluminum products by reference to Shanghai Futures Exchange spot prices. The Shanghai Futures Exchange primary aluminum spot prices generally reflect LME primary aluminum spot prices, plus an amount on account of international transportation, import tariffs, value-added tax and other import-related costs. Thus, fluctuations in the Shanghai Futures Exchange (and, by extension, the LME) spot prices affect our operating performances. Primary aluminum prices on the Shanghai Futures Exchange and LME tend to be cyclical and volatile. The following table sets out the average three-month primary aluminum futures price on LME and the Shanghai Futures Exchange in 2002, 2003 and 2004.

	2002	2003	2004
	<u>                    </u>	<u>                    </u>	<u>                    </u>
	(U.S. Dollar per tonne)		
LME	1,366.9	1,433.0	1,723.0
Shanghai Futures Exchange	1,388.9	1,499.1	1,695.0



Global and domestic demand for primary aluminum continued to increase in 2004, resulting in a significant increase in primary aluminum prices. The highest three-month primary aluminum futures price on LME in 2004 reached US\$2,000 per tonne, a record high for the past nine years.

In 2004, the growth rate in aluminum consumption in China was approximately 20.0% per year as a result of the rapid growth in its economy. China consumed approximately 6.0 million tonnes of primary aluminum in 2004, representing an increase of 15.4% from 2003. Principal consumers in China for primary aluminum include the companies operated in construction, auto, electric power and packaging industries. Total primary aluminum production volume in China was approximately 6.7 million tonnes in 2004, representing an increase of 20.0% over 2003, which is greater than China's growth in domestic consumption. The net export volume of domestic primary aluminum was approximately 710,000 tonnes in 2004.

### Electricity Prices

The smelting of primary aluminum requires a substantial and continuous supply of electricity. Therefore, the availability and price of electricity are key considerations in our primary aluminum production operations. Interruptions of electricity supply can result in lengthy production shutdowns, increased costs associated with restarting production and waste of production in progress. In extreme cases, interruptions of electricity supply can also cause damage to or destruction of the equipment and facilities. We encountered severe shortages of electric power supply in 2003 and 2004. We do not expect any significant improvement of this situation until late 2006 when a number of national power generation projects are scheduled for completion. In the second half of 2004, the average electricity shortage led to an increase of electricity price of approximately 10.6%, which in turn caused our unit production cost for primary aluminum to increase by 4.1% as compared to 2003. Currently, all of our production facilities enjoy preferential electricity prices granted by local government authorities.

### Debt and Financing Costs Reduction

Our financing costs consist predominantly of interest expenses on our borrowings. From 2002 through December 31, 2004, our financing costs decreased primarily due to interest rate reductions and debt repayments. The majority of our debt has been incurred to fund our capital expenditures. Interest rates on loans related to capital expenditures and working capital are set by the People's Bank of China. The People's Bank of China reduced interest rates for commercial loans chargeable by state-owned banks in 2002, 2003 and 2004. These interest rate reductions correspondingly reduced our interest expense on our floating rate loans. In addition, our plants historically received loans from state-owned banks with reduced interest rates (and in some instances interest free) as a form of government support for our projects. In 2002, 2003 and 2004, the principal amount of loans from state-owned banks at reduced interest rates amounted to RMB348.0 million, RMB258.0 million and RMB939.0 million, respectively. We expect that such preferential interest loans will continue to be available to us in the future.

### Consolidated Operating Performances

The following table sets forth, for the periods indicated, certain income and expense items as a percentage of our sales of goods from our consolidated statements of income:

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Year Ended December 31,

2002	2003	2004

%

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Sales of goods	100.0%	100.0%	100.0%
Cost of goods sold	79.5	70.7	66.4
	<hr/>	<hr/>	<hr/>
Gross profit	20.5	29.3	33.6
Other revenues	3.1	2.5	2.2
Expenses related to other revenues	2.7	2.2	1.8
	<hr/>	<hr/>	<hr/>
Other revenues, net	0.4	0.3	0.4
Selling and distribution expenses	3.0	2.4	2.0
General and administrative expenses	4.4	4.5	3.8
Research and development expenses	0.8	0.8	0.4
Other (income) expenses	0.1	0.1	-- <sup>(1)</sup>
	<hr/>	<hr/>	<hr/>
Operating income	12.6	21.8	27.8
Finance costs	2.9	1.9	1.3
Operating income after finance costs	9.7	19.9	26.5
	<hr/>	<hr/>	<hr/>

(1) Less than 0.1.

Sales to Chinalco and its subsidiaries, jointly controlled entities and other related parties accounted for approximately 4.9% and 5.4% of consolidated turnover for the two years ended December 31, 2003 and 2004, respectively. For information on related party transactions, see "Item 7 - Major Shareholders and Related Party Transactions - Related Party Transactions" and Note 32 to our audited financial statements.

Year Ended December 31, 2004 Compared with Year Ended December 31, 2003

#### Revenues

Our total revenues amounted to RMB33,021.2 million for the year ended December 31, 2004, representing an increase of RMB9,195.2 million, or 38.6%, from the previous year's RMB23,826.0 million. Total revenues include sales of goods and other revenues. Sales of goods, which consist of sales of alumina and primary aluminum products, accounted for 97.3% and 97.6% of our total revenues for the years ended December 31, 2003 and 2004, respectively. Our sales of goods increased by 39.0% from RMB23,245.9 million for the year ended December 31, 2003 to RMB32,313.1 million for the year ended December 31, 2004, representing an increase of RMB9,067.2 million. The increase was primarily due to the increase in selling prices of our principal products such as alumina and primary aluminum, and a growth in external sales volume of alumina.

For 2004, our average external selling price for alumina reached RMB3,229.7 per tonne (tax excluded, similarly hereinafter), representing an increase of RMB822.0 per tonne or 34.1% from

RMB2,407.7 per tonne for the previous year. Our average external selling price for primary aluminum reached RMB13,756.3 per tonne, representing an increase of RMB1,295.8 per tonne or 10.4% from RMB12,460.5 per tonne for the previous year. Our external sales volume of alumina increased by 15.4% from 4.2 million tonnes for the year ended December 31, 2003 to 4.9 million tonnes for the year ended December 31, 2004. Our external sales volume of primary aluminum increased by 1.8% from 746,900 tonnes for the year ended December 31, 2003 to 760,600 tonnes for the year ended December 31, 2004.

#### Cost of Sales

Our total cost of sales increased by 30.6% from RMB16,439.5 million in 2003 to RMB21,464.2 million in 2004. The increase was mainly attributable to a growth in external sales volume of alumina, and the increased unit costs of primary aluminum and alumina resulting from the increases in raw material and fuel prices compared to 2003.

#### Selling and Distribution Expenses

Our selling and distribution expenses increased by RMB98.1 million from RMB549.4 million in 2003 to RMB647.5 million in 2004, or 17.9%. The increase was primarily attributable to the increase in transportation, loading and packaging fees by RMB79.1 million, among which RMB56.2 million resulted from the increase in external sales of volume of alumina and RMB16.2 million was the additional fees paid for express delivery or as guarantees to solve transportation bottleneck.

#### General and Administrative Expenses

General and administrative expenses increased by 16.6% from RMB1,047.5 million in 2003 to RMB1,220.9 million in 2004. The increase was mainly due to (i) an increase of RMB94.8 million in tax expenses other than income tax corresponding with our business expansion; (ii) an increase of RMB30.9 million in remuneration and welfare expenses for management members under our incentive plan as a result of achievement of our operating targets set for 2004, and (iii) an increase of RMB13.4 million in insurance premiums to reflect our policy to increase our insurance coverage.

#### Research and Development Expenses

Our research and development expenses decreased by 23.5% from RMB173.4 million in 2003 to RMB132.6 million in 2004. The decrease was because we strategically held up our new research and development projects in 2004 and placed our emphasis on consolidating our research results from previous years. We will continue to make appropriate investment in research and development activities in the following years.

#### Other Income / Expenses

Our expenses (net of other income) decreased from a net expense of RMB25.5 million in 2003 to a net expense of RMB3.4 million in 2004. This was mainly because we reached an agreement with a financial institution for early repayment of outstanding principal amounting to RMB16.0 million and as a result saved interest expense totaling RMB9.8 million otherwise payable by us. The decrease was also attributable to a net exchange gain of RMB10.9 million realized from our foreign currency deposits obtained from the H shares placement at the beginning of 2004, compared with RMB8.2 million net exchange loss in 2003.

#### Operating Income

Our operating income increased by 76.4% from RMB5,078.5 million in 2003 to RMB8,960.0 million in 2004. Our operating income as a percentage of sales of goods increased from 21.8% in 2003 to 27.7% in 2004.

#### Finance Costs

Our finance costs decreased by RMB42.4 million, or 9.4%, from RMB451.4 million in 2003 to RMB409.0 million in 2004. The decrease was mainly attributable to the early repayment of outstanding long-term loans for the savings of interest of RMB9.8 million, the prepayment of a portion of our short-term loans and a reduction in average interest rate on our bank loans.

#### Income Taxes

Our income tax expense increased from RMB918.9 million in 2003 to RMB2,079.5 million in 2004, which was mainly attributable to our increased profit before tax. Our effective income tax rate was 24.3% in 2004, which was lower than the statutory tax rate of 33.0%. This was mainly because our three branches situated in Guizhou Province, Guangxi Zhuang Autonomous Region and Qinghai Province in the western region of the PRC were entitled to a preferential income tax rate of 15.0% in connection with the national policy to develop the western region. In addition, some of our plants benefit from tax credits in connection with the investment in the equipment made in China. Such tax credit resulted in tax reduction of approximately RMB208.9 million in 2004.

Our effective income tax rate increased by 4.4% as compared to 2003. The increase was mainly because Shandong Aluminum, our subsidiary located in Shandong Province ceased to be entitled to a preferential rate of 15.0%. It was taxed at 33.0% in 2004 pursuant to Guo Shui Han 2004 No.319 issued by the Shandong Province Tax Bureau of the PRC at the end of 2004. The change of tax rate caused our income tax expenses to increase by RMB202.5 million. In addition, the fact that we were granted by the State Tax Bureau of the PRC to use tax losses from previous years in 2003 but were not entitled to such benefit in 2004 also contributed to the lower income tax rate applicable to us in 2003. No tax losses were carried forward from December 31, 2004.

#### Minority Interests

Minority interests increased from RMB157.4 million in 2003 to RMB243.5 million in 2004 primarily as a result of the increase in the profit of one of our subsidiaries, Shandong Aluminum.

## Net Income for the Year

As a result of the foregoing, our net income for 2004 increased by 75.2% from RMB3,552.0 million in 2003 to RMB6,223.9 million in 2004.

## Year Ended December 31, 2003 Compared with Year Ended December 31, 2002

### Revenues

Our total revenues amounted to RMB23,826.0 million for the year ended December 31, 2003, representing an increase of RMB6,510.4 million, or 37.6%, from the previous year's RMB17,315.6 million. Total revenues include sales of goods and other revenues. Sales of goods, which consist of sales of alumina and primary aluminum products, accounted for 97.0% and 97.6% of our total revenues for the years ended December 31, 2002 and 2003, respectively. Our sales of goods increased by 38.4 % from RMB16,792.8 million for the year ended December 31, 2002 to RMB23,245.9 million for the year ended December 31, 2003, representing an increase of RMB6,453.1 million. The increase was primarily due to the significant increase in selling prices of our principal products such as alumina and primary aluminum, and a growth in sales volume of alumina.

For 2003, our average external selling price for alumina reached RMB2,407.7 per tonne (tax excluded, similarly hereinafter), representing an increase of RMB758.0 per tonne or 45.9% from RMB1,649.7 per tonne for the previous year. Our average external selling price for primary aluminum reached RMB12,460.5 per tonne, representing an increase of RMB960.3 per tonne or 8.4% from RMB11,500.2 per tonne for the previous year. Our external sales volume of alumina increased by 12.8% from 3,740,500 tonnes for the year ended December 31, 2002 to 4,219,600 tonnes for the year ended December 31, 2003. Our external sales volume of primary aluminum decreased by 1.5% from 758,600 tonnes for the year ended December 31, 2002 to 746,900 tonnes for the year ended December 31, 2003.

### Cost of Sales

Our total cost of sales increased by 23.1% from RMB13,349.5 million in 2002 to RMB16,439.5 million in 2003. The increase was mainly attributable to a growth in sales volume of alumina, and the increased unit costs of primary aluminum and alumina caused by the increase in raw material prices compared to 2002.

### Selling and Distribution Expenses

Our selling and distribution expenses increased by RMB47.6 million from RMB 501.8 million in 2002 to RMB549.4 million in 2003, or 9.5%, which was primarily attributable to the increase in sales volume of alumina. We were successful in controlling the relative increase in selling and distribution expenses for 2003 at a level that was lower than the increase in sales, due to a combination of higher average selling prices for our products and the effect of the rationalization and consolidation of our sales channels.

### General and Administrative Expenses

General and administrative expenses increased by 42.8% from RMB733.8 million in 2002 to RMB1,047.5 million in 2003. The increase was mainly due to the recovery of the accounts receivable in 2002 for the years prior to 1999, which resulted in a net write-back of provisions for doubtful accounts of RMB97.1 million, reducing general and administrative expenses accordingly; and a rise of RMB55.0 million in taxation and surcharges which were levied by the PRC, due to the increased revenue for the year. In addition, owing to overfulfilment of operational targets set for 2003, the wages and welfare expenditure of management staff increased by RMB136.2 million under our incentive compensation program. Amortization charge of mining rights and write-back of provision for obsolete inventories which were included in general and administrative expenses for the year ended December 31, 2002 were reclassified as part of the cost of goods sold. Accordingly, the financial statements for the year ended December 31, 2002 were adjusted to reflect the reclassification.

#### Research and Development Expenses

Our research and development expenses increased by 31.5% from RMB131.9 million in 2002 to RMB173.4 million in 2003. The increase was primarily due to the centralization of research and development activities undertaken at each plant in our research and development center.

#### Other Income / Expenses

Our expenses (net of other income) increased from a net expense of RMB16.1 million in 2002 to a net expense of RMB25.5 million in 2003. This was attributable to RMB65.2 million of realized and unrealized losses on futures contracts in 2003 and RMB 8.2 million of net exchange loss in 2003 primarily related to foreign currency borrowings, being partially offset by a gain of RMB44.5 million relating to an agreement reached with China Construction Bank for repayment of outstanding principal and waiver of interest payable by the Company.

#### Operating Income

Our operating income increased by 139.2 % from RMB2,122.7 million in 2002 to RMB5,078.5 million in 2003. Our operating income as a percentage of sales of goods increased from 12.6% in 2002 to 21.8 % in 2003.

#### Finance Costs

Our finance costs decreased by RMB39.2 million, or 8.0 %, from RMB490.6 million in 2002 to RMB451.4 million in 2003. The decrease was mainly attributable to a reduction in average interest rate on our bank loans. In addition, we expedited the collection of accounts receivable so that the level of our working capital borrowings was reduced.

#### Income Taxes

Our income tax expense increased from RMB183.4 million in 2002 to RMB918.9 million in 2003, which was mainly attributable to our increased profit before tax. Our effective income tax rate was 19.9% in 2003, which was

lower than the statutory tax rate of 33.0%. This was mainly because our three branches situated in Guizhou Province, Guangxi Province and Qinghai Province in the western region of the PRC were entitled to a preferential income tax rate of 15.0% in connection with the national policy to develop the western region. In addition, a subsidiary in Shandong is taxed at a preferential rate of 15.0% as it is classified as a "high-technology" enterprise in its province for tax purposes. With the approval from the State Tax Bureau, the Company's Zhongzhou branch used tax loss of RMB139.8 million brought forward from years prior to our reorganization to set off against the current income tax expense. Certain of our plants are also entitled to preferential income tax treatment for the purchase of domestically-produced equipment in investment projects.

#### Minority Interests

Minority interests increased from RMB46.8 million in 2002 to RMB157.4 million in 2003 primarily as a result of the increase in the profit of one of the Company's subsidiaries, Shandong Aluminum Industry Co., Ltd.

#### Net Income for the Year

As a result of the foregoing, our net income for the year increased by 153.4% from RMB1,401.6 million in 2002 to RMB3,552.0 million in 2003.

#### Discussion of Segment Operations

We began accounting for our operations on a segmental basis, that is, separately accounting for the alumina and primary aluminum segments as well as the corporate and other services segment. Unless otherwise indicated, also included in these segments are other revenues derived from such activities as supplying electricity, gas, heat and water to affiliates, selling scrap and other materials, and providing services including transportation and research and development to third parties. Interest income and dividends from unlisted securities investments, included in other revenues, are not attributed to any segments. For additional data and information relating to our business segments and segment presentation, see Note 3 to our audited financial statements beginning on page F-20.

The following table sets forth (i) revenues by segment for the periods indicated, and (ii) the contribution of external sales and inter-segment sales for 2004 as a percentage of sales of goods for such period, both before and after elimination of inter-segment sales.

Before Elimination of Inter-segment Sales			Before Elimination of Inter-segment Sales	After Elimination of Inter-segment Sales
Year Ended December 31,				
2002	2003	2004	2004	2004

	RMB	RMB	RMB	%	%
(in millions)					
Sales of goods					
<u>Alumina</u>					
:					
External sales	7,459.0	12,327.5	19,223.9	52.6	59.5
Inter-segment sales	2,320.6	3,131.7	4,226.2	11.6	-
<u>Primary aluminum</u>					
:					
External sales	9,268.1	10,845.6	12,994.1	35.6	40.2
<u>Corporate and other services</u>					
:					
External sales	65.7	72.7	95.1	0.2	0.3
Total sales of goods before inter-segment eliminations	19,113.4	26,377.5	36,539.3	100%	-
Eliminations of inter-segment sales	(2,320.6)	(3,131.7)	(4,226.2)	-	-
Total sales of goods	16,792.8	23,245.8	32,313.1	-	100%

The following table sets forth, for the periods indicated, sales of goods, costs of goods sold, other costs net of other revenues and other income, and operating income (loss) by segment before and after elimination of inter-segment transactions.

Year Ended December 31,		
2002	2003	2004
RMB	RMB	RMB
(in millions)		



Alumina:

Sales of goods	9,779.6	15,459.2	23,450.0
Cost of goods sold	(7,685.1)	(9,592.0)	(13,085.7)
Other costs, net of other revenues and other income	(714.9)	(757.7)	(992.7)

Operating income	1,379.6	5,109.5	9,371.6
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Primary aluminum:

Sales of goods	9,268.1	10,845.6	12,994.1
Cost of goods sold	(7,902.5)	(9,883.9)	(12,501.8)
Other costs, net of other revenues and other income	(222.0)	(516.4)	(524.5)

Operating income (loss)	1,143.6	445.3	(32.2)
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Corporate and other services:

Sales of goods	65.7	72.7	95.1
Cost of goods sold	(51.7)	(65.0)	(81.7)
Other costs, net of other revenues and other income	(71.9)	(86.1)	(90.3)

Operating loss	(57.9)	(78.4)	(76.9)
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Segment operating income before unallocated operating loss and inter-segment elimination	2,465.3	5,476.4	9,262.5
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Unallocated operating loss	(311.7)	(367.7)	(281.4)
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Inter-segment elimination	(30.9)	(30.3)	(21.1)
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Total operating income	2,122.7	5,078.5	8,960.0
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Year Ended December 31, 2004 Compared with Year Ended December 31, 2003

## Alumina Segment

*Sales of Goods.* Our total sales of goods of the alumina segment increased by RMB7,990.8 million to RMB23,450.2 million in 2004, a 51.7% increase from RMB15,459.2 million in 2003.

We sold alumina products to our smelters and to other domestic smelters. Revenues from the external sales of alumina in 2004 rose by RMB6,896.4 million, or 55.9%, compared with 2003, mainly due to an increase in selling price and external sales volume of alumina. The average external selling price of alumina in 2004 increased to RMB3,229.7 per tonne from RMB2,407.7 per tonne in 2003, mainly due to strong domestic demand for alumina. The external sales volume of alumina increased by 15.4% to 4.87 million tonnes in 2004 from 4.21 million tonnes in 2003, mainly attributable to the increased demand and the fact that our production capacity for alumina increased by 0.52 million tonnes in 2004 from 2003.

Revenues from the sales of alumina to our smelters in 2004 rose by RMB1,094.5 million, or 34.9%, from 2003, primarily due to the increase in selling price. Our internal sales volume of alumina as a percentage of the total sales volume of alumina decreased from 25.2% in 2003 to 23.4 % in 2004.

*Cost of Goods Sold.* The total alumina segment cost of goods sold in 2004 increased by RMB3,493.8 million, or 36.4%, from RMB9,592.0 million in 2003 to RMB13,085.8 million in 2004, primarily due to an increase in sales volume of alumina and an increase in raw material costs and fuel and power costs in 2004. To further strengthen our control over bauxite supply, we established a bauxite mine branch located in Zhengzhou, Henan on March 25, 2005 to centralize the procurement and make effective allocation of bauxite resources among our plants.

*Operating Income.* Total operating income for the alumina segment increased by 83.4% from RMB5,109.5 million in 2003 to RMB9,371.6 million in 2004 primarily as a result of a 51.7% increase in turnover of this segment. The operating income of the alumina segment as a percentage of our sales of goods increased from 33.1% in 2003 to 40.0% in 2004.

#### Primary Aluminum Segment

*Sales of Goods.* We sold a total of 747,000 tonnes and 760,600 tonnes of the primary aluminum products we produced in 2003 and 2004, respectively. Our total sales of goods for the primary aluminum segment increased by RMB2,148.5 million to RMB12,994.1 million in 2004, a 19.8% increase over 2003. This was mainly attributable to a 10.4% increase in the average selling price for primary aluminum. The increase of sales is also attributable to a change in product mix to higher value-added and high-margin aluminum products. The sales volume of higher value-added aluminum products represents an increase of approximately 10.8% in 2004 as compared to 2003, while the sales volume of ingots remained at the same level.

*Cost of Goods Sold.* The total cost of goods sold for our primary aluminum segment increased by 26.5% from RMB9,884.0 million in 2003 to RMB12,501.8 million in 2004, mainly due to an increase in the raw material costs and fuel and power costs in 2004, including a 34.1% increase in the price of alumina, and a 10.6% increase in the cost of electricity in 2004 which led the unit cost of primary aluminum to increase by 10.7%.

However, we continue to upgrade our production facilities to improve production efficiency. In addition, we have adopted a material management measure based on our analysis of production process to prevent over consumption of materials, which caused a reduction in material consumption for each tonne of primary aluminum.

*Operating (Loss) Income.* The primary aluminum segment recorded an operating loss of RMB32.2 million in 2004, compared to operating income of RMB445.3 million in 2003, primarily because the increase in cost of goods sold exceeded the increase in average selling prices.

#### Corporate and Other Services Segment

Our corporate and other services segment reflected the expenses for our headquarters and research and development services and revenues from product sales of our research institute to external customers. This segment recorded an operating loss of RMB76.9 million for the year ended December 31, 2004. The loss remained essentially at the same level as 2003.

#### Year Ended December 31, 2003 Compared with Year Ended December 31, 2002

#### Alumina Segment

*Sales of Goods.* Our total sales of goods of the alumina segment increased by RMB5,679.6 million to RMB15,459.2 million in 2003, a 58.1% increase from RMB9,779.6 million in 2002.

We sold alumina products to our smelters and to other domestic smelters. Revenues from the external sales of alumina in 2003 rose by RMB4,868.6 million, or 65.3%, compared with 2002, mainly due to an increase in selling price and external sales volume of alumina. The average external selling price of alumina in 2003 increased to RMB2,407.7 per tonne from RMB1,649.7 per tonne in 2002, mainly due to strong domestic demand for alumina driven by the rapidly expanding aluminum production capacity in China. The external sales volume of alumina increased by 12.8 % to 4,219,600 tonnes in 2003 from 3,740,500 tonnes in 2002, mainly attributable to the fact that our production capacity for alumina increased to 5.95 million tonnes in 2003 from 5.18 million tonnes in 2002, including the commencement of operations at the end of June 2003 of the 400,000-tonne alumina production line at Pingguo phase II.

Revenues from the sales of alumina to our smelters in 2003 rose by RMB811.0 million, or 34.9%, from 2002, primarily due to the increase in our internal sales volume by 2.7% to 1,425,100 tonnes in 2003 from 1,387,800 tonnes in 2002. Our internal sales volume of alumina as a percentage of the total sales volume of alumina dropped from 27.1% in 2002 to 25.2 % in 2003.

*Cost of Goods Sold.* The total alumina segment cost of goods sold in 2003 increased by RMB1,906.9 million, or 24.8%, from RMB7,685.1 million in 2002 to RMB9,592.0 million in 2003, primarily due to an increase in sales volume of alumina in 2003 and an increase in raw material costs and fuel and power costs in 2003. The increase in fuel and power costs was mainly attributable to a 16.0% increase in the unit cost of coal and 24.0% increase in unit cost of heavy oil in 2003.

However, our operations achieved better technical efficiency than in 2002, leading to the decrease in consumption rate, which partially offset the influence of the rising prices of certain raw materials, mainly including coal and bauxite that are procured from third parties.

*Operating Income.* Total operating income for the alumina segment increased by 270.4% from RMB1,379.6 million in 2002 to RMB5,109.5 million in 2003 primarily as a result of a 58.1% increase in turnover of this segment. The operating income of the alumina segment as a percentage of our sales of goods increased from 14.1% in 2002 to

33.1% in 2003.

#### Primary Aluminum Segment

*Sales of Goods.* We sold a total of 760,000 tonnes and 747,000 tonnes of the primary aluminum products we produced in 2002 and 2003, respectively. Our total sales of goods for the primary aluminum segment increased by RMB1,577.5 million to RMB10,845.6 million in 2003, a 17.0% increase over 2002. This was mainly attributable to a 8.4% increase in the average selling price for primary aluminum. The increase of sales is also attributable to a change in product mix to higher value-added and higher margin aluminum products.

*Cost of Goods Sold.* The total cost of goods sold for our primary aluminum segment increased by 25.1% from RMB7,902.5 million in 2002 to RMB9,884.0 million in 2003, mainly due to an increase in the raw material costs and fuel and power costs in 2003, including a 26.0% increase in the average unit cost of alumina and a 4.0% increase in the cost of electricity in 2003.

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*Operating Income.* Operating income of the primary aluminum segment decreased by 61.1% from RMB1,143.7 million in 2002 to RMB445.2 million in 2003, primarily because the increase in cost of goods sold exceeded the increase in average selling prices. The operating income of our primary aluminum segment as a percentage of that segment's sales of goods decreased from 12.3% in 2002 to 4.1% in 2003.

#### Corporate and Other Services Segment

This segment recorded an operating loss of RMB78.4 million for the year ended December 31, 2003, representing an increase of 35.2% compared with 2002.

#### Liquidity and Capital Resources

Our primary sources of funding are cash generated by operating activities, prepayments and deposits from customers, short-term and long-term borrowings, and proceeds from shares offerings. Our primary uses of funds have been production-related working capital, repayment of short-term and long-term borrowings and capital expenditures. In 2004, we required our long-term customers to make deposits or prepayments for purchases of alumina. The total amount of deposits and prepayments was RMB1,507.4 million as of December 31, 2004. We have relied on prepayments and deposits received from customers as a source of our liquidity. In the event that demand for alumina declines, we may not be able to require such prepayments and deposits from customers, in which case this source of liquidity would not be available to us.

As of December 31, 2004, our current assets amounted to RMB14,356.6 million, representing an increase of RMB5,718.0 million from the previous year. The increase was mainly attributable to (i) an increase of RMB3,624.0 million in cash and cash equivalent resulting from our H shares placement on

January 6, 2004; (ii) an increase of RMB1,106.1 million in inventories for the anticipation of an increase in prices of raw material; and (iii) an increase in accounts receivable of RMB998.9 million.

As of December 31, 2004, our current liabilities amounted to RMB13,193.5 million, representing an increase of RMB2,922.1 million from the previous year. The increase was mainly due to an increase of prepayments or deposits collected from our long-term alumina customers totaling RMB810.8 million, from RMB696.7 million to RMB1,507.4 million, as well as an increase of RMB824.7 million in accounts payable in connection with our capital expenditures. The increase in income tax payable in 2004 by RMB513.9 million was due to the increase in pre-tax profit.

As of December 31, 2004, our long-term loans amounted to RMB8,465.3 million, representing an increase of RMB2,236.8 million from the previous year. The increase was mainly attributable to an increase in our borrowings to finance capital expenditures. As of December 31, 2004, our total long-term debt, less long-term loans maturing within one year was RMB7,391.7 million, compared with RMB5,412.6 million on December 31, 2003.

Our gearing ratio (the ratio of total liabilities to the sum of total liabilities and owner's equity) decreased to 30.5% as of December 31, 2004 from 34.9% as of December 31, 2003, which is mainly attributable to an increase in retained earnings.

Our ability to obtain external financing in the future and the cost of such financing are subject to a variety of uncertainties, including:

- \* obtaining PRC government approvals required to access domestic or international financing or to undertake any project involving significant capital investment, which, depending on the circumstances, may include one or more approvals from the NDRC, the State Administration of Foreign Exchange, the Ministry of Commerce and the China Securities Regulatory Commission;
- \* our future operating performances, financial condition and cash flows;
- \* the cost of financing and the condition of financial markets; and

- 
- \* potential changes in monetary policy of the PRC government with respect to bank interest rates and lending practices.

If we fail to achieve timely rollover, extension or refinancing of our short-term debt, we may be unable to meet our obligations in connection with debt service, accounts payable and/or other liabilities when they become due and payable.

In view of our credit and the availability of funds in China, we currently do not foresee significant difficulties in obtaining bank borrowings. We plan to finance our capital expenditure projects and related expenditures principally through cash generated by operating activities, short-term and long-term borrowings, the remainder of the net proceeds from our global offering and H shares placement and the expected proceeds from our proposed A shares offering. We have arranged total banking facilities in the amount of RMB33,894.0 million. We believe that our working capital is sufficient to meet our present needs. For details of our banking facilities, please see - Bank Loans and Banking Facilities.

#### Cash and Cash Equivalents

Included in our cash and cash equivalents as of December 31, 2004 were amounts denominated in foreign currencies of RMB460.0 million, comprising US\$55.5 million and HK\$249,000.

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

	For the Year Ended December 31,		
	2002	2003	2004
	RMB	RMB	RMB
	(in millions)		
Cash flows from operating activities:			
Operating income before working capital changes <sup>(1)</sup>	4,101.1	7,403.4	11,349.3
Net change in working capital <sup>(2)</sup>	(201.5)	26.5	(891.6)
Interest paid	(904.5)	(600.8)	(456.3)
PRC income tax paid	(323.3)	(826.5)	(1,736.2)
<b>Total</b>	<b>2,671.8</b>	<b>6,002.5</b>	<b>8,265.2</b>
Cash flows from (used in) investing activities:			
Capital expenditures	(3,894.2)	(5,352.8)	(8,972.4)
Purchase of intangible assets	(19.8)	(17.5)	(81.6)
Investment in jointly controlled entities	--	(3.3)	(49.5)
Net decrease in bank deposits with initial term of over three months	75.1	-	-
Interest received	42.1	26.2	61.5
Others	16.0	(47.9)	-
<b>Total</b>	<b>(3,780.8)</b>	<b>(5,395.3)</b>	<b>(9,055.8)</b>

## Cash flows from (used in) financing activities:

Net proceeds from issue of shares	204.8	-	3,250.7
Net borrowings	(956.9)	(22.8)	1,884.5
Decrease in bank deposits pledged	101.0	46.2	-
Net contribution from owner and minority shareholders	0.6	166.1	360.5
Dividend paid by a subsidiary to minority shareholders	(39.5)	(23.8)	(16.9)
Dividend paid	(178.5)	(472.5)	(1,060.9)
Total	(868.5)	(306.8)	4,417.9
Net increase (decrease) in cash and cash equivalents	(1,977.5)	300.4	3,627.3

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- (1) Represents income before income tax and minority interests as adjusted for depreciation expense, loss on disposal of fixed assets, interest waived written back in 2001 and 2003, interest income and interest expenses.
- (2) Represents (increase) decrease in inventories, accounts receivable and other receivable, accounts payable and other payables, including amounts due from and due to related parties.

## Net Cash Flows from Operating Activities

Net cash from operations increased by 37.7% from RMB6,002.5 million for 2003 to RMB8,265.2 million for 2004. The increase was primarily due to:

- \* an increase in operating profit of RMB3,923.9 million in 2004; and
- \* a decrease in interest paid of RMB144.5 million;

partially offset by an increase in cash used in working capital of RMB921.6 million and an increase of RMB909.7 million in PRC income taxes paid in 2004. The increase in cash used in working capital was attributable to:

- \* an increase in accounts and other receivables of RMB982.3 million,

compared to the decrease of RMB1,069.1 million in 2003;

- \* an increase in inventories of RMB1,164.5 million in 2004, compared to an increase of RMB819.5 million in 2003; and
- \* an increase in accounts and other payables of RMB1,255.2 million, among which RMB810.8 million was due to the increase of prepayment and deposits from customers, compared to the decrease of RMB223.2 million in 2003.

#### Net Cash Flows from Investing Activities

Net cash outflow from investing activities in 2003 and 2004 amounted to RMB5,395.3 million and RMB9,055.8 million, respectively, consisting primarily of capital investment for the purchase of fixed assets of RMB5,352.8 million in 2003 and RMB8,972.4 million in 2004. In 2004, our capital expenditure program was the major contributor to our increase in alumina production capacity of 520,000 tonnes. See "- Capital Expenditure Plan" and "Item 4. Information on the Company - Property, Plants and Equipment - Our Expansion and Profit Improvement Plan" for a detailed description of our capital expenditure plans.

#### Net Cash Flows from Financing Activities

Net cash outflows from financing activities amounted to RMB306.9 million in 2003, consisting primarily of net loan repayment over new loans borrowed of RMB22.8 million in 2003, dividend payment for the year 2002 of RMB472.5 million, partially offset by contributions of Chinalco of RMB85.5 million and capital injection by minority shareholders of RMB80.6 million in 2003. Net cash inflows from financing activities amounted to RMB4,418.0 million in 2004, consisting primarily of the proceeds from issue of shares of RMB3,250.7 million and new bank loans of RMB1,884.5 million, partially offset by cash outflow of RMB1,060.8 million from distribution of dividends.

We continue to benefit from the centralized cash management system implemented since 2002. We expect that this system will continue to help:

- \* centralize and simplify internal clearing and settlement procedures;
- \* utilize excess bank deposits to reduce bank borrowings;
- \* reduce accounts receivable; and
- \* improve the efficiency of our internal funds management.

#### Bank Loans and Banking Facilities



The aggregate maturities of our outstanding long-term bank loans as of December 31, 2004 were as follows:

Maturity Date	Principal Outstanding as of December 31, 2004	
	RMB	US\$( <sup>1</sup> )
	(in millions)	
2005	1,054.7	127.4
2006	1,621.7	195.9
2007	1,886.8	228.0
2008 and thereafter	3,883.1	468.8
Total	8,446.3	1,020.1

(1) Translated solely for the convenience of the reader into U.S. dollars at the noon buying rate prevailing on December 31, 2004 of US\$1.00 to RMB8.2765.

Please see Note 27 to our audited financial statements for a more detailed description of our long-term debt including interest rate and maturity profile.

Our net borrowings for the year ended December 31, 2002, 2003 and 2004 were as follows:

As of December 31,

	2002	2003	2004	2004
	RMB	RMB	RMB	US\$( <sup>1</sup> )
	(in millions)			
Short-term debt	4,049.3	3,801.3	3,448.9	416.5
Long-term debt	6,003.3	6,228.5	8,465.3	1,022.4
Total debt	10,052.6	10,029.8	11,914.2	1,438.9
Less: Cash and cash equivalents	(2,296.1)	(2,596.4)	(6,223.8)	(759.0)

Net debt	7,756.5	7,433.4	5,690.4	679.9
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(1) Translated solely for the convenience of the reader into U.S. dollars at the noon buying rate prevailing on December 31, 2004 of US\$1.00 to RMB8.2765.

As of December 31, 2004, we had no secured bank loans and we, on a stand-alone basis, provided guarantees in respect of RMB1,100.0 million banking facilities for our subsidiaries.

As of December 31, 2004, Chinalco guaranteed RMB1,485.2 million of our bank loans. The guarantees by Chinalco and its subsidiaries to various banks in respect of banking facilities and loans granted to third parties as of December 31, 2000 remained with Chinalco after our reorganization.

As of December 31, 2004, we had total banking facilities of RMB33,894.0 million, inclusive of long-term facilities of approximately RMB13,963.0 million and other loan facilities of approximately RMB19,931.0 million. Out of the total banking facilities granted, amounts totaling RMB11,895.0 million have been utilized as of December 31, 2004. Approximately RMB26,198.0 million in bank facilities must be renewed in 2005. We believe that we will be able to renew these facilities when they expire.

## Foreign Exchange

We conduct our business primarily in Renminbi, which is also our functional and reporting currency. We convert a portion of our Renminbi revenues into other currencies to meet foreign currency financial obligations and to pay for imported equipment and materials. Under current foreign currency regulations in China, to meet these needs, we are permitted to convert Renminbi into the necessary foreign currencies at authorized banks based on a presentation of the relevant contracts. We may also borrow foreign currency loans from such banks for these purposes. To the extent that we need to obtain foreign currency funding for capital projects as defined under foreign exchange regulations, we would be required to obtain approval from the State Administration of Foreign Exchange. Transactions in foreign exchange are translated at exchange rates prevailing at the transaction dates. Monetary assets and liabilities expressed in foreign currencies at the balance sheet date are translated at exchange rates prevailing at the balance sheet date. Exchange differences arising in these cases are recognized as income or expense in the profit and loss account.

As of December 31, 2004, we had outstanding loans of 8.0 million Danish Krone (RMB12.2 million) and bank balances of US\$55.5 million and HK\$249,000. See Note 27 to our audited financial statements. We had U.S. dollar denominated accounts receivable amounted to US\$23.7 million at the same date. Most of our sales are domestic and as such we have a limited amount of foreign currency denominated accounts receivable. We earn a small amount of foreign currency, primarily U.S. dollars, from primary aluminum exports, which totaled 56,600 tonnes in 2004, and through our processing or

tolling business. See "Item 11 - Quantitative and Qualitative Disclosures about Market Risk - Foreign Exchange Rate Risk". In addition to foreign currency debt, we also had short-term deposits denominated in foreign currencies equivalent to RMB460.0 million as of December 31, 2004, which are denominated in U.S. dollars and Hong Kong Dollars. Our sources of foreign exchange include the remaining proceeds from our global share offering and H share placement, borrowings and funds converted from Renminbi. We do not anticipate that we will incur significant additional foreign currency debt in the near future.

We have been, and will continue to be, affected by changes in exchange rates in connection with our ability to meet our foreign currency obligations and will be affected by such changes in connection with our ability to pay dividends on H shares in Hong Kong dollars and on ADSs in U.S. dollars. As of December 31, 2004, we maintained bank balances of US\$55.5 million and HK\$249,000 or the equivalent of approximately RMB460.0 million for purposes of satisfying our foreign currency obligations and paying dividends to our overseas shareholders. We believe that we have obtained or will be able to obtain sufficient foreign exchange to continue to satisfy these obligations. We do not engage in any financial contract or other arrangement to hedge our currency exposure.

#### Inflation

According to the State Statistical Bureau, China experienced inflation of 0.4% and 0.7% in 2000 and 2001, respectively, deflation of 0.8% in 2002, inflation of 1.2% in 2003, and inflation of 3.9% in 2004. As a result, inflation in the PRC has not had a significant impact on our operating performances in recent years.

#### Trend Information

In 2004, China's GDP growth rate reached 9.5%. China's economy is expected to continue its strong growth in 2005, with increasingly important contribution from industrial growth. We expect the national demand for alumina and primary aluminum to grow in line with the nation's continuous economic growth. The recovery of the global economy is expected to further enhance aluminum consumption and support market prices of primary aluminum and alumina.

However, we will continue to face challenges in 2005, such as:

- \* an increase in production cost resulting from continued increases in prices of raw materials and fuel power;

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- \* continuing power shortages and transportation bottlenecks; and
  - \* intensified competition in the domestic aluminum market resulting from the cancellation of tax refund for primary aluminum export.

#### U.S. GAAP Reconciliation

Our financial statements are prepared in accordance with HK GAAP, which differs in various material respects from U.S. GAAP. These material differences, as they apply to our financial statements, relate primarily to the following:

- \* Under HK GAAP, finance costs are capitalized to the extent that such costs are directly attributable to the construction of a qualifying asset. Under U.S. GAAP, finance costs capitalized are limited to the lower of actual finance costs incurred or avoidable finance costs. Avoidable finance cost is the amount that could have been avoided if expenditure for the qualifying asset had not been made, when qualifying expenditures have occurred and activities necessary to prepare the asset have begun. The periodic depreciation expense under HK GAAP and U.S. GAAP differs as a result of the difference in the amount of finance costs capitalized under the two accounting standards.
- \* Under HK GAAP, fixed assets transferred from Chinalco to us were accounted for under the acquisition accounting method at July 1, 2001. As a result, our fixed assets were revalued at fair value under HK GAAP. The fixed assets were appraised by China United Assets Appraisal Co Ltd. and Chesterton Petty Limited as of December 31, 2000 and as of June 30, 2001, respectively. In addition, during 2004, one of our subsidiaries purchased certain production facilities from one of the subsidiaries of Chinalco. The production facilities were revalued at fair value under HK GAAP. The production facilities were appraised by a professional valuer in the PRC. Under U.S. GAAP, the new cost basis for the fixed assets was not established for us as the transfer was a transaction under common control. When an asset is transferred from the parent to its wholly-owned subsidiary, the subsidiary records the asset at the parent's carrying value.
- \* Under HK GAAP, goodwill resulting from acquisitions under purchase accounting is recognized as an intangible asset and amortized on a straight-line basis over its estimated useful economic life of not more than 20 years. Under U.S. GAAP, annual amortization of this amount ceased effective January 1, 2002. Goodwill is subject to annual impairment testing and is written down if carrying value exceeds fair value.
- \* As part of the reorganization and pursuant to the Mining Rights Transfer Agreement, we acquired mining rights of eight bauxite mines and four limestone quarries from Chinalco for a consideration of RMB285,341,000. Under HK GAAP, mining rights acquired are capitalized and stated at acquisition cost less accumulated impairment losses. Amortization of mining rights is calculated on a straight-line basis over their estimated useful lives of not more than 30 years. Under U.S. GAAP, the new cost basis was not established for us as the transfer was a transaction under common control.
- \* Under U.S. GAAP, a deferred tax liability relating to the addition of the interest capitalization effect and deferred tax assets relating to the reversal of the fixed assets revaluation, goodwill amortization and mining rights are recognized.

Adjustment of Deferred Tax Asset and Restatement of Owners' Equity and Net Income as Reported under U.S. GAAP

We have restated the U.S. GAAP reconciliation of owners' equity as of December 31, 2001, 2002 and 2003 and net income for the year ended December 31, 2002 to properly reflect the effect under U.S. GAAP of recognition of a deferred tax asset arising from the revaluation of fixed assets and mining rights that occurred in connection with the Reorganization effective July 1, 2001. Under U.S. GAAP, the deferred tax asset should have been recorded in 2001, applying the statutory tax rate of 33% then applicable to us. We adjusted the deferred tax asset downwards in 2002, at a time when our tax rate had been reduced from 33% to 15% for certain branches by means of various tax preferences available under PRC law. Accordingly, the amount of the deferred tax asset that we recorded in 2002, reflecting the lower tax rate for certain tax preferred entities, was less than the deferred tax asset that should have been recorded under U.S. GAAP in 2001, reflecting the higher rate. Although the deferred tax asset has not been recognized, we have recorded the reversal effects of the deferred tax asset in 2001, 2002 and 2003. The restatement arises as a result of recognizing the initial deferred tax asset in 2001, and the subsequent reduction of the amount of that asset in 2002 at the time our tax preferences for certain tax preferred entities were approved by PRC tax authorities.

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*Owners' equity*

In accordance with U.S. GAAP, we have now recorded a deferred tax asset of RMB1,223.5 million as of December 31, 2001. The deferred tax asset provided for is reversed as the revalued fixed assets are depreciated and the revalued mining rights are amortized. The effect on owners' equity is to increase a deferred tax asset net of the subsequent reversal effects. Accordingly, owners' equity has been restated as follows:

	As of December 31,		
	2001	2002	2003
	RMB	RMB	RMB
	(in millions)		
Original reported	10,308.2	12,014.3	15,477.9
As restated	11,671.9	13,171.0	16,634.5

*Net income*

In 2002, our income tax rate was reduced from 33% to 15% for certain branches. Accordingly, the value of the deferred tax asset that should have been recorded as of December 31, 2001 has been correspondingly reduced. This reduction of the deferred tax asset value has been reflected as a charge to 2002 U.S. GAAP income in the amount of RMB186.3 million, reducing net income under U.S. GAAP from the originally reported RMB1,679.9 million to the restated figure of RMB1,493.6 million, a reduction of 11.1%. Net income under U.S. GAAP for subsequent periods is not restated.

Since the transactions in connection with the Reorganization and the related asset revaluations were a non-recurring event, we do not believe that they will give rise to further restatements of this nature. However, future changes in our income tax rate could give rise to prospective changes in deferred tax asset values.

Our owners' equity and net income reported under Hong Kong GAAP are not affected.

See Note 33 to our audited financial statements for the reconciliation of net income and owners' equity under HK GAAP to net income and owner's equity under U.S. GAAP, further information, additional qualitative disclosures required and recent accounting pronouncements under U.S. GAAP.

#### Contractual obligations

The following table summarizes our contractual obligations and commercial commitments at December 31, 2004:

	Payment due by period				
	Total	2005	2006-2007	2008-2009	Thereafter
	RMB	RMB	RMB	RMB	RMB
	(in millions)				
Long-term debt	8,465.3	1,073.7	1,621.7	1,886.8	3,883.1
Operating leases	10,759.4	246.0	492.0	492.0	9,529.5
Purchase obligations	3,024.1	2,330.3	508.6	185.2	--
<b>Total</b>	<b>22,248.8</b>	<b>3,650.0</b>	<b>2,622.3</b>	<b>2,564.0</b>	<b>13,412.7</b>

#### Capital Expenditures

The following table sets forth our capital expenditures by segment for 2002, 2003 and 2004, and the capital expenditures in each segment as a percentage of our total capital expenditures for such years.

Year Ended December 31,

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	2002		2003		2004	
	RMB	%	RMB	%	RMB	%
(in millions, except percentages)						
Alumina	3,192.8	80.4	3,831.6	71.2	4,976.5	48.5
Primary aluminum	700.6	17.6	1,471.5	27.3	5,020.6	48.8
Corporate and other services	49.3	1.2	47.3	0.9	76.8	0.7
Unallocated	29.9	0.8	33.0	0.6	208.4	2.0
<b>Total</b>	<b>3,972.6</b>	<b>100.0%</b>	<b>5,383.4</b>	<b>100%</b>	<b>10,282.3</b>	<b>100%</b>

In 2004, we spent approximately 97.2% of our 2004 capital expenditure budget of RMB9,997.1 million to improve our alumina and primary aluminum production capacity:

- \* We used RMB4,976.5 million of our alumina segment expenditures to expand alumina production capacity and to undertake technological improvements to our alumina production processes and facilities, including capacity expansions at our Shanxi, Henan and Zhongzhou plants, with expansions amounting to 1.8 million tonnes. We spent the remainder on capital improvements relating to environmental protection, bauxite mining and the production of alumina hydroxide, alumina chemicals and gallium; and
- \* We used RMB5,020.6 million of our primary aluminum segment expenditures were used to expand production capacity at Shanxi-Huaze Aluminum and Power Company Limited. The expansion amounted to 280,000 tonnes. We spent the remainder on projects to sustain long-term production and for projects relating to environmental protection.

The following table sets forth our planned capital expenditures by segment for each of the years 2005 through 2006 and the expenditures in each segment as a percentage of the total. Actual capital expenditures may differ materially from these planned amounts.

	Year Ended December 31,					
	2005E		2006E		Total	
	RMB	%	RMB	%	RMB	%
(in millions, except percentages)						
Alumina	4580.0	48.9	3,000	46.2	7,580	47.8

Primary aluminum	4790.0	51.1	3,500	53.8	8,290	52.2
Total	9370.0	100.0%	6,500	100.0	15,870	100.0

For further information with respect to our capital expenditure plan, see "Item 4. Information on the Company - Property, Plants and Equipment - Our Expansion and Profit Improvement Plan."

Our capacity expansion plan reflects our focus on expanding our alumina production capacity to take advantage of our market position in China. In addition, we continually evaluate acquisition and joint venture opportunities and may take advantage of these opportunities if we determine that it is in our and our shareholders' best interests. We expect that our production capacity for alumina and primary aluminum will reach 9.4 million tonnes and 1.5 million tonnes, respectively, by the end of 2006.

These are our current plans with respect to our capital expenditures. They may change as circumstances change, and may be modified as our business plans evolve. Other than as required by law, we do not undertake any obligation to publish updates of our plans.

#### Research and Development

Our research and development center 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 research, is responsible for research and development of technologies and associated projects that have general application in all of our plants. The technology centers at our plants focus on providing engineering solutions to, and technological application of, research and development efforts. 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 was approximately RMB131.9 million, RMB173.4 million and RMB132.6 million for 2002, 2003 and 2004, respectively.

For further information with respect to the trends in our operation and the production markets, see "- Factors Affecting Operating Performances."

#### DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

#### ITEM 6.



All of our directors and supervisors are elected for a three-year term. At the expiry of the term of office, the term is renewable upon re-election. Each of our directors and supervisors has entered into a service contract with us for a term of three years. The service contract is not terminable 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.

In addition to director's fees, our directors are entitled to be paid performance bonuses and stock appreciation rights. As of December 31, 2004, no stock appreciation rights were issued. The executive directors are also entitled to the welfare benefits provided under the relevant PRC laws and regulations.

## Directors

At our annual general meeting of shareholders held on June 7, 2004, Messrs. Xiong Weiping, Chen Xiaozhou, Joseph C. Muscari, Chiu Chi Cheong Clifton and Wang Dianzuo were re-elected for further terms of three years, and Messrs. Xiao Yaqing, Luo Jianchuan and Chen Jihua were elected for terms of three years. Mr. Xiao Yaqing was elected Chairman of the Board of Directors and Chief Executive Officer. At the extraordinary shareholders' meeting held on September 28, 2004, Mr. Kang Yi was elected to fill the vacancy in our Board. Each of Mr. Guo Shengkun, Mr. Liang Zhongxiu, Mr. Yin Yufu and Mr. Wu Weicheng resigned from the Board of Directors with effect from June 7, 2004. The business address of each of our directors is No. 12B Fuxing Road, Haidian District, Beijing, People's Republic of China 100814.

We follow our home country practice in relation to the composition of our Board of Directors 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.

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Name	Age	Positions with the Company
Executive Directors		
Xiao Yaqing	45	Chairman of the Board of Directors and Chief Executive Officer
Xiong Weiping	48	Director and President
Luo Jianchuan	41	Director and Senior Vice President
Chen Jihua	37	Director, Vice President and Chief Financial Officer
Non-executive Directors		

Chen Xiaozhou	41	Director
Joseph C. Muscari	58	Director

Independent Non-executive  
Directors

Chiu Chi Cheong Clifton	50	Independent Director
Wang Dianzuo	69	Independent Director
Kang Yi	64	Independent Director

Executive Directors

**Xiao Yaqing**, aged 45, is the Chairman and Chief Executive Officer of the Company. Mr. Xiao is the Chairman of the Remuneration and Nomination Committee under the Board of our Company and is the President of Chinalco. Mr. Xiao graduated from Central South University of Technology in 1982 and majored in pressure processing. Mr. Xiao is a professor-grade senior engineer. Mr. Xiao has abundant academic achievement and more than twenty years of extensive practical experience in the fields of metallic materials and management. He has been the engineer, department head, deputy chief engineer and chief engineer of Northeast Light Alloy Fabrication Plant. He has also been the General Manager of Northeast Light Alloy Corporation Limited, the Factory Manager of Southwest Aluminum Fabrication Plant, the Chairman and General Manager of Southwest Aluminum (Group) Co., Ltd. and the Deputy General Manager of Chinalco.

**Xiong Weiping**, aged 48, an Executive Director and the President of the Company. He has been employed by the Company since 2001. Mr. Xiong has a Ph.D. degree in mining engineering and completed post-doctoral research in economics. He has academic achievements and practical experience in economics and corporate management. He is a professor and a supervisor of Ph.D students. He was formerly the Vice President of Central South University of Technology and Deputy General Manager of China Copper, Lead and Zinc Group Company, the Deputy General Manager of Chinalco and the Senior Vice President of the Company.

**Luo Jianchuan**, aged 41, is an Executive Director and the Senior Vice President. He has been employed by the Company since 2001. Mr. Luo is a senior engineer with about 20 years of experience in nonferrous metal import and export trading management and extensive professional experience in trading and management. Mr. Luo formerly served as the engineer of the Lead and Zinc Bureau under China Non-ferrous Metals Industry Corporation, the Manager of Haikou Nanxin Industry & Commerce Corporation, Assistant to General Manager of Jinpeng Mining Development Corporation, the Deputy General Manager and General Manager of Xinquan Corporation, Assistant to General Manager of China Non-Ferrous Metals Industry Trading Group Corporation, the Deputy Chief of the Trading Division of China Copper, Lead & Zinc Group Corporation, the General Manager of China Aluminum International Trading Corporation Limited and the General Manager of Chalco's Marketing Sales Division.

**Chen Jihua**, aged 37, is an Executive Director, Vice President and Chief Financial Officer of the Company. He has been employed by the Company since 2001. Mr. Chen holds a Master's degree from Central University of Finance and Banking. Mr. Chen has participated in a wide range of corporate and financial management projects. He formerly served as the Executive Manager of the International Finance Department of China Chengxin Securities Rating Company Limited, the Chief Financial Officer with Red Bull Vitamin Beverages Company Limited and China Operations of ALJ Group of Saudi Arabia. He also formerly served as the Chief Financial Officer with Jitong Network Communications Company Limited.

*Non-executive Directors*

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**Chen Xiaozhou**, aged 41, is a Non-executive Director of the Company. Mr. Chen is the Vice President of China Cinda. Mr. Chen graduated from Hangzhou University in 1983 with a Bachelor's degree in economics and obtained a Master's degree in economics from the Graduate School of the Head Office of the People's Bank of China in 1988. Mr. Chen previously served in various positions in China Construction Bank before he was transferred to the investment banking department of China Cinda in 1999.

**Joseph C. Muscari**, aged 58, is a Non-executive Director of the Company. Mr. Muscari is the Executive Vice President of Alcoa. He is also the Group President of Alcoa for hard package, aluminum foil and the Asian Regions, and is responsible for the operations and development planning of the above mentioned businesses of Alcoa both worldwide and in the Asian regions. He is also a member of the Executive Council of Alcoa. Mr. Muscari graduated in 1968 from the New Jersey Institute of Technology with a Bachelor's degree in industrial engineering. He obtained a Master of Business Administration degree from the University of Pittsburgh in 1969. In 1994, he received an honorary doctorate in law from Salem-Teikyo University.

## Independent Non-executive Directors

**Chiu Chi Cheong Clifton**, aged 50, is an Independent Non-executive Director and the Chairman of the Audit Committee of the Company. Mr. Chiu was appointed as the Independent Non-executive Director of the Company in 2001. Mr. Chiu holds a Master of Business Administration degree and is a U.S. certified public accountant with extensive experience in international finance, securities and accounting. He serves as the Vice Chairman of the Takeover and Mergers Panel of the Hong Kong Securities and Futures Commission and was formerly the Vice Chairman of the Main Board and Growth Enterprise Market Listing Committees of The Stock Exchange of Hong Kong Limited. Mr. Chiu is also the Managing Director of Harvester (Holdings) Company Limited and is the Director of Shenzhen Expressway Company Limited.

**Wang Dianzuo**, aged 69, is an Independent Non-executive Director of the Company. Mr. Wang was appointed as the Independent Non-executive Director of the Company in 2001. Mr. Wang is a professor in ore dressing. Mr. Wang was formerly the President of the Central South University of Technology, the President of the Beijing General Research Institute for Non-ferrous Metals. Mr. Wang has served as the Vice Chairman of Chinese Academy of Engineering. Mr. Wang is also a part-time professor at Central South University of Technology, Northeastern University and Beijing University of Science and Technology. He has also been elected as a member of Chinese Academy of Sciences, Chinese Academy of Engineering and Russian Academy of Engineering and as a foreign associate of the US National Academy of Engineering. Mr. Wang is also a senior consultant to many research institutions.

**Kang Yi**, aged 64, is an Independent Non-executive Director of the Company. Mr. Kang was appointed as the Independent Non-executive Director of the Company in 2004. Mr. Kang graduated in 1965 from Central South University of Technology in the expertise of the metallurgy of nonferrous metals, and is a professor grade senior engineer. Mr. Kang is the Chairman of the China Non-ferrous Metals Industry Association. Mr. Kang once served as the factory manager of Qingtongxia Aluminum Plant, the Director of the Economic Committee of Ningxia Hui Nationality Autonomous Region, the Deputy General Manager of China Non-ferrous Metals Industry Corporation

and the deputy head of the State Non-ferrous Metals Industry Bureau. Mr. Kang is now a member of the China Association for Science and Technology, the Chairman of Non-ferrous Metals Society of China and the Independent Non-executive Director of Jiangxi Copper Company Limited, Lanzhou Aluminum Corporation Limited and Baotou Aluminum Corporation Limited. Mr. Kang resigned as the Independent Non-executive Director of Lanzhou Aluminum Corporation Limited in March 2005.

### 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. The table and discussion below set forth certain information concerning our supervisors.

Name	Age	Positions with the Company
Luo Tao	51	Chairman of the Committee of Supervisors
Yuan Li	46	Supervisor (employee representative), Deputy General Manager of Corporate Culture Department
Ou Xiaowu	40	Supervisor

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**Luo Tao**, aged 51, is the Chairman of the Supervisory Committee of the Company and the Deputy General Manager of Chinalco. Mr. Luo is also a senior economist with extensive management experiences in human resources, labor relations and corporate management. Mr. Luo was formerly the Vice President of Beijing General Research Institute for Non-ferrous Metals, Deputy Director of the Department of Human Resources and Training of China Non-ferrous Metals Industry Corporation and Director of Department of Human Resources of the State Bureau of Non-ferrous Metals Industry.

**Yuan Li**, aged 46, is a Supervisor elected as the employee representative of the Company and the Deputy General Manager of the Corporate Culture Department of the Company. He has been employed by the Company since 2001. Mr. Yuan is an engineer with extensive administrative and managerial experiences. He formerly served as the Deputy Director of the General Management Office under the General Office of China Non-ferrous Metals Industry Corporation, head of the Department of Research and Survey as well as the chief of the Secretariat and an assistant inspector of the State Bureau of Non-ferrous Metals Industry and Deputy Director of the Department of Political Affairs and the Director of the Community Union Working Department of Chinalco.

**Ou Xiaowu**, aged 40, is a Supervisor of the Company and the Director of the Finance Department of Chinalco as well as a senior auditor. Mr. Ou formerly served as Director of the Department of Auditing in China Nonferrous Metals Industry Corporation, Deputy Director of the Finance Department of China Copper, Lead and Zinc Corporation, and Director of General Affairs in Chinalco's Finance Department, and Deputy General Manager of Guizhou branch of the Company.

### Other Senior Management Personnel

The table and discussion below set forth certain information concerning other senior management personnel.

Name	Age	Positions with the Company
Zhang Chengzhong	44	Vice President
Liu Xiangmin	42	Vice President
Sun Zhaoxue	42	Vice President
Liu Qiang	41	Secretary to the Board

**Zhang Chengzhong**, aged 44, is a Vice President of the Company and has been employed by the Company since 2001. Mr. Zhang is a professor-grade senior engineer with extensive experience in alumina production and research. Mr. Zhang previously served as the Deputy Director and then the Director of the alumina production facility in Shanxi Aluminum Plant of the Company, the Deputy Director and then the Director of the research institute affiliated with the Shanxi Aluminum Plant as well as the Deputy Director and then the Director of the Shanxi Aluminum Plant.

**Liu Xiangmin**, aged 42, is a Vice President of the Company and has been employed by the Company since 2001. Mr. Liu graduated from Central South Institute of Mining and Metallurgy and majored in non-ferrous metal science. He is a professor-grade senior engineer and has extensive and professional experience in the fields of metallurgy of non-ferrous metals and corporate management. Mr. Liu previously served as the Deputy Director and then Director of the Alumina branch of our Zhongzhou Plant, the Deputy Manager of our Zhongzhou Aluminum Plant, and the General Manager of our Zhongzhou Branch.

**Sun Zhaoxue**, aged 42, is a Vice President of the Company and has been employed by the Company since 2001. Mr. Sun is a professor-grade senior engineer with extensive experience in the management of bauxite mining and production of alumina. He graduated from North China University of Science and Technology and majored in engineering management science. Mr. Sun formerly served as the Deputy Director and then Director of the Xiao Yi Mine of Shanxi Plant, the Deputy Manager and then Manager of Shanxi Plant, and the General Manager of Shanxi Branch of the Company. Mr. Sun has also serves as the Chairman of Shanxi-Huaze Aluminum-Power Company Limited.

**Liu Qiang**, aged 41, has been employed by the Company since 2001 and has been the Secretary to the Board since November 2003. Ms. Liu holds a Master's degree in English literature and is a professor-grade senior translator. She has extensive experience in the import and export of non-ferrous metals and analysis of the aluminum market. Ms. Liu formerly served as the Finance Manager of the Australian branch of, and Business Manager of the Aluminum Business Division of, China National Non-Ferrous Metals Import and Export Corporation; senior analyst for the Aluminum Industry and Market in the Information Division of China National Non-Ferrous Metals Trading Group; senior analyst for the Aluminum Industry and Market in the Information Division of China National Metals and Minerals Import and Export Corporation; and deputy manager of the Import and Export Division of China Aluminum International Trading Corporation Limited.

#### Audit Committee

Currently, our audit committee consists of three Independent Non-executive Directors, namely, Mr. Wang Diansuo, Mr. Chiu Chi Cheong Clifton and Mr. Kang Yi. Mr. Kang Yi was appointed as a member by the Board on March 28, 2005 to replace the previous audit committee member Mr. Chen Xiaozhou, who resigned on March 27, 2005. Mr. Chiu Chi Cheong Clifton serves as the Chairman of the committee and is a financial expert. Until the appointment of Mr. Kang Yi, our audit committee may not have been in compliance with the NYSE Corporate Governance Rules, as Mr. Chen Xiaozhou was not classified as an independent director by us. We rely on the exemption under Section 303A.00 of the NYSE Corporate Governance Rules which allows foreign private issuers until July 31, 2005 to comply with the audit committee standards set out in Section 303A.06. Our audit committee is currently in compliance with the NYSE Corporate Governance Rules. We rely on the exemption under Section 303A.00 of the NYSE Corporate Governance Rules which allows foreign private issuers to follow our home country practice in lieu of the provisions of Section 303A.07 relating to audit committees. 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 process, including our internal controls and disclosure controls and procedures, supervise our internal and external auditors, and review management policies. The audit committee convened three meetings in 2004.

#### Remuneration and Nomination Committee

We have established a remuneration and nomination committee. Our remuneration and nomination committee consists of two Executive Directors and one Independent Non-executive Director. The three members for the current term are Mr. Xiao Yaqing, Mr. Xiong Weiping and Mr. Wang Diansuo, with Mr. Xiao Yaqing serving as Chairman of the committee. Committee members' responsibilities as set out in the committee charter include reviewing compensation policies and performance appraisals with respect to the directors and senior management, reviewing and recommending selection of independent directors and members of the committees under the Board of Directors, approving the terms of directors service contracts, and the appointment and removal of senior executives.

We follow our home country practice in relation to the composition of our compensation and nominating 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 nominating committee or that the compensation committee must be composed entirely of independent directors.

#### Planning and Development Committee

We have established a strategic planning and development committee which consists of two Executive Directors, Mr. Xiong Weiping and Mr. Luo Jianchuan, and one Independent Non-executive Director, Mr. Wang Diansuo, with Mr. Wang Diansuo serving as the Chairman. In accordance with the committee charter, the committee reviews and assesses our strategic plans for development, fiscal budgeting, investment, business operations and annual rates of return on investments.

#### Disclosure Committee

Our disclosure committee consists of the Chief Executive Officer, the Chief Financial Officer and the Secretary to the Board. Our Chief Executive Officer and Chief Financial Officer serve as the Chairman and Vice Chairman of the committee, respectively. The committee implements our disclosure controls and procedures and reviews information disclosed to ensure accurate, open and timely disclosure.

## Compensation

### Directors', Supervisors' and Senior Officers' Compensation

Our Executive Directors and Supervisors who are employees receive compensation in the form of salaries, housing allowances, other allowances and benefits in kind, including our contribution to the pension plans for our Directors and Supervisors. Directors and Supervisors who are not employed by us receive fees for their services. We have entered into three-year service contracts with all of our Directors and Supervisors. None of these service contracts provide benefits to our directors upon termination. The aggregate amount of cash compensation we paid for the year ended December 31, 2004 (1) to our five highest paid individuals was RMB3.85 million; (2) to our Directors (not including our Independent Directors) was RMB4.71 million; (3) to our Supervisors was RMB0.93 million; (4) to our senior management was RMB2.88 million; (5) to Independent Non-executive Directors was RMB713,400; and (6) to our Directors (not including our Independent Directors), Supervisors and senior management as a group was RMB8.51 million.

### Senior Management Incentive System

In order to better provide incentives for our senior management and improve our shareholders' value, upon the recommendation of our Board of Directors, our shareholders adopted a special compensation system for our senior management in September 2001. The system is designed to link our senior management's financial interests with our operating performances and performance of our H shares. Under this system, the senior management's compensation consists of three components:

- \* fixed compensation, including basic salaries and benefits;
- \* performance bonuses; and
- \* stock appreciation rights, or SARs, which entitle recipients to receive cash payments to the extent that the market price of the company's H shares at the time of exercise of the SARs is higher than the exercise price as described below, subject to various conditions.

The variable components in our senior management's compensation, such as performance bonuses and SARs, account for 65% to 80% of their total potential compensation, not including the directors and supervisors who receive only fixed compensation and performance bonuses. As the seniority level of the recipient rises, SARs may constitute an increasingly large proportion of the recipient's potential compensation package.

Under the system, the compensation committee under the Board of Directors has set up key performance indexes, or KPIs, used as bases for eligibility for and allocation of performance bonuses and SARs. The performance evaluation system relies on information provided by the management information system to ensure that the management's performance evaluation process is fair and transparent.

#### SARs

No shares will be issued under the SARs plan we have adopted. Therefore, the share holding of our shareholders from time to time will not be diluted as a result of the issuance of SARs.

The current SARs plan has a term of ten years from the date of approval by the shareholders' meeting in September 2001. The Board of Directors may grant SARs annually, but new SARs may not be granted when the cumulative total units of SARs that have been granted exceed a number equal to 10% of our total outstanding shares. Similarly, no new units of SARs may be issued to any individual if the cumulative total units of SARs he or she has received exceed 25% of the cumulative total units of SARs that have been issued and planned to be issued under the plan by us. Each SARs unit represents one share of our outstanding shares. The number of SARs granted to a person may also be adjusted in accordance with the result of performance evaluations as measured by the KPIs.

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The power to formulate and implement the SAR plan rests with the compensation committee under our Board of Directors. The compensation and nominating committee recommends the recipients and amount of each grant of SARs, and submits its recommendation to our Board of Directors for approval. The granted SARs normally expire 10 years after the grant date. The SARs start to vest one year after the date of grant, with one-third of the granted SARs to be vested each year for three years. A recipient may exercise at any time duly vested and unexpired SARs.

As of December 31, 2004, we have not issued stock appreciation rights under the SARs plan.

#### Board Practices

##### Board of Directors

Pursuant to the articles of association, our Board of Directors consists of not more than nine directors, one of whom is the Chairman. Directors are elected at the shareholders' general meeting by vote of shareholders, and serve for terms of three years. Upon the expiration of the term of their office, they may serve successive terms if re-elected at the shareholders' general meeting. The current Board of Directors, except Mr. Kang Yi, was elected at the shareholders' annual general meeting held on June 7, 2004. Mr. Kang Yi was elected in the extraordinary shareholders' meeting held on September 28, 2004. The term of this Board of Directors will expire on June 7, 2007, or at such time as the shareholders' general meeting elects a new Board of Directors. The Board of Directors is responsible to the shareholders.



## Supervisory Committee

We have a supervisory committee composed of three Supervisors. Supervisors serve a term of three years. Upon the expiration of their terms of office, they may be reappointed to serve consecutive terms. The supervisory committee is presided over by a chairman who may be elected or removed with the consent of two-thirds or more of the members of the supervisory committee. The term of office of the Chairman is three years, renewable upon re-election. The current Supervisory Committee is comprised of two representatives of Chinalco and one representative of our employees. Members of the Supervisory Committee may also observe meetings of the Board of Directors. Our current Supervisory Committee was appointed at the shareholders' annual general meeting held on June 7, 2004. The term of this Supervisory Committee will expire on June 7, 2007, or at such time when the shareholders, at a general meeting, appoint a new supervisory committee.

Supervisors attend board meetings as non-voting members. The supervisory committee is responsible to the shareholders' general meeting and has the following duties and responsibilities:

- \* to supervise our handling of our financial matters;
- \* to supervise any acts of directors, the general manager, deputy general manager and other senior officers that are in violation of laws, administrative regulations or our articles of association;
- \* to request directors, the general manager, deputy general manager and other senior officers to rectify their acts that are detrimental to the interests of Chalco;
- \* to verify such financial information as financial reports, business reports and profit distribution plans submitted by the Board of Directors to the shareholders' general meeting, and arrange certified public accountants and auditors to verify issues;
- \* to propose to convene interim shareholders' general meetings; and
- \* to bring law suits against directors on behalf of Chalco.

## Audit Committee

See "-Directors, Supervisors and Senior Management - Audit and other Committees."

## Employees

For each of 2002, 2003 and 2004, we had a total of 67,334, 67,400 and 68,620 employees, respectively.

The table below sets forth the number of our employees by function as of the period indicated:

	As of December 31,					
	2002		2003		2004	
	% of Total		% of Total		% of Total	
Function:						
Alumina production	36,736	54.6	37,500	55.7	38,100	55.5
Primary aluminum production	18,560	27.6	18,625	27.6	19,150	27.9
Mining	3,997	5.9	3,555	5.3	3,550	5.2
Research and development	1,917	2.8	1,980	2.9	1,980	2.9
Sales and Marketing	953	1.4	740	1.1	740	1.1
Management and other	5,171	7.7	5,000	7.4	5,100	7.4
Total	67,334	100.0%	67,400	100.0%	68,620	100%

The table below sets forth the number of our employees as of December 31, 2004:

Location	Employees	% of Total
Shandong		
Shandong Plant	10,510	15.3
Henan		
Zhengzhou plant	13,520	19.7
Zhongzhou plant	4,850	7.1
Research Institute	950	1.4
Guizhou		
Guizhou plant	15,250	22.2
Guangxi		
Pingguo plant	5,510	8.0
Shanxi		
Shanxi plant	11,770	17.2
Qinghai		
Qinghai plant	5,130	7.5

Headquarters and others	1,130	1.6
	<hr/>	<hr/>
Total	68,620	100.0%
	<hr/>	<hr/>

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 assist in mediating disputes between us and individual employees. All employees are union members. We have not been subjected to any strikes or other labor disturbances that have interfered with our operations, and we believe that our relationship with our employees is good.

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 currently 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 the sum of its employees' salaries, bonuses and various allowances. The amount of contribution as a percentage of the employees' salary varies from plant to plant, ranging from 18.0% to 22.9%, depending in part on the location of the plant and the average age of the employees. We have made all required pension contributions up to December 31, 2004. 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 also contribute to a welfare fund for our employees. Our contributions to this fund are made at rates ranging from 5% to 10% of our after-tax income. In addition, we have introduced a new employee incentive plan which includes performance bonuses for our employees. We provide to our employees various social welfare benefits through hospitals, schools, retirement homes and other institutions owned by Chinalco and its other affiliates or through third parties.

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#### Share Ownership

None of our Directors, Supervisors or senior management own any interest in any shares or options to purchase our shares.

#### MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

##### ITEM 7.

##### Major Shareholders

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We are a joint stock limited company organized under the laws of the PRC. Our parent company, Chinalco, a state-owned enterprise, currently owns 42.14% of our outstanding common shares after our placement of H shares on January 6, 2004 (Chinalco owned 44.4% of our outstanding common shares as of December 31, 2003). The parent company holds a significant portion of our domestic shares in the form of state legal person shares and can exercise all rights as our controlling shareholder according to the relevant laws, rules and regulations. The parent company has substantial influence over our management and policies and corporate actions, not only in its capacity as the largest shareholder, but also because two of our Directors, including our Chairman, hold senior management positions with Chinalco and Chinalco has nominated two of the three members of our Supervisor Committee.

The following table sets forth information regarding ownership of our issued and outstanding capital stock as of December 31, 2004. 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 our capital stock.

As of December 31, 2004		
Holders of Domestic Shares and H Shares	No. of shares	Approximate % of issued share capital
(in millions)		
Holders of Domestic Shares		
Chinalco	4,656.3	42.14
China Cinda	1,610.3	14.57
China Orient	602.2	5.45
China Development Bank	554.9	5.02
Holders of H Shares		
Alcoa	884.2	8.0
Other public investors	2,415.7	21.87

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

To the best of our knowledge, as of December 31, 2004, none of the outstanding H shares was held by United States holders of record, and all of the outstanding ADSs were held by 26 United States holders of record. Because only PRC investors can hold domestic shares, there were no non-PRC holders hold the domestic shares 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 relating to our shares with respect to various matters in a manner prejudicial to the interests of our other shareholders. See "Item 10. Additional Information - 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 restrictions noted in the first sentence of this paragraph, the voting rights of our major holders of domestic shares are identical to those of any other holders of our domestic shares, and the voting rights of our major holders of H shares are identical to those of our other holders of H shares. Holders of domestic shares and H shares are deemed to be shareholders of different classes for some

matters, which may effect their respective interests. Holders of H shares and domestic shares are entitled to the same voting rights.

On March 28, 2005, the Board of Directors resolved that we would apply (i) to the CSRC for the issue of a maximum of 1,500,000,000 A shares to the PRC public, and (ii) to the Shanghai Stock Exchange for the listing of the A shares on the Shanghai Stock Exchange. Such resolution is subject to approval by our shareholders at the annual general meeting to be held on June 9, 2005. See "Item 4 - Information on the Company - The Proposed A Share Offering.

#### Related Party Transactions

##### Connected Transactions under Hong Kong Listing Rules

Under the HKSE Listing Rules, transactions between connected persons and us constitute connected transactions and such transactions are normally subject to reporting, announcement and/or shareholders' approval unless otherwise waived by the Hong Kong Stock Exchange. Under the HKSE Listing Rules, Chinalco, Guangxi Associate, Guizhou Development and Southwest Aluminum (Group) Co., Ltd. ("Southwest Aluminum") are considered our connected persons. According to certain waivers granted by the Hong Kong Stock Exchange on December 22, 2003, our Independent Non-executive Directors must review and certify annually that the contracts entered into between us and our connected persons are based on normal commercial terms that are fair and reasonable. Commencing on June 7, 2004, our Audit Committee pre-approves related-party transactions in accordance with the NYSE Listing Rules. The following transactions are exempted from the strict compliance of the requirements under the HKSE Listing Rules in relation to connected transactions, subject to certain conditions as stated in the waiver letter issued by the Hong Kong Stock Exchange.

Although connected transactions are not synonymous with related party transactions, the concepts are sufficiently similar that the following description of our connected transactions would satisfy the disclosure requirements under U.S. securities laws. See the table below for a list of the amounts paid under such transactions for the years ended December 31, 2002, 2003 and 2004.

We have the following ongoing connected transactions with Chinalco, our largest shareholder, Guangxi Associate, Guizhou Development and Southwest Aluminum.

- \* Comprehensive Social and Logistics Services Agreement;
- \* General Agreement on Mutual Provision of Production Supplies and Ancillary Services;
- \* Mineral Supply Agreement;
- \* Provision of Engineering, Construction and Supervisory Services Agreement;

- \* Land Use Rights Leasing Agreement;
- \* Buildings Leasing Agreement;
- \* Trademarks License Agreement;
- \* Guarantee of Debts Contract;
- \* Aluminum Ingots and Alumina Supply Agreement;
- \* Aluminum Ingots Agency Agreement; and
- \* Primary Aluminum Supply Agreement with Southwest Aluminum.

#### Comprehensive Social and Logistics Services Agreement

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Chinalco provides certain social welfare and logistics services on a continuing basis to us. To regulate our relationship with Chinalco in this regard, we have entered into the Comprehensive Social and Logistics Services Agreement with Chinalco on November 5, 2001 for the provision of social welfare and logistics services.

#### General Agreement on Mutual Provision of Production Supplies and Ancillary Services

Chinalco retained certain non-core assets and businesses relating to ancillary production supplies and services which include assets and businesses for, among other things, (a) supply of various raw materials required in the course of production of alumina and primary aluminum; (b) provision of transportation and loading services; and (c) the provision of production supporting service, which continue to provide ancillary production supplies and services to us on an ongoing basis.

Chinalco also retained all its assets and businesses relating to aluminum fabrication (except for aluminum fabrication capacity of Shandong Aluminum). It purchases its supply of primary aluminum as well as other alumina products from us. On the other hand, Chinalco transferred to us (a) operating assets and businesses for the production of alumina, primary aluminum, scrap materials, coal and pitch; and (b) assets and businesses for provision of ancillary production supplies and services which include, among other things, the supply of electricity, gas, heat and water, spare parts and the provision of repair and maintenance services. Such assets and businesses continue to provide ancillary production supplies and services to Chinalco.

To regulate the relationship between Chinalco and us in these respects, we entered into a General Agreement on Mutual Provision of Production Supplies and Ancillary Services with Chinalco on November 5, 2001.

#### Mineral Supply Agreement

Chinalco retained certain assets and businesses relating to several small bauxite mines and limestone quarries in respect of which the mining rights have not been transferred to us. Chinalco continues to provide bauxite and limestone to us on an ongoing basis. Chinalco also purchases bauxite and limestone from other mines and re-sells the bauxite and limestone to us.

To regulate the relationship between Chinalco and us in these respects, we entered into a Mineral Supply Agreement with Chinalco on November 5, 2001.

#### Provision of Engineering, Construction and Supervisory Services Agreement

Chinalco retained all its operating assets and liabilities relating to metallurgical construction and construction supervisory services and Luoyang Research Institute for Non-ferrous Metals Processing, which specializes in engineering design. The other operating assets and liabilities relating to engineering design services have been transferred to us.

Chinalco has provided and continues to provide metallurgical design, construction and supervisory services to us. In turn, we have provided and continue to provide various research and development services relating to engineering design to Chinalco.

We have entered into a Provision of Engineering, Construction and Supervisory Services Agreement with Chinalco dated November 5, 2001 relating to the provision of such engineering design, construction and supervisory services.

#### Land Use Rights Leasing Agreement

Chinalco leased to us all the 453 pieces or parcels of land for the purposes of all aspects of our operations and businesses. On November 5, 2001, we entered into the Land Use Rights Leasing Agreement with Chinalco for the leasing of these 453 parcels of land covering an aggregate area of approximately 58.3 million square meters, which are located in six provinces in the PRC. The annual rent payable to Chinalco is approximately RMB239.8 million.

As a result of the adjustment in the standard land price and land use tax made by relevant local authorities in 2004, Chinalco was required to pay an extra tax amount of RMB66.0 million. On January 11, 2005, after arm-length negotiations between Chinalco and us, we agreed to bear the annual tax increment beginning from January 1, 2004, pursuant to which our payment of the rental for land use right increased from RMB173.0 million to RMB239.0 million. We had applied and recommended to the HKSE for the amendment of maximum amount of annual land use right payable by us be adjusted from RMB200.0 million to RMB250.0 million.

#### Buildings Leasing Agreement

Chinalco transferred to us, among other operating assets, ownership of the buildings and properties for the operation of our core businesses, with Chinalco retaining the buildings and properties for its remaining operations.

We leased to Chinalco and Chinalco leased to us a number of buildings and properties for ancillary uses, which include buildings and properties mainly for offices, dormitory, canteen and storage purposes. The buildings and properties we lease to Chinalco comprise 59 buildings with an aggregate gross floor area of 62,819 square meters. In turn, the buildings and properties Chinalco leases to us for ancillary uses comprise 100 buildings with an aggregate gross area of 273,637 square meters. We entered into the Buildings Leasing Agreement on November 5, 2001 with Chinalco, regarding the terms and conditions for the lease of these buildings and properties.

#### Trademarks License Agreement

Chinalco transferred to us, among other trademarks, two trademarks relating to its retained operating assets and businesses. To enable Chinalco to continue operating its retained assets and businesses using these two trademarks, the parties entered into a Trademarks License Agreement dated November 5, 2001 whereby we have granted to Chinalco and its associates free of charge a non-exclusive right to use these two trademarks for ten years from July 1, 2001, but may be extended upon negotiations with Chinalco. Pursuant to such agreement, we are responsible for the payment of a total annual fee of no more than RMB1,000 to maintain the effective registration.

#### Guarantee of Debts Contract

Part of the debt of the Chinalco Group relating to assets transferred to us in the reorganization was transferred to, and assumed by, us. These debts were guaranteed by Chinalco.

In a Guarantee of Debts Contract dated December 29, 2003, entered into between Chinalco and us, Chinalco agreed to continue to provide guarantees for the debts assumed by us pursuant to the reorganization, if the guarantees are required by the creditors. As at December 31, 2004, these debts aggregated approximately RMB1.5 billion. We provide no security and pay no fees with respect to these guarantees, but are required to repay Chinalco for any payments Chinalco may make under these guarantees. According to the "Solution of Chinalco Guarantee Management" issued by Chinalco in May 2004, we paid a one-off guarantee service fee of RMB14,3995,000 to Chinalco during 2004.

#### Aluminum Ingots and Alumina Supply Agreement

Guangxi Associate has purchased and continues to purchase aluminum ingots and alumina from us for trading and for aluminum fabrication. Guangxi Investment has approximately 37.5% equity interests in Guangxi Associate. Guangxi Associate is an associate (as defined in the HKSE Listing Rules) of Guangxi Investment, which is one of our promoters and therefore a connected person, and any transactions between Guangxi Associate and us are connected transactions within the meaning of the HKSE Listing Rules.

To regulate our relationship with Guangxi Associate in this respect, we entered into an agreement with Guangxi Associate in relation to the supply of alumina and aluminum ingots on November 5, 2001.

#### Aluminum Ingots Agency Agreement



Guizhou Development has been and continues to be our agent for the distribution and sale of our aluminum ingots and related products for a commission. Such transactions between Guizhou Development and us are connected transactions within the meaning of the Listing Rules.

To regulate the relationship between Guizhou Development and ourselves in this respect, we entered into an agency agreement on November 5, 2001 relating to the sale of aluminum ingots by Guizhou Development as our agent.

#### Primary Aluminum Supply Agreement with Southwest Aluminum (Group) Company Limited

We have been and are continuing to supply primary aluminum to Southwest Aluminum. China Cinda has approximately a 36.0% equity interest in Southwest Aluminum. As one of our substantial shareholders, China Cinda is our "connected person" (as defined in the Listing Rules). As China Cinda has more than a 30% equity interest in Southwest Aluminum, Southwest Aluminum is an "associate" (as defined in the HKSE Listing Rules) of China Cinda and our connected person. Any transactions between Southwest Aluminum and ourselves are "connected transactions" within the meaning of the HKSE Listing Rules.

To regulate our supply relationship with Southwest Aluminum, we entered into a Primary Aluminum Supply Agreement dated November 5, 2001 with Southwest Aluminum in relation to the supply of primary aluminum to it.

#### Guangxi Huayin Aluminum Co., Ltd.

We have established a joint venture company, Guangxi Huayin Aluminum Co., Ltd. ("Guangxi Huayin"), with Guangxi Aluminum Development and Investment Stock Co., Ltd. ("Guangxi Associate") and China Minmetals Non-ferrous Metals Co., Ltd. on February 18, 2003 to undertake the construction of an alumina plant to exploit the discovery of a bauxite deposit in western Guangxi Province. We have conducted feasibility studies and we are now preparing to construct an alumina plant with an annual output of 1,600,000 tonnes. The feasibility study report has been submitted to the relevant government authorities for approval. The advance made by us to Guangxi Huayin as operating capital has amounted to RMB49.5 million.

#### Shandong Aluminum

In October 2003, Shandong Aluminum signed an agreement to purchase two rotary kilns from Shandong Aluminum Company, a wholly-owned subsidiary of Chinalco. The purchase price is based on an independent valuation report. The purchase was approved by the independent shareholders of Shandong Aluminum at a general meeting duly convened to approve the purchase in accordance with the requirements of the Shanghai Stock Exchange Listing Rules and the transaction was completed in March 2004.

#### Amounts Received or Paid Under Material Related Party Transactions

During the years ended December 31, 2002, 2003 and 2004, we had the following material related transactions.

Year Ended December 31,

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	2002	2003	2004
	RMB	RMB	RMB
	(in thousands)		
Sales of materials and finished goods to:			
Chinalco and its subsidiaries	671,085	1,106,919	1,700,746
Jointly controlled entity	21,496	33,701	52,424
Provision of utility services to Chinalco and its subsidiaries	195,519	234,067	219,952
Provision of engineering, construction and supervisory services by Chinalco and its subsidiaries	665,337	784,163	830,582
Purchase of property, plant and equipment from:			
Chinalco and its subsidiaries <sup>(1)</sup>	-	-	115,098
Purchase of key and auxiliary materials from:			
Chinalco and its subsidiaries	212,654	391,730	427,727
Other related parties	151,747	128,956	205,937
Provision of social services and logistics services by Chinalco and its subsidiaries	541,731	744,575	927,252
Land and building rental charged by Chinalco	141,995	173,611	239,810
Building rental charged to Chinalco	2,584	-	--

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(1) Our subsidiary, Shandong Aluminum, purchased two kilns from Shandong Aluminum Plant. The purchase price is based on an independent valuation report.

See Note 34 to our audited financial statements for a detailed discussion of our related party transactions.

FINANCIAL INFORMATION

ITEM 8.

Consolidated Statements and Other Financial Information

See pages F-1 to F-69 following Item 19.

## Legal Proceedings

We are involved in a number of judicial proceedings before PRC courts concerning matters arising in connection with the conduct of our businesses. We are not a party to any material legal proceeding and no material legal proceeding is known to us to be pending against us or with respect to our properties.

## Dividends

Our Board of Directors 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 financial year is subject to shareholders' approval. The Bank of New York, 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 PRC Company Law 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 of Directors.

The declaration of dividends is subject to the discretion of our Board of Directors, 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 credit worthiness;
- \* general business conditions; and
- \* other factors our Board of Directors may deem relevant.

We may only distribute dividends after we have made allowance for:

- \* recovery of losses, if any;
- \* allocation to the statutory common reserve fund;

- \* allocation to the statutory common welfare reserve fund; and
- \* allocation to a discretionary common reserve fund if approved by our shareholders and after allocation is made to the statutory common reserve fund.

The minimum and maximum aggregate allocations to the statutory funds is 15% and 20%, respectively, of our net income determined in accordance with PRC GAAP. Under PRC law, our distributable earnings will be equal to our net income determined in accordance with PRC GAAP or HK GAAP, whichever is lower, less allocations to the statutory and discretionary funds.

The Board of Directors proposed to declare a final dividend of RMB0.176 per share for 2004. 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.

Subject to the relevant provisions of the PRC Company Law and our articles of association, Chinalco may seek to influence our determination of dividends with a view to satisfying its cash flow requirements. We believe that Chinalco's financial condition will benefit from our success and that by supporting a dividend policy intended to enhance our long-term profitability and the market value of our securities, Chinalco will increase the value of its own interest in us.

See "Item 10. Additional Information - Taxation" for a discussion of the tax consequences of receipt of dividends.

#### Other Significant Changes since December 31, 2004

In January 2005, we entered into an agreement with Lanzhou Aluminum Plant to acquire 151,851,442 shares, or 28% of the total share capital in Lanzhou Aluminum in consideration of RMB767.3 million. Lanzhou Aluminum owns one primary aluminum refinery plants with total production capacity of approximately 160,000 tonnes per annum.

On March 28, 2005, the Board of Directors resolved that we would apply (i) to the CSRC for the issue of a maximum of 1,500,000,000 A shares to the PRC public, and (ii) to the Shanghai Stock Exchange for the listing of the A shares on the Shanghai Stock Exchange. Such resolution is subject to an approval by our shareholders at the annual general meeting to be held on June 9, 2005. See "Item 4 - Information on the Company - The Proposed A Share Offering."

Other than events disclosed above and elsewhere in this annual report, there have been no significant changes since December 31, 2004.

#### THE OFFER AND LISTING

#### ITEM 9.

The Hong Kong Stock Exchange is the principal non-US trading market for our H shares. The ADSs, each representing 100 H shares, have been issued by the Bank of New York as depository and are listed on the NYSE. The following table sets forth, for the periods indicated, the reported high and low closing prices for our shares on each of these two stock exchanges:

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Calendar Period	NYSE		Hong Kong Stock Exchange	
	High	Low	High	Low
	(US\$ per ADS)		(HK\$ per H share)	
2001(from December 5, listing)	18.27	17.05	1.39	1.30
2002	24.25	9.38	1.94	0.73
2003				
First Quarter	19.55	14.40	1.53	1.13
Second Quarter	24.20	16.25	1.87	1.24
Third Quarter	34.51	22.00	2.60	1.72
Fourth Quarter	81.70	34.56	6.15	2.83
2004				
First Quarter	85.00	62.85	6.75	4.925
Second Quarter	91.80	45.88	7.05	3.50
Third Quarter	66.36	42.71	5.05	3.275
Fourth Quarter	68.91	56.83	5.40	4.40
November	65.66	57.81	5.00	4.50
December	63.80	57.66	5.05	4.525
2005				
January	58.52	51.20	4.625	4.025
February	66.35	54.52	5.25	4.225
March	64.90	57.70	5.20	4.50
April (through April 20)	61.10	55.64	4.70	4.30

## ADDITIONAL INFORMATION

ITEM 10.

Our registered office is located at No.12B, Fuxing Road, Haidian District, Beijing, People's Republic of China 100814. Our telephone number at this address is (86) 10 6398 5654. Our agent for service of process is CT Corporation System, 111 Eighth Avenue, New York, New York 10011.

#### 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. Our articles of association were amended at the general shareholders' meeting held on June 12, 2002 and approved by the State Economic and Trade Commission on July 5, 2002 to increase the number of Directors from seven to nine and to reflect the changes in our registered capital and shareholding structure. A copy of the English translation of the amendment was filed with the SEC as Exhibit 1.1 to our Annual Report on Form 20-F for 2002. Our articles of association were further amended at the general shareholders' meeting held on June 7, 2004 and approved by the State-owned Assets Supervision and Administration Commission of the State Council on July 30, 2004 (1) to increase the minimum number of Independent Non-executive Directors from two to three, (2) to reflect changes in our total share capital and shareholding structure following the placing of 549,976,000 new H shares on January 6, 2004, and (3) pursuant to an amendment to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange. We have elected a third Independent Non-executive Director on September 28, 2004. A copy of the English translation of the amendment was filed as Exhibit 1.1 to this Annual Report on Form 20-F for 2003.

To accommodate the proposed A share offering and relevant corporate governance requirements in the PRC, our Board of Directors has proposed amendments to our articles of association in compliance with applicable PRC legal and regulatory requirements, including those of the CSRC, stipulating provisions mandatory or recommended for inclusion in articles of associations of PRC listed companies. The proposed amendments are subject to approval by our shareholders at the annual general meeting to be held on June 9, 2005.

#### *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, which includes exploration and exploitation of bauxite and limestone mines; production and sales of aluminum and magnesium products, smelting products, fabricated products, carbon products and related nonferrous metal products; exploration design, project construction general contracting, construction and installation; machinery manufacturing; related technology development, and technical support service.

#### *Directors' power to vote on matters in which he or she has an interest*

Under Article 133, a Director may not vote on any board resolution approving any contract or arrangement or any other proposal in which he or any of his associates (as defined in the Rules Governing the Listing of Securities on

the Hong Kong Stock Exchange) has a material interest, nor may he or she be counted in satisfying the quorum requirements for such meeting. Unless the interested Director has disclosed his or her interest in accordance with the Articles 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 satisfying the quorum requirements and has refrained from voting, any contract, transaction or arrangement in which such director is materially interested is voidable at the instance of the 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, the charging or mortgaging of part or whole of our business or properties and to provide guarantees or mortgages for the debts of third parties (including, without limitation, our subsidiaries or associated companies) in all types of circumstances. 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) provisions which provide that the issuance of debentures must be approved by the shareholders in a general meeting by way of a special resolution; and (c) Article 96(4) provides that the Directors have the power to formulate our annual preliminary and final financial budgets and the extent of our corporate borrowing powers and the manner in which the borrowing powers may be varied are subject to adoption by the affirmative vote of a simple majority of the directors as part of the preliminary or final financial budget plan.

#### *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 95, the Directors are not required to hold qualifying shares.

#### *Dividend rights*

Article 51(I) provides that holders of our common shares have the right to receive dividends and benefits in other forms, e.g., right to share profits and the right to surplus in the event of a liquidation, in respect of the number of shares held. Under Article 45, when we convene a general shareholders' meeting, declare dividends, liquidate or undertake other actions that require the verification of shareholders' rights, the Board of Directors must specify a date as the record date for determination of shareholders' rights. The shareholders registered in the shareholders' register at the record date are the shareholders entitled to participate.

#### *Voting rights*

Article 51(II) provides that holders of our common shares have the right to attend in person or appoint a proxy to attend and vote at general meetings of shareholders.

*Rights to share profits*

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Article 77(2) provides that profit distribution plans and loss recovery plans formulated by the Board of Directors must be approved by way of ordinary resolution of the shareholders' general meeting.

*Rights to share surplus in the event of liquidation*

Article 51(VI) provides that the shareholders have the right to receive our surplus assets upon liquidation in proportion to their respective shareholdings.

*Redemption provisions; sinking fund provisions and liability to further capital calls*

Article 29 provides that we may repurchase issued shares upon obtaining approvals from the shareholders by way of a special resolution and from relevant supervisory authorities under the following circumstances: (1) canceling shares to reduce our capital; (2) merging with another company holding our shares; (3) other purposes permitted by law and administrative regulations.

No securities issued by us are (a) redeemable, (b) entitled to a sinking fund or (c) 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 78(5), amendment of any type of shareholder rights, 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 71, 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.

Any proposal to vary or abrogate the rights conferred on any class of shareholders ("class rights") must be approved by way of a special resolution in a shareholders' general meeting and by holders of shares of that class at a separate meeting conducted in accordance with the articles of association. The circumstances which are deemed to be a variation or abrogation of the class rights are set forth under Article 88. 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 89) are not entitled to vote at class meetings.

Resolutions of a class of shareholders require votes representing more than two-thirds of the voting rights of shareholders of that class represented at the relevant meeting who are entitled to vote. 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.



The class meetings must be conducted in a manner as similar as possible to that of general meetings of shareholders. The provisions relating to the manner in which the shareholders' general meetings must be convoked 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, is prohibited from exercising its voting rights in relation to the following matters in a manner that would be prejudicial to the interests of our shareholders generally or some part of our shareholders:

- \* to relieve a Director or Supervisor of his or her duty to act honestly in our best interest;

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- \* to approve the expropriation by a Director or Supervisor (for his or her own benefit or the benefit of another person) of our assets, including any business opportunities that may benefit us; or
- \* to approve the expropriation by a Director or Supervisor (for his or her own benefit or the benefit of another person) of the rights of other shareholders.

*Conditions governing the manner in which annual general meetings and extraordinary general meetings of shareholders are convoked*

Shareholders' general meetings can be annual general meetings or extraordinary general meetings. Shareholders' meetings must be convened by the Board of Directors. Annual general meetings of shareholders are held once a year within six months after the end of the previous financial year.

The Board of Directors is required to convene an extraordinary general meeting within two months of the occurrence of any one of the following circumstances:

- (1) where the number of Directors is less than the number stipulated in the Company Law or two-thirds of the number specified in the articles of association;
- (2) where our unrecovered losses amount to one-third of the total amount of its share capital;

- (3) where shareholder(s) holding 10 percent or more of our issued and outstanding shares carrying voting rights request(s) in writing for the convening of an extraordinary general meeting;
- (4) whenever the Board of Directors deems necessary or the Supervisory Committee so requests; or
- (5) when proposed by more than two Independent Non-executive Directors.

In convening a shareholders' general meeting, written notice of the meeting shall be given no less than 45 days prior to the meeting to notify all of the shareholders whose names appear in the share register of the matters to be considered and the date and the place of the meeting. A shareholder who intends to attend the meeting shall deliver to us his or her written reply 20 days before the date of the meeting. Shareholders holding 5% or more of our total voting shares have the right to propose new motions in writing, and we are required to place such proposed motions on the agenda for such general meeting if they are matters falling within the functions and powers of shareholders in general meetings.

*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 and as described in Item 7, 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.

*Provisions having an effect of delaying, deferring or preventing a change in control*

Under Article 97, in making decisions regarding mergers and acquisitions where the consideration to be paid or the assets to be acquired exceed 10% of our total assets, the Board of Directors is required to engage relevant professional consultants to provide professional opinions, and to give due weight to such opinions in arriving at their decision.

Under Article 78, division, merger, dissolution and liquidation of the Company and material acquisition or sale by the Company require adoption of a special resolution at the shareholders' general meeting.

*Provisions governing the ownership threshold above which such ownership must be disclosed*

There are no provisions pertaining to the ownership threshold above which shareholder ownership must be disclosed under the articles of association.

*Conditions governing changes in registered capital*

Under Article 96(6), any proposal for the increase or reduction of our registered capital must be formulated by the Board of Directors. Article 78(1) further provides that any increase or reduction in share capital requires adoption of a special resolution at a shareholders' general meeting.

#### Material Contracts

We are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of our business or disclosed in our annual reports. Please see "Item 7. Major Shareholders and Related Party Transactions -- Related Party Transactions" for a summary of contracts with certain of our related parties.

#### 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 State Administration of Foreign Exchange 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 State Administration of Foreign Exchange. 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 Hong Kong and United States 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. Although the Renminbi US dollar exchange rate has been relatively stable since 1994, we cannot predict nor give any assurance of its future stability. Fluctuations in exchange rates may adversely affect the value, translated or converted into US dollars or Hong Kong 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 US dollar and other foreign currencies will not adversely affect our results of operations and financial condition.

#### Taxation

##### China Taxation

The following discussion summarizes the material PRC tax provisions relating to the ownership and disposition of H shares or ADSs purchased in connection with the global offering and held by the investor as capital assets.

##### Dividends Paid to Individual Investors

Under the Provisional Regulations of China Concerning Questions of Taxation on Enterprises Experimenting with the Share System (the "Provisional Regulations") and other applicable tax laws and regulations, dividends paid by Chinese companies to individuals are generally subject to a PRC withholding tax of 20%. However, on July 21, 1993, the PRC State Administration of Taxation issued the Notice Concerning the Taxation of Gains on Transfer and Dividends from Shares (Equities) Received by Foreign Investment Enterprises, Foreign Enterprises and Foreign Individuals (the "Tax Notice"). Under the Tax Notice, dividends paid by a Chinese company to foreign persons with respect to shares listed on an overseas stock exchange ("Overseas Shares"), including the H shares and ADSs, are exempt from PRC withholding taxes for the time being. However, if the Tax Notice is withdrawn, we will withhold such taxes as required by law.

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The Individual Income Tax Law of China was amended effective January 1, 1994 and states that it supersedes any contradictory prior administrative regulation concerning individual income tax. The amended Individual Income Tax Law can be interpreted as providing that all non-PRC individuals are subject to the 20% withholding tax on dividends paid by a Chinese company on its Overseas Shares unless specifically exempted by the financial authority of the State Council of the PRC. However, in a letter dated July 26, 1994 to the former State Commission for Restructuring the Economic System, the former State Council Securities Committee and the CSRC, the PRC State Administration of Taxation restated the exemption. In the event that the letter is withdrawn, a 20% tax may be withheld on dividends paid to non-PRC individual holders of H Shares or ADSs, subject to reduction by an applicable tax treaty between China and the country where such holders reside. To date, the relevant tax authorities have not collected withholding tax from dividend payments on such shares exempted under the Tax Notice.

#### Dividends Paid to Non-PRC Enterprises

According to the Provisional Regulations and other applicable tax laws and regulations, dividends paid by Chinese companies to non-PRC enterprises are ordinarily subject to a China withholding tax levied at a flat rate of 20%. However, according to the Tax Notice, a non-PRC enterprise with no permanent establishment in China receiving dividends paid on Overseas Shares is currently exempt from the 20% withholding tax. If the Tax Notice is withdrawn and such withholding tax becomes applicable in the future, such rate may still be reduced under relevant tax treaties, if applicable.

#### 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 a number of countries, including:

- \* the United States;
- \* Australia;
- \* Canada;

- \* France;
- \* Germany;
- \* Japan;
- \* Malaysia;
- \* Singapore;
- \* the United Kingdom; and
- \* the Netherlands.

Under each one of such treaties, the rate of withholding tax imposed by China's taxation authorities is generally reduced. For example, under the double taxation treaty between China and the United States, China may tax dividends paid by us to an eligible U.S. holder up to a maximum of 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".

## Capital Gains

The Tax Notice provides that gains realized by non-PRC enterprises upon the sale of Overseas Shares which are not held by entities established by such enterprises in China and gains realized by non-PRC individuals upon the sale of Overseas Shares are not subject to withholding tax for the time being. However, as far as individuals are concerned, the Individual Income Tax Law of China, as amended on October 31, 1993 and effective on January 1, 1994, provides for a capital gains tax of 20% on individuals. On January 28, 1994, the Provisions for Implementing the Individual Income Tax Law of China was promulgated which provides that the measures to levy individual income tax on the gains realized on the sale of shares will be made in the future by the Ministry of Finance and subject to the approval of the State Council. On June 20, 1994, February 9, 1996 and March 30, 1998, the Ministry of Finance and the State Administration of Taxation issued notices providing that temporarily no capital gains tax will be imposed on gains from the sale of shares by individuals. However, it is uncertain whether the above exemption for non-PRC enterprises and non-PRC individuals will continue to apply or to be renewed in the future. If such exemption does not apply or is not renewed, and the Tax Notice is found not to apply, holders of H shares or ADSs might be subject to a 20% tax on capital gains, unless reduced by an applicable double taxation treaty.

Under the Tax Reduction Notice, beginning from January 1, 2001, enterprise income tax at a reduced 10% rate will apply to interest, rental, license fees and other income obtained in China by non-PRC enterprises without agencies or establishments in China or by non-PRC enterprises of which such incomes do not have any substantive relationship with their agency or establishment in China. Therefore, if the exemption as described in the preceding paragraph does not apply or is not renewed, and the Tax Reduction Notice is found not to apply, a non-PRC enterprise shareholder might be subject to a 20% tax on capital gains, unless reduced by an applicable double taxation treaty.

#### 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 his or her 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.

#### U.S. Holders

The following is a general discussion of material United States federal income tax consequences of purchasing, owning and disposing of the H shares or ADSs if you are a U.S. holder, as defined below, and hold the H shares or ADSs as capital assets within the meaning of Section 1221 of the Internal Revenue Code of 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:

- \* tax-exempt entities;
- \* partnerships or other entities treated as partnerships for United States federal income tax purposes
- \* certain insurance companies;
- \* financial institutions;
- \* regulated investment companies;

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- \* real estate investment trusts;

- \* broker-dealers;
- \* traders in securities that elect to mark to market;
- \* U.S. holders liable for alternative minimum tax;
- \* U.S. holders that own, actually or constructively, 10% or more of our voting stock;
- \* banks;
- \* grantor trusts;
- \* dealers or traders in securities or currencies;
- \* persons who receive the H shares or ADSs as compensation for services;
- \* U.S. holders that hold the H shares or ADSs as part of a straddle or a hedging or conversion transaction; or
- \* U.S. holders whose functional currency is not the U.S. dollar.

Moreover, this description does not address United States federal estate and gift taxes or any state or local tax consequences of the acquisition, ownership and disposition of the H shares or ADSs.

This discussion is based on the Code, its legislative history, final, temporary and proposed United States 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 citizen or resident of the United States for United States federal income tax purposes;
- \* a corporation or other entity treated as a corporation for United States federal income tax purposes created or organized under the laws of the United States or any political subdivision thereof;
- \* any entity created or organized in or under the laws of any other jurisdiction if treated as a United States corporation pursuant to United States federal income tax laws;
- \* an estate the income of which is subject to United States federal income tax without regard to its source; or

\* a trust:

- subject to the primary supervision of a United States court and the control of one or more United States persons; or
- that has 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 United States federal tax purposes) is a beneficial owner of the H shares or ADSs, the treatment of the 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.

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We urge you to consult your tax advisors regarding the United States federal, state, local and non-United States tax consequences of the purchase, ownership and disposition of the H shares or ADSs.

In general, if you hold ADRs evidencing ADSs, you will be treated as the owner of the H shares represented by the ADSs. The following discussion assumes that we are not a passive foreign investment company ("PFIC"), as discussed under "PFIC Rules" below.

#### Distributions on the H Shares or ADSs

The gross amount of any distribution (without reduction for any Chinese tax withheld) we make on the H shares or ADSs out of our current or accumulated earnings and profits (as determined for United States federal income tax purposes) will be includible in your gross income as ordinary dividend income when the distribution is actually or constructively received by you, or by the depository in the case of ADSs. Distributions that exceed our current and accumulated earnings and profits will be treated as a return of capital to you to the extent of your basis in the H shares or ADSs and thereafter as capital gain. Any dividend will not be eligible for the dividends-received deduction generally allowed to United States corporations in respect of dividends received from United States 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.

Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by an individual, trust or estate prior to January 1, 2009 with respect to the H shares or ADSs will be subject to taxation at a maximum rate of 15% if the dividends are "qualified dividends." Dividends paid on H shares or ADSs will be treated as qualified dividends if either (i) we are eligible for the benefits of a comprehensive income tax treaty with the United States that the Internal Revenue Service ("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, 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 PFIC. The income tax treaty between China and the United States has been approved for the purposes of the qualified dividend rules, and we expect to qualify for benefits under the income tax treaty between China and the United States. Moreover, the ADSs are currently traded on the NYSE. 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 2004 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 2005 taxable year or any future year. However, our status in 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 of the PFIC rules below.

The U.S. Treasury has announced its intention to promulgate rules pursuant to which holders of common stock and intermediaries through whom such stock is held will be permitted to rely on certifications from issuers to establish that dividends are treated as qualified dividends. Because such procedures have not yet been issued, it is not clear whether we will be able to comply with them. Holders of H shares or ADSs should consult their own tax advisers regarding the availability of the reduced dividend tax rate in light of their own particular circumstances.

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 by you or by the depository, regardless of whether you or the depository 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 or the depository convert the distribution into U.S. dollars will be treated as United States source ordinary income or loss.

Subject to various limitations, any Chinese tax withheld from distributions in accordance with 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 will be deductible or creditable against your United States federal income tax liability. For foreign tax credit limitation purposes, dividends paid on the H shares or ADSs will be foreign source income, and generally will be treated as "passive income" or, in the case of some U.S. holders, "financial services income." You may not be able to claim a foreign tax credit (and instead may claim a deduction) for non-United States 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, (ii) are obligated to make payments related to the dividends (for example, pursuant to a short sale) or (iii) hold the H shares or ADSs in an arrangement in which your expected economic return, after non-United States taxes, is insubstantial.

#### Sale, Exchange or Other Disposition

Upon a sale, exchange or other disposition of the H shares or ADSs, you will recognize capital gain or loss for United States 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. Any gain or loss will generally be United States source gain or loss for foreign tax credit limitation purposes. Capital gain of certain non-corporate U.S. holders, including individuals, is generally taxed at a maximum rate of 15 percent where the property has been held more than one year. Your ability to deduct capital losses is subject to limitations.

If you are paid in a currency other than U.S. dollars, any gain or loss resulting from currency exchange fluctuations during the period from the date of the payment resulting from sale, exchange or other disposition to the date you convert the payment into U.S. dollars will be treated as United States

source ordinary income or loss.

#### PFIC Rules

In general, a foreign 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:

- \* 75% or more of its gross income consists of passive income, such as dividends, interest, rents and royalties; or
- \* 50% or more of the average quarterly value of its assets consists of assets that produce, or are held for the production of, passive income.

We believe that we will not meet either of the PFIC tests in the current or subsequent taxable years and therefore will not be treated as a PFIC for such periods. However, there can be no assurance that we will not be a PFIC in the current or subsequent taxable years.

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 United States federal income tax rate on ordinary income 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.

The foregoing rules with respect to excess distributions and dispositions may be avoided or reduced if you are eligible for and timely make a valid "mark-to-market" election. If your H shares or ADSs were treated as shares regularly traded on a "qualified exchange" for United States federal income tax purposes and a valid mark-to-market election was made, in calculating your taxable income for each taxable year you generally would be required to take into account as ordinary income or loss the difference, if any, between the fair market value and the adjusted tax basis of your H shares or ADSs at the end of your taxable year. However, the amount of loss you would be allowed is limited to the extent of the net amount of previously included income as a result of the mark-to-market election. The NYSE in which the ADSs will be traded is a qualified exchange for United States federal income tax purposes.

Alternatively, a timely election to treat us as a qualified electing fund under Section 1295 of the Code 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 record keeping requirements that would permit you to make a qualified electing fund election.

If you own the H shares or ADSs during any year that we are a PFIC, you must file IRS Form 8621. We encourage you to consult your own tax advisor concerning the United States federal income tax consequences of holding the H shares or ADSs that would arise if we were considered 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.

Any amount withheld under the backup withholding rules generally will be creditable against your United States federal income tax liability provided that you furnish the required information to the IRS in a timely manner. If you do not provide a correct taxpayer identification number you may be subject to penalties imposed by the IRS.

#### Hong Kong Taxation

The following discussion summarizes the material Hong Kong tax provisions relating to the ownership of H shares or ADSs purchased in connection with the global offering and held by you.

#### Dividends

Under current practice, no tax will be payable in Hong Kong in respect of dividends paid by us.  
Taxation of Capital Gains

No tax is generally imposed in Hong Kong in respect of capital gains from the sale of property (such as the H shares). Trading gains from the sale of property by persons carrying on a business in Hong Kong, where such gains are derived from or arise in Hong Kong from such business, will be chargeable to Hong Kong profits tax, which is currently imposed at the rate of 17.5% on corporations and at a maximum rate of 16.0% on individuals. Gains from sales of the H shares effected on the Hong Kong

Stock Exchange will be considered to be derived from or arise in Hong Kong. Liability for Hong Kong profits tax would thus arise in respect of trading gains from sales of H shares realized by persons carrying on a business of trading or dealing in Hong Kong in securities.

There will be no liability for Hong Kong profits tax in respect of profits from the sale of ADSs, where purchases and sales of ADSs are effected outside Hong Kong, e.g. on the NYSE.

#### Hong Kong Stamp Duty

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Hong Kong stamp duty will be payable by each of the seller and the purchaser for every sale and purchase, respectively, of the H shares. Stamp duty is charged at the 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 duty not paid will be assessed on the instrument of transfer (if any), and the transferee will be liable for payment of such duty.

The withdrawal of H shares when ADSs are surrendered, and the issuance of ADSs when H shares are deposited, may be subject to Hong Kong stamp duty at the rate described above for sale and purchase transactions, unless the withdrawal or deposit does not result in a change of beneficial ownership under Hong Kong law. 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. You are not liable for the Hong Kong stamp duty on transfers of ADSs outside of Hong Kong so long as it does not result in a change of beneficial interest in the H shares.

#### Hong Kong Estate Duty

The Hong Kong budget handed down on March 16, 2005 proposed abolition of Hong Kong Estate Duty. As of the date of this Annual Report, relevant legislation has not yet been introduced although it is expected that this recommendation will be implemented. It is also expected that the abolition will take effect from the date of enactment and will not retroactively apply.

Estate duty is imposed upon the principal value of property situated in Hong Kong passing on the death of a person. H shares are regarded as property situated in Hong Kong for estate duty purposes. Hong Kong estate duty is imposed on the principal value of a deceased's estate at graduated rates from 5% to 15%. No estate duty is payable where the principal value of the dutiable estate does not exceed HK\$7.5 million; the maximum rate of 15% applies where the principal value exceeds HK\$10.5 million.

#### **U.S. GAAP Reconciliation**

We have restated the U.S. GAAP reconciliation of owners' equity as of December 31, 2001, 2002 and 2003 and net income for the year ended December 31, 2002 to properly reflect the effect under U.S. GAAP of recognition of a deferred tax asset arising from the revaluation of fixed assets and mining rights that occurred in connection with the Reorganization effective July 1, 2001. Under U.S. GAAP, the deferred tax asset should have been recorded in 2001, applying the statutory tax rate of 33% then applicable to us. We adjusted the deferred tax asset downwards in

2002, at a time when our tax rate had been reduced from 33% to 15% for certain branches by means of various tax preferences available under PRC law. Accordingly, the amount of the deferred tax asset that we recorded in 2002, reflecting the lower tax rate for certain tax preferred entities, was less than the deferred tax asset that should have been recorded under U.S. GAAP in 2001, reflecting the higher rate. Although the deferred tax asset had not been recognized, we have recorded the reversal effects of the deferred tax asset in 2001, 2002 and 2003. The restatement arises as a result of recognizing the initial deferred tax asset in 2001, and the subsequent reduction of the amount of that asset in 2002 at the time our tax preferences for certain tax preferred entities were approved by PRC tax authorities.

#### Comparison of NYSE Corporate Governance Rules and PRC Corporate Governance Rules For Listed Companies

Under the amended Corporate Governance Rules of NYSE, foreign issuers (including us) listed on the NYSE are required to disclose a summary of the significant differences between their domestic corporate governance rules and NYSE corporate governance rules that would apply to a U.S. domestic issuer. We have posted a description of such differences on our website: [http://www.chalco.com.cn/report/2004\\_e\\_06.pdf](http://www.chalco.com.cn/report/2004_e_06.pdf).

#### Documents on Display

We are subject to the information reporting requirements of the Exchange Act and, in accordance with the Act, file certain reports and other information with the SEC. You may read and copy any report, statement or other information filed by us at the SEC's public reference rooms in Washington, D.C., New York and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our reports and other information filed with the SEC are also available to the public from commercial document retrieval services and the website maintained by the SEC at <http://www.sec.gov>.

As a foreign private issuer, we are exempt from the rules under the Act prescribing the furnishing and content of proxy statements to shareholders.

#### QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

##### ITEM 11.

We are exposed to various types of market risks, including credit risk relating to financial assets, 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 and long-term funds, including variable-rate debt, principally denominated in RMB. We hedge a limited amount of our sales through trading of futures contracts on the Shanghai Futures Exchange. 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 constitutes "forward-looking statements" that involve risk and uncertainties, summarize our market-sensitive financial instruments including fair value, maturity and contract terms. Such discussions address market risk only and do not present other risks, which we face in the normal course of business.

#### Credit Risk

The carrying amount of accounts and other receivables included in the balance sheet represent our maximum exposure to credit risk in relation to our financial assets. We perform periodic credit evaluations of our customers and believe that we have made adequate provision for uncollectible accounts and other receivables in the financial statements.

None of our major customers exceed 10% of total revenue and do not individually present a material risk to our sales.

We maintain substantially all of our cash and cash equivalents in interest-bearing accounts in several major financial institutions in the PRC. No other financial assets carry a significant exposure to credit risk.

We use the majority of our futures contracts traded on the Shanghai Futures Exchange and LME to hedge against adverse fluctuations in aluminum price and do not hold other derivatives instruments. The futures contracts are marked to market at balance sheet dates and corresponding unrealized holding gains (loss) are recorded in the profit and loss account for the year. The fair value of the unrealized holding gains (losses) for the years ended December 31, 2003 and 2004 were RMB(10,244) and RMB(4,972), respectively.

#### Foreign Exchange Rate Risk

We conduct our business primarily in Renminbi, which is also our functional and reporting currency. We convert a portion of our Renminbi revenues into other currencies to meet foreign currency financial 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 State Administration of Foreign Exchange. Actions taken by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates. Although the Renminbi to U.S. dollar exchange rate has been relatively stable since 1994, we cannot predict nor give any assurance of its future stability. Fluctuations in exchange rates could adversely affect the value, translated or converted into U.S. dollars or Hong Kong dollars, of our net assets, earnings and any declared dividends. We cannot assure you that any future movements in the exchange rates of Renminbi against the U.S. dollar and other foreign currencies will not adversely affect our operating performances and financial condition.

As of December 31, 2004, we had outstanding loans of 8.0 million Danish Krone (RMB12.2 million) and bank balances of US\$55.5 million and HK\$249,000. See Note 27 to our audited financial statements. We had U.S. dollar denominated accounts receivable of US\$23.7 million at the same date. Most of our sales are domestic and as such we have a limited amount of foreign currency denominated accounts receivable. We earn a small amount of foreign currency, primarily U.S. dollars, from primary aluminum exports, which totaled 56,600 tonnes in 2004, and through our processing or tolling business.

A significant depreciation in the Renminbi against major foreign currencies could have an adverse impact on our capital expenditures program. We have incurred relatively small amounts of foreign currency denominated debt for capital expenditures primarily relating to development of our alumina refineries, and may incur foreign currency denominated debt in the future. To the extent the Renminbi devalues against any of these currencies, it would correspondingly increase our repayment costs on such loans.

### Interest Rate Risk

We are exposed to interest rate risk resulting from fluctuations in interest rates on our debt, primarily on our long-term debt obligations. Our debt consists of fixed and variable-rate debt obligations with original maturities ranging from one to 15 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 debt and the interest cost of outstanding variable rate borrowings. Fluctuations in interest rates can also lead to significant fluctuations in the fair values of our debt obligations. We do not currently use any derivative instruments to modify the nature of our debt so as to manage our interest rate risk.

The table below sets forth information about our interest rate sensitive financial instruments, including foreign currency denominated debt instruments that are sensitive to foreign currency exchange rates. The table presents principal cash flows and related weighted average interest rates by expected maturity dates. The information is presented in Renminbi equivalents. We do not have any capital lease obligations. The information below should be read in conjunction with our audited balance sheets and Note 27 to our audited financial statements beginning on page F-44.

### Expected Maturity

	2005	2006	2007	2008	2009 and thereafter	Total	Fair Value
(in thousands, except percentage data)							
Short-term loans:							
Fixed rate (RMB)	3,448,910	--	--	--	--	3,448,910	3,448,910
Average interest rate	4.67%						
Long-term loans:							
Variable rate (RMB)	1,073,658	1,621,658	1,886,818	1,131,658	2,751,529	8,465,321	8,465,321
Average interest rate	5.352%	--	--	--	--		

Fixed rate (Danish kroner)*	1,066	1,066	1,066	1,066	7,897	12,161	9,638
Average interest rate	0.3%	0.3%	0.3%	0.3%	0.3%		

\* Data in Renminbi equivalents.

#### Commodity Price Risk

We are exposed to fluctuations in the prices of alumina and primary aluminum. We import alumina from suppliers outside of China. Such purchases are made at market prices. In addition, all our sales of alumina and primary aluminum are made at market prices. Therefore, fluctuations in the prices of alumina and primary aluminum have a significant effect on our operating performances.

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We enter into short-term futures contracts traded on the Shanghai Futures Exchange and LME to hedge a limited amount of sales of primary aluminum so as to minimize the impact of the fluctuations in the price of primary aluminum on our operating performances. Gains and losses on such futures contracts are recorded as other income or expenses at each balance sheet date. The contracts have maturity dates that do not exceed six months.

As of December 31, 2003 and 2004, we had outstanding the following primary aluminum futures contracts:

	As of December 31					
	2003			2004		
	Contract value RMB	Market value RMB	Fair value RMB	Contact value RMB	Market value RMB	Fair value RMB
	(in thousands)					
Future contracts	179,244	189,488	(10,244)	220,961	225,933	(4,972)

The fair values of futures contracts are based on quoted market prices. As of December 31, 2003 and 2004, we held futures contracts covering 12,050 tonnes and 13,845 tonnes of primary aluminum maturing in the first nine months of 2004 and in the first three months of 2005, respectively. Market prices of these primary aluminum futures contracts outstanding at December 31, 2003 and 2004 ranged from RMB13,800 to RMB16,300 per tonne and RMB16,214 to RMB16,430 per tonne respectively.



DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

ITEM 12.

Not applicable.

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PART II

DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

ITEM 13.

As of December 31, 2004, we were not in default in the payment of principal or interest of any lender.

MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

ITEM 14.

None.

CONTROLS AND PROCEDURES

ITEM 15.

As of the end of the period covered by this report, an evaluation was carried out under the supervision of and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-14(c) and 15d-14(c), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002). Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures as of December 31, 2004 were effective in timely alerting them to material information about us required to be disclosed in the reports we file or submit under the Act, and effectively ensure the recording, processing, summarizing and reporting of such material information in accordance with the rules and forms of the SEC.

During the period covered by this Annual Report, no significant change has occurred in our internal controls over financial reporting that has materially affected, or reasonably likely to materially affect, our internal controls over financial reporting. However, we have found from the implementation of our current internal control system a number of weaknesses, including the rigor of U.S. GAAP financial reporting process, formalization of risk assessment framework, assessment documentation and independence of our internal audit force. We have set up a special panel and a project management

committee for design, testing and implementation of a comprehensive system of corporate internal controls in order to enhance the effectiveness of our internal control system and to correct the weaknesses in connection with internal controls. We are required under Section 404 of the Sarbanes-Oxley Act to complete implementation before the end of 2006.

[RESERVED]

ITEM 16.

AUDIT COMMITTEE FINANCIAL EXPERT

ITEM 16A

Our Audit Committee members are Mr. Wang Dianzuo, Mr. Chiu Chi Cheong Clifton and Mr. Kang Yi. Our Board of Directors has determined that Mr. Chiu Chi Cheong Clifton is the financial expert serving on our Audit Committee. See "Item 6. Directors, Senior Management and Employees."

CODE OF ETHICS

ITEM 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: <http://www.chalco.com.cn>. A copy of this Code of Ethics is available, without charge, upon request from the address on the cover of this Form 20-F.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

ITEM 16C.

PricewaterhouseCoopers served as our independent auditors for the 2004 fiscal year. A description of the fees billed to us by PricewaterhouseCoopers for professional services in each of the last two fiscal years is set forth below:

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Year ended December 31,	
2003	2004
RMB	RMB
(in thousands)	

Audit fees	12,657	17,320
Audit-related fees	786	1,197
All other fees	-	-
Total	13,443	18,517

"Audit Fees" are the aggregate fees billed by PricewaterhouseCoopers for the audit of our consolidated annual financial statements, reviews of interim financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements. "Audit-Related Fees" are fees charged by PricewaterhouseCoopers for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "Audit Fees."

Audit Related Services include those other assurances and related services provided by auditors, but not restricted to those that can only reasonably be provided by the external auditors signing the auditors' report, that are reasonably related to the performance of the audit or review of the Company's financial statements such as acquisition due diligence, audits of pension and benefit plans, consultations concerning financial accounting and reporting standards.

In April 2003, our Audit Committee established pre-approval policies and procedures under which all audit and non-audit services performed by our principal accountants must be approved by the Audit Committee. For 2004, all of the services provided by PricewaterhouseCoopers were pre-approved by the Audit Committee.

#### EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

##### ITEM 16D.

Currently, our Audit Committee consists of three Independent Non-executive Directors, namely, Mr. Wang Dianzuo, Mr. Chiu Chi Cheong Clifton and Mr. Kang Yi. Mr. Kang Yi was appointed as a member by the Board on March 28, 2005 to replace the previous Audit Committee member Mr. Chen Xiaozhou, who resigned on March 27, 2005. Mr. Chiu Chi Cheong Clifton serves as the chairman of the committee and is a financial expert. Until the appointment of Mr. Kang Yi, our audit committee may not have been in compliance with the NYSE Corporate Governance Rules, as Mr. Chen Xiaozhou was not classified as an independent director by us. We rely on the exemption under Section 303A.00 of the NYSE Corporate Governance Rules which allows foreign private issuers until July 31, 2005 to comply with the audit committee standards set out in Section 303A.06. Our Audit Committee is currently in compliance with the NYSE Corporate Governance Rules. We rely on the exemption under Section 303A.00 of the NYSE Corporate Governance Rules which allows foreign private issuers to follow our home country practice in lieu of the provisions of Section 303A.07 relating to Audit Committees.

#### PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS.

##### ITEM 16E.

None.

### PART III

FINANCIAL STATEMENTS

ITEM 17.

We have elected to provide the financial statements and related information specified in Item 18 in lieu of Item 17.

FINANCIAL STATEMENTS

ITEM 18.

See pages F-1 to F-69 following Item 19.

EXHIBITS

ITEM 19.

(a) See pages F-1 to F-69 following this item.

(b) Index of Exhibits

Documents filed as exhibits to this Annual Report:

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Exhibit Number Description

6.1	-	Statement explaining how earnings per share information was calculated in this Annual Report
7.1	-	Statements explaining how certain ratios are calculated in this Annual Report
8.1	-	List of all of our subsidiaries as of December 31, 2004
12.1	-	Certifications pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2	-	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)

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ALUMINUM CORPORATION OF CHINA LIMITED

CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2003 AND 2004 AND  
FOR THE YEARS ENDED DECEMBER 31, 2002, 2003 AND 2004

<u>Contents</u>	<u>Pages</u>
Report of Independent Registered Public Accounting Firm	<u>F-1</u>
Consolidated Statements of Income for the years ended December 31, 2002, 2003 and 2004	<u>F-2</u>
Consolidated Balance Sheets as of December 31, 2003 and 2004	<u>F-3</u>
Consolidated Statements of Cash Flows for the years ended December 31, 2002, 2003 and 2004	<u>F-4</u>
Consolidated Statements of Owner's Equity for the years ended December 31, 2002, 2003 and 2004	<u>F-7</u>
Notes to the Consolidated Financial Statements	<u>F-8</u>

SIGNATURE

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 its behalf.

ALUMINUM CORPORATION OF CHINA LIMITED

By: \_\_\_\_\_  
/s/ XIAO Yaqing  
XIAO Yaqing  
Chief Executive Officer

Date: May 24, 2005

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Statement Explaining How Earnings Per Share Information  
Was Calculated in This Annual Report

The calculation of basic earnings per share for the year ended December 31, 2004 is based on the combined net income for the year attributable to ordinary shareholders of RMB6,223.9 million divided by the weighted average number of ordinary shares outstanding in 2004, which were 11,040,835,452 shares. As there are no dilutive securities, there is no difference between basic and diluted pro forma earnings per share.

Statement Explaining How Certain Ratios Were Calculated in Annual Report

The leverage ratio of Chalco is calculated using our total debt divided by the aggregate of our total debt plus owners' equity. Our leverage ratio was 39.3% (RMB10,052,572 divided by the sum of RMB10,052,572 and RMB15,523,947), 34.9% (RMB10,029,758 divided by the sum of RMB10,029,758 and RMB18,742,341) and 30.5% (RMB11,914,231 divided by the sum of RMB11,914,231 and RMB27,156,143) as of December 31, 2002, 2003 and 2004, respectively.

List of Subsidiaries of Aluminum Corporation of China Limited

The following table lists information concerning the subsidiaries of Aluminum Corporation of China Limited:

Name	Jurisdiction of Incorporation	Percentage of Interest held by Chalco
Subsidiaries:		
Shandong Aluminum Industry Co., Ltd.	PRC	71.4%
Shandong Hengcheng Machinery Works	PRC	100%
Shanxi Longmen Aluminum Co., Ltd.	PRC	55%
Zibo Shengye Science Industrial Trading Co., Ltd.	PRC	100% (of which 43% is held indirectly)
The Design Institute of Shandong Aluminum Corporation	PRC	100%
Zibo Wancheng Industrial Trading Co., Ltd.	PRC	100%
Zhengzhou Hicer Hitech Ceramics Co., Ltd.	PRC	80%
Zibo Kaipeng HI-tech and Industrial Trading Co., Ltd.	PRC	100% (of which 32.5% is held indirectly)
Hejing Hedong Carbon Plant	PRC	72.6%
China Aluminum International Trading Co., Ltd.	PRC	100%
Shandong Aluminum Electronic Technology Co., Ltd.	PRC	75%
Research & Design Institute Great Wall Aluminum Corporation	PRC	100%
Shanxi Huazhe Aluminum and Electricity Co., Ltd.	PRC	60%
China Aluminum Qinghai International Trading Corp., Ltd.	PRC	90% (held indirectly)
Chalco Foshan Trading Co., Ltd.	PRC	99% (held indirectly)
Chalco Chongqing Trading Co., Ltd.	PRC	99.5% (held indirectly)

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China Aluminum International Shipping and Forwarding (Beijing) Corp., Ltd.	PRC	98% (held indirectly)
Chalco Kelin Aluminum of Shanghai Co., Ltd.	PRC	99% (held indirectly)
Chalco Western Qinghai International Trading Co., Ltd.	PRC	90% (held indirectly)
Shanxi Huatai Coal Co., Ltd.	PRC	98.81% (5% held indirectly)
Aluminum Corporation of China (Hong Kong) Ltd.	Hong Kong	100% (held indirectly)

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EXHIBIT 12.1

CERTIFICATION PURSUANT TO RULE 13a-14 OR 15d-14  
OF THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, XIAO Yaqing, certify that:

1. I have reviewed this annual report on Form 20-F of Aluminum Corporation of China Limited;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - 4.1 designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - 4.2 evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
  - 4.3 disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially

affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of registrant's Board of Directors (or persons performing the equivalent function):

5.1 all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

5.2 any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ XIAO Yaqing

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XIAO Yaqing  
Chief Executive Officer  
May 24, 2005

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EXHIBIT 12.1

CERTIFICATION PURSUANT TO RULE 13a-14 OR 15d-14  
OF THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, CHEN Jihua, certify that:

1. I have reviewed this annual report on Form 20-F of Aluminum Corporation of China Limited;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:



- 4.1 designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
- 4.2 evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
- 4.3 disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Audit Committee of registrant's Board of Directors (or persons performing the equivalent function):
- 5.1 all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- 5.2 any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ CHEN Jihua

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CHEN Jihua  
Chief Financial Officer  
May 24, 2005

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EXHIBIT 12.2

CERTIFICATION PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002  
(18 U.S.C. SECTION 1350)

In connection with the annual report of Aluminum Corporation of China Limited, a joint stock limited company incorporated in the People's Republic of China with limited liability (the "Company"), on Form 20-F for the

year ended December 31, 2004 as filed with the Securities and Exchange Commission (the "Report"), I, XIAO Yaqing, Chief Executive Officer of the Company, certify, pursuant to §906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. §1350), that to the best of my knowledge: (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ XIAO Yaqing

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XIAO Yaqing  
Chief Executive Officer  
May 24, 2005

\*A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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EXHIBIT 12.2

CERTIFICATION PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002  
(18 U.S.C. SECTION 1350)

In connection with the annual report of Aluminum Corporation of China Limited, a joint stock limited company incorporated in the People's Republic of China with limited liability (the "Company"), on Form 20-F for the year ended December 31, 2004 as filed with the Securities and Exchange Commission (the "Report"), I, CHEN Jihua, Chief Financial Officer of the Company, certify, pursuant to §906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. §1350), that to the best of my knowledge: (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ CHEN Jihua

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CHEN Jihua  
Chief Financial Officer  
May 24, 2005

\*A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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FINANCIAL STATEMENTS FOR THE

YEAR ENDED DECEMBER 31, 2004

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Aluminum Corporation of China Limited

In our opinion, the accompanying consolidated balance sheets as of December 31, 2003 and 2004 and the related consolidated statements of income, owner's equity and cash flows, prepared in accordance with accounting principles generally accepted in Hong Kong, present fairly, in all material respects, the consolidated financial position of Aluminum Corporation of China Limited (the "Company") and its subsidiaries (together "the Group") as of December 31, 2003 and 2004, and the consolidated results of their operations and their cash flows for each of the three years ended December 31, 2002, 2003 and 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements 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 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Accounting principles generally accepted in Hong Kong vary in certain significant respects from accounting principles generally accepted in the United States. Information relating to the nature and effect of such differences is presented in Note 33, as restated, to the consolidated financial statements.

PricewaterhouseCoopers  
Certified Public Accountants

Hong Kong, May 23, 2005

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ALUMINUM CORPORATION OF CHINA LIMITED

CONSOLIDATED STATEMENTS OF INCOME  
FOR THE YEARS ENDED DECEMBER 31, 2002, 2003 AND 2004

(RMB and US\$ amounts in thousands, except per share data)

	Note	2002 RMB	2003 RMB	2004 RMB	2004 US\$
Sales of goods	3	16,792,766	23,245,858	32,313,076	3,904,196
Cost of goods sold		13,349,514	16,439,534	21,464,189	2,593,390
		<hr/>	<hr/>	<hr/>	<hr/>
Gross profit		3,443,252	6,806,324	10,848,887	1,310,806
Other revenues	3	522,875	580,171	708,158	85,562
Expenses related to other revenues	4	459,777	512,220	592,630	71,603
		<hr/>	<hr/>	<hr/>	<hr/>
Other revenues, net		63,098	67,951	115,528	13,959
		<hr/>	<hr/>	<hr/>	<hr/>
Selling and distribution expenses	5	501,829	549,432	647,532	78,237
General and administrative expenses	6	733,803	1,047,461	1,220,902	147,515
Research and development expenses		131,941	173,359	132,635	16,025
Other expenses, net	7	16,089	25,543	3,383	409
		<hr/>	<hr/>	<hr/>	<hr/>
Operating income		2,122,688	5,078,480	8,959,963	1,082,579
Finance costs	11	490,614	451,411	408,992	49,416
		<hr/>	<hr/>	<hr/>	<hr/>

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Operating income after finance costs		1,632,074	4,627,069	8,550,971	1,033,163
Share of (loss) income of jointly controlled entities		(254)	1,193	(3,953)	(478)
		<u>1,631,820</u>	<u>4,628,262</u>	<u>8,547,018</u>	<u>1,032,685</u>
Income before income taxes		1,631,820	4,628,262	8,547,018	1,032,685
Income taxes	12	183,393	918,862	2,079,538	251,258
		<u>1,448,427</u>	<u>3,709,400</u>	<u>6,467,480</u>	<u>781,427</u>
Income after income taxes		1,448,427	3,709,400	6,467,480	781,427
Minority interests		46,822	157,370	243,540	29,426
		<u>1,401,605</u>	<u>3,552,030</u>	<u>6,223,940</u>	<u>752,001</u>
		<u>1,401,605</u>	<u>3,552,030</u>	<u>6,223,940</u>	<u>752,001</u>
Dividend	13	472,496	1,060,788	1,944,778	235,161
		<u>472,496</u>	<u>1,060,788</u>	<u>1,944,778</u>	<u>235,161</u>
Basic net income per share	14	RMB0.13	RMB0.34	RMB0.56	US\$0.07
		<u>RMB0.13</u>	<u>RMB0.34</u>	<u>RMB0.56</u>	<u>US\$0.07</u>

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

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ALUMINUM CORPORATION OF CHINA LIMITED

CONSOLIDATED BALANCE SHEETS

AS OF DECEMBER 31, 2003 AND 2004

(RMB and US\$ amounts in thousands, except per share data)

	Note	2003 RMB	2004 RMB	2004 US\$
Assets				
Current assets				
Cash and cash equivalents	15	2,596,440	6,223,763	751,980
Accounts receivable, net	16	787,891	1,786,822	215,891
Due from related parties	17	452,498	438,658	53,004
Inventories	18	4,125,818	5,231,907	632,140
Other current assets	19	675,919	664,578	80,297

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Investment in securities - mature within 1 year		-	10,860	1,312
Total current assets		8,638,566	14,356,588	1,734,624
Investment in securities	20	21,309	10,800	1,305
Interests in jointly controlled entities	21(a)	21,330	66,877	8,080
Interests in an associated company	21(b)	-	45,000	5,437
Property, plant and equipment	22	25,554,197	33,464,575	4,043,324
Deferred tax assets	12(d)	136,878	307,370	37,138
Intangible assets	23	706,015	729,153	88,099
Total assets		35,078,295	48,980,363	5,918,007
Liabilities and Equity				
Current liabilities				
Accounts payable	24	1,867,666	1,968,423	237,833
Due to related parties	25	387,864	636,215	76,873
Other payables and accruals	26	2,834,096	4,987,760	602,641
Current portion of long-term loans	27	815,845	1,073,658	129,724
Unsecured short-term loans		3,801,285	3,448,910	416,711
Income tax payable		564,642	1,078,508	130,310
Total current liabilities		10,271,398	13,193,474	1,594,092
Long-term loans	27	5,412,628	7,391,663	893,090
Total liabilities		15,684,026	20,585,137	2,487,182
Commitments and contingencies - Notes 28 and 29				
Minority interests		651,928	1,239,083	149,711
Owner's equity/issued capital and reserves	30	18,742,341	27,156,143	3,281,114
Total liabilities and equity		35,078,295	48,980,363	5,918,007

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

## ALUMINUM CORPORATION OF CHINA LIMITED

## CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2002, 2003 AND 2004

(RMB and US\$ amounts in thousands, except per share data)

	2002	2003	2004	2004
	RMB	RMB	RMB	US\$
Cash flow from operating activities				
Operating income after finance costs	1,632,074	4,627,069	8,550,971	1,033,163
Depreciation	1,981,537	2,043,983	2,312,540	279,410
Loss on disposal of property, plant and equipment	7,270	160,823	43,740	5,285
Impairment loss on property, plant and equipment	-	74,485	20,227	2,444
Amortization of intangible assets	44,119	48,464	58,468	7,064
Unrealized loss on short-term investments	786	2,979	917	111
Realized gain on short-term investments	-	-	(403)	(49)
Unrealized (gain)loss on futures contracts	(13,180)	10,244	4,972	601
Realised loss on futures contracts	-	54,970	20,520	2,479
Loss on disposal of long-term investments	-	-	-	-
Interest waived	-	(44,476)	(9,777)	(1,181)
Interest income	(42,069)	(26,204)	(61,540)	(7,436)
Interest expense	490,614	451,411	408,992	49,416
Income from unlisted investment securities	(30)	(351)	(351)	(42)
	<hr/>	<hr/>	<hr/>	<hr/>
Operating income before working capital changes	4,101,121	7,403,397	11,349,276	1,371,265
Decrease(increase) in inventories	484,783	(819,477)	(1,164,495)	(140,699)
Decrease(increase) in accounts receivable and other receivables, including amounts due from related parties	783,735	1,069,109	(982,300)	(118,693)
(Decrease)increase in accounts payable and other payables, including amounts due to related parties	(1,470,077)	(223,159)	1,255,177	151,663

Cash generated from operations	3,899,562	7,429,870	10,457,658	1,263,536
Interest paid	(904,489)	(600,836)	(456,291)	(55,131)
PRC income taxes paid	(323,314)	(826,528)	(1,736,164)	(209,770)
Net cash inflow from operating activities	2,671,759	6,002,506	8,265,203	998,635

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

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## ALUMINUM CORPORATION OF CHINA LIMITED

### CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2002, 2003 AND 2004

(RMB and US\$ amounts in thousands, except per share data)

	2002	2003	2004	2004
	RMB	RMB	RMB	US\$
Investing activities				
Purchase of property, plant and equipment, excluding interest capitalized	(3,894,198)	(5,352,771)	(8,972,400)	(1,084,081)
Sale of property, plant and equipment	29,296	50,038	53,864	6,508
Purchase of intangible assets	(19,840)	(17,542)	(81,606)	(9,860)
Purchase of investments				
- Held-to-maturity debt securities	(10,000)	-	-	-
- Short-term listed investments	(3,651)	(51,067)	(3,405)	(411)
Purchase of an unlisted equity investment	-	(10,000)	-	-
Investment in a jointly controlled entity	-	(3,300)	(49,500)	(5,981)
Investment in an associated company	-	-	(45,000)	(5,437)
Sales of long-term unlisted equity investment	-	100	-	-
Loss on settlement of future contracts	-	(41,790)	(30,764)	(3,717)
Sale of short-term listed investments	382	4,869	11,441	1,382
Interest received	42,069	26,204	61,540	7,436



Dividends received from long-term investments	30	-	-	-
Net decrease in bank deposits with initial term of over three months	75,100	-	-	-
Net cash used in investing activities	(3,780,812)	(5,395,259)	(9,055,830)	(1,094,161)
Net cash (outflow)inflow before financing	(1,109,053)	607,247	(790,627)	(95,526)

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

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## ALUMINUM CORPORATION OF CHINA LIMITED

### CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED) FOR THE YEARS ENDED DECEMBER 31, 2002, 2003 AND 2004 (RMB and US\$ amounts in thousands, except per share data)

	Note	2002 RMB	2003 RMB	2004 RMB	2004 US\$
Financing activities					
Issue of shares	31	215,170	-	3,300,648	398,798
Share issue expenses	31	(10,415)	-	(49,998)	(6,041)
New loans borrowed		6,764,405	5,631,789	7,302,829	882,357
Repayment of amounts borrowed		(7,721,284)	(5,654,603)	(5,418,356)	(654,668)
	31	(956,879)	(22,814)	1,884,473	227,689
Decrease in bank deposits pledged		101,002	46,169	-	-
Dividend paid by subsidiaries to minority shareholders	31	(39,493)	(23,851)	(16,885)	(2,040)
Other contribution by Chinalco #		-	85,500	-	-
Capital injection by minority shareholders	31	600	80,600	360,500	43,557
Dividend paid	31	(178,498)	(472,496)	(1,060,788)	(128,169)
Net cash (outflow)inflow from financing		(868,513)	(306,892)	4,417,950	533,794

(Decrease)increase in cash and cash equivalents	(1,977,566)	300,355	3,627,323	438,268
Cash and cash equivalents at beginning of the year	4,273,651	2,296,085	2,596,440	313,712
Cash and cash equivalents at end of the year	2,296,085	2,596,440	6,223,763	751,980
Analysis of balances of cash and cash equivalents:				
Bank balances and cash	2,296,085	2,596,440	6,223,763	751,980

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Aluminum Corporation of China (Chinese Characters) ("Chinalco or the holding company")

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

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## ALUMINUM CORPORATION OF CHINA LIMITED

### CONSOLIDATED STATEMENTS OF OWNER'S EQUITY FOR THE YEARS ENDED DECEMBER 31, 2002, 2003 AND 2004 (RMB and US\$ amounts in thousands, except per share data)

		Statutory				
Share capital	Capital reserve	Statutory surplus reserve	public welfare fund	Retained earnings	Total	
Note 30(a)	Note 30(b)(i)	Note 30(b)(ii)	Note 30(b)(iii)	Note 30(b)(iv)		
RMB	RMB	RMB	RMB	RMB	RMB	

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As of January 1, 2002	10,352,942	3,252,461	50,646	47,836	392,200	14,096,085
Issue of shares	146,958	68,212	-	-	-	215,170
Share issue expenses	-	(10,415)	-	-	-	(10,415)
Net income for the year	-	-	-	-	1,401,605	1,401,605
Transfer to						
- statutory surplus reserve	-	-	147,840	-	(147,840)	-
- statutory public welfare fund	-	-	-	142,633	(142,633)	-
Dividend paid	-	-	-	-	(178,498)	(178,498)
As of December 31, 2002	10,499,900	3,310,258	198,486	190,469	1,324,834	15,523,947
Net income for the year	-	-	-	-	3,552,030	3,552,030
Transfer to						
- capital reserve	-	44,476	-	-	(44,476)	-
- statutory surplus reserve	-	-	394,196	-	(394,196)	-
- statutory public welfare fund	-	-	-	372,548	(372,548)	-
Dividend paid	-	-	-	-	(472,496)	(472,496)
Other reserve	-	138,860	-	-	-	138,860
As of December 31, 2003	10,499,900	3,493,594	592,682	563,017	3,593,148	18,742,341
Issue of shares	549,976	2,750,672	-	-	-	3,300,648
Shares issue expenses	-	(49,998)	-	-	-	(49,998)
Net income for the year	-	-	-	-	6,223,940	6,223,940
Transfer to						
- capital reserve (Note 7(b))	-	9,777	-	-	(9,777)	-
- statutory surplus reserve	-	-	685,107	-	(685,107)	-
- statutory public welfare fund	-	-	-	651,292	(651,292)	-
Dividend paid (Note 13)	-	-	-	-	(1,060,788)	(1,060,788)
As of December 31, 2004	11,049,876	6,204,045	1,277,789	1,214,309	7,410,124	27,156,143

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

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## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

### 1 Basis of preparation

The consolidated financial statements have been prepared in accordance with accounting principals generally accepted in Hong Kong and comply with accounting standards issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). They have been prepared under the historical cost convention except that short-term investments and futures contracts are stated at fair value and held-to-maturity securities are stated at amortized cost.

HKICPA has issued a number of new and revised Hong Kong Financial Reporting Standards and Hong Kong Accounting Standards ("new HKFRSs") which are effective for accounting periods beginning on or after January 1, 2005. The Group has not early adopted these new HKFRSs in the financial statements for the year ended December 31, 2004. The Group has already commenced an assessment of the impact of these new HKFRSs and the effect of the more significant differences between new HKFRSs and current accounting policies that are expected to affect the Group are stated in Note 33(i).

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the respective years. Actual results could differ from these estimates.

The financial statements are expressed in Renminbi ("RMB"), the national currency of the PRC. Solely for the convenience of the reader, the financial statements as of and for the year ended December 31, 2004 have been translated into United States Dollars ("US\$") at the noon buying rate in New York City on December 31, 2004 for cable transfers in RMB as certified for customs purposes by the Federal Reserve Bank of New York of US\$1.00=RMB8.2765. No representation is made that the RMB amounts could have been, or could be, converted into US\$ at that rate or at any other certain rate on December 31, 2004, or at any other date.

### 2 Principal accounting policies

#### (a) Subsidiaries

Subsidiaries are enterprises in which the Group controls the composition of the Board of Directors, controls more than half of the voting power, holds more than 50 percent of the issued share capital or has power to exercise control over the financial and operating policies. Minority interests represent the interests of outside shareholders in the operating results and net assets of subsidiaries.

The results of operations of subsidiaries acquired or disposed of during the year are included in the consolidated statement of income from the effective date of acquisition or up to the effective date of disposal, as appropriate, and the share attributable to minority interests is deducted from the net results. Intercompany transactions and balances within the Group are eliminated on consolidation.

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 2 Principal accounting policies (continued)

## (a) Subsidiaries (continued)

The following table lists the Company's principal subsidiaries. These subsidiaries are incorporated or established in the PRC under their Chinese names and the Company's ownership is based on these Chinese names. The English names set forth below represent translations by management from the official Chinese names, solely for the convenience of reference.

Name	Place of Incorporation and operation	Legal status	Particulars of issued capital	Equity interest held	Principal Activities
Shandong Aluminum Industry Co., Ltd. (Chinese Characters)	PRC	Joint stock company with limited liability listed on the Shanghai Stock Exchange	672,000,000 A shares of RMB0.001 each	71.4%	Production and distribution of alumina and primary aluminum
Shandong Hengcheng Machinery Works (Chinese Characters)	PRC	1 (Note)	Paid up capital of RMB14,087	100%	Production of mechanical equipment
Shanxi Longmen Aluminum Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB40,000	55%	Production and distribution of primary aluminum
Zibo Shengye Science Industrial Trading Co., Ltd.	PRC	Company with limited liability	Paid up capital of RMB2,134	100% (of which 43% is held)	Production, installation and repair of testers

(Chinese Characters)				indirectly)	
The Design Institute of Shandong Aluminum Corporation (Chinese Characters)	PRC	1 (Note)	Paid up capital of RMB3,003	100%	Design of production process and provision of technical consulting services
Zibo Wancheng Industrial Trading Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB13,870	100%	Provision of repair and maintenance services for electrical plant and machinery
Zhengzhou Hicer Hitech Ceramics Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB5,000	80%	Production and distribution of ceramic products

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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 2 Principal accounting policies (continued)

## (a) Subsidiaries (continued)

Name	Place of Incorporation and operation	Legal status	Particulars of issued capital	Equity interest held	Principal Activities
Zibo Kaipeng Hi-tech and Industrial Trading Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB922	100% (of which 32.5% is held indirectly)	Design of production automated systems

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Hejing Hedong Carbon Plant (Chinese Characters)	PRC	2  (Note)	Paid up capital of RMB1,750	72.6%	Production and distribution of electrode
China Aluminum International Trading Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB100,000	100%	Import and export activities
Shandong Aluminum Electronic Technology Co., Ltd (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB20,000	75%	Manufacture and distribution of electronic products
Research & Design Institute Great Wall Aluminum Corporation (Chinese Characters)	PRC	1  (Note)	Paid up capital of RMB2,000	100%	Design of production process and provision of technical consulting services
Shanxi Huazhe Aluminum and Electricity Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB200,000	60%	Production and trading of primary aluminum products, and the generation of electricity
China Aluminum Qinghai International Trading Corp., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB6,000	90% (held indirectly)	Import and export activities
Chalco Foshan Trading Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB10,000	99% (held indirectly)	Trading of alumina and primary aluminum products

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 2 Principal accounting policies (continued)

## (a) Subsidiaries (continued)

Name	Place of Incorporation and operation	Legal status	Particulars of issued capital	Equity interest held	Principal Activities
Chalco Chongqing Trading Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB3,000	99.5% (held indirectly)	Trading of alumina and primary aluminum products
China Aluminum International Shipping and Forwarding (Beijing) Corp., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB6,000	98% (held indirectly)	Transportation services
Chalco Kelin Aluminum of Shanghai Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB3,000	99% (held indirectly)	Trading of alumina and primary aluminum products
Chalco Western Qinghai Int'l Trading Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB6,000	90% (held indirectly)	Import and export activities
Shanxi Huatai Coal Co., Ltd (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB42,000	98.81% (5% held indirectly)	Production and distribution of coal related



Aluminum Corporation of China (Hong Kong) Ltd. (Chinese Characters)	HK	Company with limited liability	Paid up capital of HKD0.02	100% (held indirectly)	products Trading of alumina and primary aluminum products
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Note:

As of December 31, 2004, the legal status of these subsidiaries was either "state-owned enterprise (marked with <sup>1</sup>)" or "collectively-owned enterprise (marked with <sup>2</sup>)", respectively. The Company is in the process of rectifying the legal status of these subsidiaries which have been consolidated into the financial statements as the Directors are of the view that these enterprises meet the criteria of being a subsidiary.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 2 Principal accounting policies (continued)

##### (b) Joint ventures

A jointly controlled entity is the result of the contractual arrangements whereby the Group and other parties undertake an economic activity which is subject to joint control and none of the participating parties has unilateral control over the economic activity.

The consolidated profit and loss account includes the Group's share of the results of jointly controlled entities for the year, and the consolidated balance sheet includes the Group's share of the net assets of the jointly controlled entities.

##### (c) Associated companies

An associated company is a company, not being a subsidiary or a joint venture, in which an equity interest is held for the long-term and significant influence is exercised in its management.

The consolidated profit and loss account includes the Group's share of the results of associated companies for the year, and the consolidated balance sheet includes the Group's share of the net assets of the associated companies. Equity accounting is discontinued when the carrying amount of the investment in an associated company reaches zero, unless the Group has incurred obligations

or guaranteed obligations in respect of the associated company.

Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates; unrealized losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

2 Principal accounting policies (continued)

(d) Property, plant and equipment

- (i) Tangible property, plant and equipment are stated at cost to the Group less accumulated depreciation and accumulated impairment losses.

Tangible property, plant and equipment assets are depreciated at rates sufficient to write off their cost less accumulated impairment losses to their estimated residual value over their estimated useful lives on a straight-line basis. The estimated useful lives of the respective categories of property, plant and equipment are as follows:

Buildings	15 to 40 years
Plant and machinery	10 to 20 years
Motor vehicles and transportation facilities	6 to 12 years
Office and other equipment	5 to 10 years

Costs incurred in maintaining property, plant and equipment in their normal working conditions are charged to the statement of income. Improvements are capitalized and depreciated over their expected useful lives to the Group.

- (ii) The carrying amounts of long-lived assets are reviewed whenever events or changes in circumstances indicate that the book value of the assets may not be recoverable. An impairment exists when the carrying amount of an asset exceeds its recoverable amount. The recoverable amount is measured as the higher of net selling price or value in use, calculated based on discounted future pre-tax cash flows related to the asset or the cash generating unit to which the asset belongs. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows from

other assets or group of assets. Estimates of future cash flows include projections of cash inflows from the continuing use of the asset; projections of cash outflows that are necessarily incurred to generate the cash inflows from continuing use of the asset (including cash outflows to prepare the asset for use) and that can be directly attributed, or allocated on a reasonable and consistent basis, to the asset; and net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life. If there is an indication of impairment, the carrying value of such assets is written down to its recoverable amount.

The gain or loss on disposal of a property, plant and equipment is the difference between the net sales proceeds and the carrying amount of the relevant asset, and is recognized in the statement of income.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 2 Principal accounting policies (continued)

##### (e) Construction in progress

Construction in progress represents buildings, various plant and equipment under construction and pending installation, and is stated at cost. Cost comprises direct costs of construction as well as capitalized finance costs related to funds borrowed specifically for the purpose of obtaining a qualifying asset less any accumulated impairment losses.

Capitalization of these borrowing costs ceases and the construction in progress is transferred to property, plant and equipment when the asset is substantially ready for its intended use.

##### (f) Intangibles

###### (i) Goodwill

Goodwill which represents the excess of purchase consideration over the fair values ascribed to the separable net assets of subsidiaries acquired is recognized as an asset and amortized on a straight-line basis over its estimated useful economic life of not more than 20 years.

The gain or loss on disposal of an entity includes the unamortized balance of goodwill relating to the entity disposed of.

(ii) Mining rights

Mining rights acquired, including exploration costs, are capitalized and stated at cost to the Group less accumulated amortization and accumulated impairment losses, if any. Amortization of mining rights is calculated to write off their costs less accumulated impairment losses on a straight-line basis over their estimated useful lives of no longer than 30 years.

(iii) Research and development costs

Research and development costs are expensed as incurred, except for development costs where the technical feasibilities of the product under development have been demonstrated, costs are identifiable and a market exists for the product such that it is probable that it will be profitable. Such development costs are recognized as an asset and amortized on a straight-line basis over the estimated economic useful period to reflect the pattern in which the related economic benefits are recognized.

No expenditure on development was recognized as assets by the Group.

(iv) Impairment of intangible assets

Where an indication of impairment exists, the carrying amount of any intangible asset is assessed and written down immediately to its recoverable amount.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

2 Principal accounting policies (continued)

(g) Operating leases

Leases where substantially all the risks and rewards of ownership of assets remain with the leasing company are accounted for as operating leases. Payments made under operating leases net of any incentives received from the leasing company are charged to the statement of income on a straight-line basis over the lease periods.

The Group did not have any assets under finance leases.

(h) Investments in securities

(i) Investment securities

These represent long-term investments in unlisted securities which are stated at cost to the Group less provision for impairment losses. The carrying amounts of individual investments are reviewed at each balance sheet date to assess whether the fair values have declined below the carrying amounts. When a decline other than temporary has occurred, the carrying amount of such securities will be reduced to its fair value. The amount of the reduction is recognized as an expense in the statement of income.

(ii) Trading securities

These represent short-term investments in listed securities that the Group intends to hold for sale and are carried at fair value, which normally represents the market value. At each balance sheet date, the net unrealized gains or losses arising from the changes in fair value of the investments are recognized in the statement of income. Gains or losses on disposal of short-term investments, representing the difference between the net sales proceeds and the carrying amounts, are recognized in the statement of income as they arise.

(iii) Held-to-maturity securities

Held-to-maturity securities are stated in the balance sheet at cost less/plus any discount/premium amortized to date. The discount or premium is amortised over the period to maturity and included as interest expense/income in the statement of income. Provision is made when there is a diminution in value other than temporary.

The carrying amounts of individual held-to-maturity securities or holdings of the same securities are reviewed at the balance sheet date in order to assess the credit risk and whether the carrying amounts are expected to be recovered. Provisions are made when carrying amounts are not expected to be recovered and are recognized in the statement of income as an expense immediately.

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

### 2 Principal accounting policies (continued)

#### (h) Investments in securities (continued)

##### (iv) Futures contracts

The Group uses futures contracts to reduce its exposure to fluctuations in the price of primary aluminum. Payments for entering into these futures contracts are initially recognized in the balance sheet at cost and are subsequently remeasured at their fair value. Changes in fair value of futures contracts are recognized immediately in the statement of income.

The fair value of futures contracts is based on quoted market prices at the balance sheet date.

#### (i) Inventories

Inventories comprise raw material, work-in-progress, finished goods and production supplies are stated at the lower of cost to the Group and net realizable value. Work-in-progress and finished goods, calculated on the weighted average method, comprises materials, direct labour and an appropriate proportion of all production overhead expenditure. Net realizable value is determined on the basis of anticipated sales proceeds less estimated selling expenses.

#### (j) Accounts and other receivables

Provision is made against accounts and other receivables to the extent that they are considered to be doubtful. Accounts and other receivables in the balance sheet are stated net of such provision.

#### (k) Cash and cash equivalents

Cash and cash equivalents are carried in the balance sheet at cost. For the purpose of the cash flow statement, cash and cash equivalents comprise cash on hand, deposits held at call with banks, cash investments with an original maturity of within three months and bank overdrafts.

#### (l) Translation of foreign currencies

Transactions in foreign currencies are translated at exchange rates ruling at the transaction dates. Monetary assets and liabilities expressed in foreign currencies at the balance sheet date are translated at rates of exchange ruling at the balance sheet date. Exchange differences arising in these cases are recognized as income or expenses in the statement of income.

(m) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

2 Principal accounting policies (continued)

(n) Contingent liabilities and contingent assets

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. It can also be a present obligation arising from past events that is not recognized because it is not probable that outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

A contingent liability is not recognized but is disclosed in the notes to the financial statements. When a change in the probability of an outflow occurs so that the outflow becomes probable, it will then be recognized as a provision.

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain events not wholly within the control of the Group.

Contingent assets are not recognized but are disclosed in the notes to the financial statements when an inflow of economic benefits is probable. When inflow is virtually certain, an asset is recognized.

(o) Taxation

Income taxation charged to the statement of income comprise current and deferred tax. Current income tax is calculated based on the taxable income at the prevailing applicable rates of taxation for the year that is chargeable to tax.

Deferred taxation is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Taxation rates enacted or substantively enacted by the balance sheet date are used to determine deferred taxation.

Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized.

Deferred taxation is provided on temporary differences arising on investments in subsidiaries, associates and jointly controlled entities, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 2 Principal accounting policies (continued)

##### (p) Revenue recognition

Revenue from the sale of goods is recognized on the transfer of risks and rewards of ownership, which occurs at the time when the goods are delivered to customers and title has passed. No amount of revenue is recorded when the amount of revenue and the costs incurred or to be incurred in respect of the transaction cannot be measured reliably.

Revenue from the provision of services is recognized when the services are rendered.

Interest income is recognized on a time proportion basis, taking into account the principal amounts outstanding and the interest rates applicable.

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

##### (q) Employee benefits

###### (i) Employee leave entitlements

Employee entitlements to annual leave, sick leave, maternity leave and paternity leave, where applicable, are not recognized until the time of



leave.

(ii) Profit sharing and bonus plans

The expected cost of profit sharing and bonus payments are recognized as a liability when the Group has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made.

(iii) Retirement obligations

The Group contributes on a monthly basis to various defined contribution retirement benefit plans organized by relevant municipal and provincial governments in the PRC. The municipal and provincial governments undertake to assume the retirement benefit obligations of all existing and future retired employees payable under these plans. Contributions to these plans are expensed as incurred.

(iv) Housing fund

The Group provides housing fund based on certain percentage of the wages and with no more than the upper limit of the requirement. The housing fund is paid to social security organization, corresponding expenses are expensed or included in the cost of sales for the current year.

(r) Borrowing costs

Borrowing costs are charged to the statement of income in the year in which they are incurred unless they are directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

2 Principal accounting policies (continued)

(s) Environmental expenditures

Environmental expenditures mainly include expenditures necessary to complete remediation efforts and expenses related to the handling of waste water, gas and materials. Environmental expenditures that relate to current ongoing operations or to conditions caused by past operations are expensed as incurred.

Under the PRC law, the Group is required to remediate the area that it mines. The government of the province in which the mine is located prescribes the remediation requirements on the basis of the future intended use of the land and monitors the Group's remediation efforts. Such activities are typically performed concurrently with production. However, remediation efforts at certain mines are expected to commence after 2007 and the Group has established a liability sufficient to meet its remediation obligations. The expenditures necessary to complete remediation efforts are not expected to be material to cash flows or results of operations in any period.

(t) Government subsidies

A government subsidy is initially recognized as deferred income, when there is reasonable assurance that the Group will comply with the conditions attaching with it and that the subsidy will be received.

Government subsidies relating to income are recognized as other income in the statement of income on a systematic basis to match with the related costs which they are intended to compensate. Subsidies relating to assets are recognized in the financial statements, on a systematic basis over the useful lives of the related assets.

Government subsidies relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and are credited to statement of income on a straight-line basis over the expected lives of the related assets.

(u) Segment reporting

In accordance with the Group's internal financial reporting, the Group has determined that business segments be presented as the primary reporting format and geographical segments as the secondary reporting format.

Segment assets consist primarily of intangible assets, property, plant and equipment, inventories, receivables and operating cash, and exclude assets not dedicated to a particular segment (Note 3(ii)). Segment liabilities comprise operating liabilities and exclude liabilities not dedicated to a particular segment (Note 3(iii)). Capital expenditure comprises additions to intangible assets and property, plant and equipment, including additions resulting from acquisitions through purchases of subsidiaries, invest in jointly controlled entities and associates.

In respect of geographical segment reporting, sales are based on the country in which the customer is located. Total assets and capital expenditure are where the assets are located.

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 3 Revenues and segment information

The Group is principally engaged in the production and distribution of alumina and primary aluminum. Total revenues recognized are as follows:

	Year ended December 31,			
	2002 RMB	2003 RMB	2004 RMB	2004 US\$
Sales of goods, net of value-added tax	16,792,766	23,245,858	32,313,076	3,904,196
Other revenues				
Sale of scrap and other materials	194,961	210,128	339,585	41,030
Supply of electricity, heat, gas and water (Note 32(b))	163,759	266,808	273,537	33,050
Rendering of services (Note)	122,056	76,680	33,145	4,004
Interest income	42,069	26,204	61,540	7,436
Income from investment securities	30	351	351	42
Total other revenues	522,875	580,171	708,158	85,562
Total revenues	17,315,641	23,826,029	33,021,234	3,989,758

Note: Rendering of services mainly comprises revenues from the provision of transportation, machinery processing and production design services.

## Primary reporting format - business segments

The Group is organized in the People's Republic of China (the "PRC") into two main business segments:

\* Alumina segment - comprising mining and processing of bauxite into

alumina and the associated distribution activities.

\* Primary aluminum segment - comprising production of primary aluminum and the associated distribution activities.

In addition, the Group also provides other services.

Activities of the headquarters and other operations of the Group, comprising research and development related to alumina and primary aluminum business carried out by Zhengzhou Research Institute and minor production and distribution of alumina hydrate, are grouped under corporate and other services segment.

All inter-segment and inter-plant sales are made at prices approximate to market prices.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 3 Revenues and segment information (continued)

Primary reporting format - business segments (continued)

	Year ended December 31,			
	2002 RMB	2003 RMB	2004 RMB	2004 US\$
Segment results				
Sales of goods				
Alumina				
External sales	7,458,951	12,327,527	19,223,878	2,322,707
Inter-segment sales	2,320,642	3,131,674	4,226,150	510,620
	<u>9,779,593</u>	<u>15,459,201</u>	<u>23,450,028</u>	<u>2,833,327</u>
Primary aluminum				
External sales	9,268,120	10,845,603	12,994,082	1,569,997
Corporate and other services				
External sales (i)	65,695	72,728	95,116	11,492

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Inter-segment elimination	(2,320,642)	(3,131,674)	(4,226,150)	(510,620)
	<hr/>	<hr/>	<hr/>	<hr/>
Total sales of goods	16,792,766	23,245,858	32,313,076	3,904,196
	<hr/>	<hr/>	<hr/>	<hr/>
Cost of goods sold				
Alumina	7,685,072	9,591,954	13,085,754	1,581,073
Primary aluminum	7,902,487	9,883,991	12,501,776	1,510,515
Corporate and other services	51,667	64,982	81,718	9,874
Inter-segment elimination	(2,289,712)	(3,101,393)	(4,205,059)	(508,072)
	<hr/>	<hr/>	<hr/>	<hr/>
Total cost of goods sold	13,349,514	16,439,534	21,464,189	2,593,390
	<hr/>	<hr/>	<hr/>	<hr/>
Gross profit				
Alumina	2,094,521	5,867,247	10,364,274	1,252,254
Primary aluminum	1,365,633	961,612	492,306	59,482
Corporate and other services	14,028	7,746	13,398	1,618
Inter-segment elimination	(30,930)	(30,281)	(21,091)	(2,548)
	<hr/>	<hr/>	<hr/>	<hr/>
Total gross profit	3,443,252	6,806,324	10,848,887	1,310,806
	<hr/>	<hr/>	<hr/>	<hr/>

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

3 Revenues and segment information (continued)

Primary reporting format - business segments (continued)

Year ended December 31,

	<hr/>	<hr/>	<hr/>	<hr/>
	2002	2003	2004	2004
	RMB	RMB	RMB	US\$

## Segment results (continued)

## Other costs, net of other revenues and other income

Alumina	714,899	757,709	992,683	119,940
Primary aluminum	221,975	516,375	524,506	63,373
Corporate and other services	71,961	86,083	90,304	10,911
Unallocated	311,729	367,677	281,431	34,003

## Total other costs, net of other revenues and other income

1,320,564	1,727,844	1,888,924	228,227
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## Segment operating income (loss)

Alumina	1,379,622	5,109,538	9,371,591	1,132,314
Primary aluminum	1,143,658	445,237	(32,200)	(3,891)
Corporate and other services	(57,933)	(78,337)	(76,906)	(9,293)
Unallocated	(311,729)	(367,677)	(281,431)	(34,003)
Inter-segment elimination	(30,930)	(30,281)	(21,091)	(2,548)

## Total operating income

2,122,688	5,078,480	8,959,963	1,082,579
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## Finance costs

490,614	451,411	408,992	49,416
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## Operating income after finance costs

1,632,074	4,627,069	8,550,971	1,033,163
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## Share of (loss) income of jointly controlled entities

(254)	1,193	(3,953)	(478)
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## Income before income taxes

1,631,820	4,628,262	8,547,018	1,032,685
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## Income taxes

183,393	918,862	2,079,538	251,258
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## Income after income taxes

1,448,427	3,709,400	6,467,480	781,427
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## Minority interests

46,822	157,370	243,540	29,426
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## Net income for the year

1,401,605	3,552,030	6,223,940	752,001
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## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 3 Revenues and segment information (continued)

Primary reporting format - business segments (continued)

	Year ended December 31,			
	2002 RMB	2003 RMB	2004 RMB	2004 US\$
Capital expenditure				
Alumina	3,192,788	3,831,590	4,976,544	601,286
Primary aluminum	700,572	1,471,539	5,020,548	606,603
Corporate and other services	49,304	47,259	76,841	9,284
Unallocated	29,930	33,030	208,411	25,181
	<hr/>	<hr/>	<hr/>	<hr/>
Total capital expenditure	3,972,594	5,383,418	10,282,344	1,242,354
	<hr/>	<hr/>	<hr/>	<hr/>
Depreciation and amortization charged to the statement of income				
Alumina	1,301,487	1,316,722	1,628,165	196,721
Primary aluminum	702,149	716,611	685,749	82,855
Corporate and other services	4,768	29,890	30,764	3,717
Unallocated	17,252	29,224	26,330	3,181
	<hr/>	<hr/>	<hr/>	<hr/>
Total	2,025,656	2,092,447	2,371,008	286,474
	<hr/>	<hr/>	<hr/>	<hr/>
Impairment losses charged to the statement of income				
Alumina	-	33,116	10,902	1,317
Primary aluminum	-	41,369	9,325	1,127
	<hr/>	<hr/>	<hr/>	<hr/>
Total	-	74,485	20,227	2,444
	<hr/>	<hr/>	<hr/>	<hr/>

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 3 Revenues and segment information (continued)

Primary reporting format - business segments (continued)

	As of December 31,	
	2003	2004
	RMB	RMB
Segment assets		
Alumina	21,824,989	29,320,908
Primary aluminum	9,795,912	15,638,825
Corporate and other services	1,979,357	4,317,420
Unallocated (ii)	2,049,685	452,571
	<hr/>	<hr/>
	35,649,943	49,729,724
Inter-segment elimination	(571,648)	(749,361)
	<hr/>	<hr/>
Total assets	35,078,295	48,980,363
	<hr/>	<hr/>
Segment liabilities		
Alumina	8,280,529	10,106,946
Primary aluminum	2,314,226	6,016,499
Corporate and other services	2,351,653	718,356
Unallocated (iii)	3,309,266	4,492,697
	<hr/>	<hr/>
	16,255,674	21,334,498
Inter-segment elimination	(571,648)	(749,361)
	<hr/>	<hr/>
Total liabilities	15,684,026	20,585,137
	<hr/>	<hr/>

(i)



Sales of corporate and other services mainly represent the sale of alumina by Zhengzhou Research Institute.

- (ii) Unallocated assets, which represent assets not dedicated to a particular segment, consist primarily of bank balances and cash, investments, deferred tax assets, other receivables and non-operating property, plant and equipment.
- (iii) Unallocated liabilities, which represent liabilities not dedicated to a particular segment, consist primarily of short-term and long-term loans, taxation payable and other liabilities.

Secondary reporting format - geographical segments

The operations of the Group are principally carried out in the PRC and the related assets are located there.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

4 Expenses related to other revenues

Expenses related to other revenues mainly include the cost of scrap and other materials sold and costs incurred in the supply of electricity, heat, gas and water (Note 32(b)).

5 Selling and distribution expenses

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Transportation and loading	268,518	271,398	313,692
Packaging expenses	137,972	157,173	193,968
Miscellaneous port expenses	4,535	39,315	38,321
Salaries and welfare expenses	27,336	28,543	27,179
Sales commission and other handling fee	12,075	13,762	15,922
Others	51,393	39,241	58,450

501,829	549,432	647,532
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## 6 General and administrative expenses

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Salaries and welfare expenses	226,680	362,887	393,777
Taxes other than income taxes (Note)	178,169	233,213	327,978
Depreciation - non production property, plant and equipment	73,166	71,016	71,295
Travelling and entertainment	41,047	50,846	68,115
Utilities and office supplies	53,836	41,524	43,588
Insurance	23,124	23,657	37,096
Amortization of goodwill (Note 23)	24,648	24,648	24,648
Repairs and maintenance	24,463	23,189	19,431
Auditors' remuneration			
- audit fees	17,350	17,831	18,334
- audit related fees	-	-	500
- other fees	-	-	1,197
Loss on disposal of property, plant and equipment - non production facilities	7,270	24,095	-
(Write-back of provision) provision for doubtful debts and bad debts written off, net	(97,050)	7,231	(1,837)
Others	161,100	167,324	216,780
	<u>733,803</u>	<u>1,047,461</u>	<u>1,220,902</u>

Note: Taxes other than income taxes mainly comprise land use tax, city construction tax and education surcharge. City construction tax and education surcharge are levied on an entity based on its total amount of value-added tax and business tax payable.

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 7 Other expenses, net

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Other income			
Net exchange gain (Note (a))	-	-	10,852
Interest waived (Note (b))	-	44,476	9,777
Government subsidies	990	6,492	4,512
Realized gain on short-term investment	-	-	403
Unrealized gain on future contracts	13,180	-	-
	<u>14,170</u>	<u>50,968</u>	<u>25,544</u>
Other expenses			
Loss on future contracts			
- realized	-	54,970	20,520
- unrealized	-	10,244	4,972
Penalties, fines and compensations	1,197	84	2,518
Unrealized loss on short-term investments	786	2,979	917
Net exchange loss (Note (b))	28,276	8,234	-
	<u>30,259</u>	<u>76,511</u>	<u>28,927</u>
Other expenses, net	<u>16,089</u>	<u>25,543</u>	<u>3,383</u>

- (a) The net exchange gain for the year ended December 31, 2004 was mainly related to foreign currency deposits. The net exchange loss for the year ended December 31, 2003 was mainly related to foreign currency borrowings.
- (b) In 2004, the gain was related to an interest waiver arrangement made between the Company and a financial institution for full settlement of the outstanding loans of RMB15.95 million and the related interest payable was waived. In 2003, the gain was related to an interest waiver arrangement made between the Company and China Construction Bank for full

settlement of the outstanding loans and the related interest payable of RMB99.48 million by the payment by the Company of a lump sum of RMB55.00 million during the year.

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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 8 Directors', Supervisors and senior management's remuneration

## (a) Directors' and Supervisors' remuneration

The aggregate amounts of remuneration payable to Directors and Supervisors of the Company during each of the three years ended December 31, 2004 are as follows:

	Year ended December 31,		
	2002	2003	2004
	RMB	RMB	RMB
Fees	817	877	863
Basic salaries, housing allowances, other allowances and benefits in kind	2,381	2,356	3,303
Discretionary bonus	-	2,200	2,200
Contributions to the retirement scheme	46	67	56
	<u>3,244</u>	<u>5,500</u>	<u>6,422</u>

The remuneration of the Directors and Supervisors fell within the following bands:

	Number of Directors and Supervisors Year ended December 31,		
	2002	2003	2004
Nil - RMB1,000	12	11	16
RMB1,000 - RMB2,000	-	1	-

Directors' fees disclosed above included RMB563 (2003: RMB265; 2002: RMB292) which was in respect of amounts payable to two (2003: two; 2002: two) independent non-executive Directors. No emoluments were payable to an independent non-executive Director who was appointed during the year ended December 31, 2004.

No Directors or Supervisors of the Company waived any remuneration during the respective years.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

8 Directors', Supervisors and senior management's remuneration

(b) Five highest paid individuals

The five individuals whose remuneration were the highest in the Group were as follows:

	Number of individuals Year ended December 31,		
	2002	2003	2004
Directors and Supervisors	3	3	3
Senior management	2	2	2

Details of remuneration of senior management amongst the five highest paid individuals are as follows:

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Basic salaries, housing allowances, other allowances and benefits in kind	782	782	979

Discretionary bonus	-	544	393
Contributions to the retirement scheme	18	25	20
	800	1,351	1,392
	800	1,351	1,392

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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 9 Staff costs

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Wages, salaries and bonus	1,531,308	1,993,282	2,285,941
Housing fund	121,984	138,433	139,532
Contributions to retirement schemes (Note (a))	275,329	315,221	344,391
Discretionary bonus	-	12,000	12,000
Welfare and other expenses (Note (b))	285,688	441,022	531,996
	2,214,309	2,899,958	3,313,860
	2,214,309	2,899,958	3,313,860

(a) The employees of the Group participate in various retirement benefit plans organized by the relevant municipal and provincial governments under which the Group was required to make monthly defined contributions to these plans at rates ranging from 15% to 25% of the employees' basic salary for the respective years. The Group's contributions to these defined contribution schemes are expensed as incurred and are not reduced by forfeited contributions. The assets of the scheme, which are operated by the respective governments are held separately from the Company and its subsidiaries.

(b) Welfare and other expenses, including welfare, staff committee expenses, education expenses, unemployment insurance expenses, are accrued

based on 14% of the wages/salaries and recognized in the statement of income.

- (c) Staff costs include remuneration paid to Directors, Supervisors and senior management as set out in Note 8.

10 Expenses charged (written back) to the statement of income

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Depreciation	1,981,537	2,043,983	2,312,540
Operating lease rentals in respect of land and buildings	116,428	154,363	217,151
Loss on disposal of property, plant and equipment (Note)	7,270	160,823	43,740
Amortization of mining rights (Note 23)	19,471	23,816	33,820
(Write-back of provision)provision for obsolete inventories	(28,318)	(15,223)	39,591

Note: Loss on disposal of property, plant and equipment for the year ended December 31, 2003 includes loss on the dismantling of certain aged production equipment to carry out technology renovation to the production line and equipment of the Company's Guizhou branch and loss on disposal of other non-production facilities.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

11 Finance costs

Year ended December 31,		
2002 RMB	2003 RMB	2004 RMB

Interest on bank loans	553,392	509,598	518,481
Interest on loans from other financial institutions			
Wholly repayable within five years	15,557	9,818	1,436
Not wholly repayable within five years	61	-	-
	<hr/>	<hr/>	<hr/>
Total finance costs incurred	569,010	519,416	519,917
Less: amount capitalized in construction in progress	(78,396)	(68,005)	(110,925)
	<hr/>	<hr/>	<hr/>
	490,614	451,411	408,992
	<hr/>	<hr/>	<hr/>
Interest rates per annum at which finance costs were capitalized	6.0% to 6.2%	4.9% to 5.6%	4.9% to 5.8%

## 12 Taxation

(a) The amount of taxation charged to the statement of income represents:

	Year ended December 31,		
	2002	2003	2004
	RMB	RMB	RMB
Current taxation:			
PRC income tax	343,980	1,075,255	2,271,195
Over provision in prior years (Note b)	(171,568)	(53,107)	(21,165)
Deferred tax	10,981	(104,144)	(170,492)
	<hr/>	<hr/>	<hr/>
	183,393	918,004	2,079,538
Share of income tax attributable to jointly controlled entities	-	858	-
	<hr/>	<hr/>	<hr/>
	183,393	918,862	2,079,538
	<hr/>	<hr/>	<hr/>

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NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

12 Taxation (continued)

- (b) Pursuant to "Guo Ban Fa 2001 No. 73" dated September 29, 2001 issued by the State Council of the PRC and approved by the respective local tax authorities in late 2002, three branches and a subsidiary of the Company located in the western region of China (namely Guangxi branch, Qinghai branch, Guizhou branch and China Aluminum Qinghai International Trading Corp., Ltd.) were granted a tax concession to pay PRC income tax at a preferential rate of 15%. The preferential tax rate is applicable to qualified operations in specified regions with retroactive effect from January 1, 2001 for a ten-year period to December 31, 2010 as long as these branches and the subsidiary continue to engage in qualified operations in their respective regions. Accordingly, the over provision for taxation payable in relation to the three branches for year 2001 were written back during the year ended December 31, 2002.

A subsidiary in Shandong is taxed at a preferential rate of 15% since January 1, 2000 as it is classified as a "high-tech" enterprise in its province for tax purpose. During the year, pursuant to "Guo Shui Han 2004 No. 319" issued by the Shandong Province Tax Bureau of the PRC, this subsidiary is taxed at 33% since January 1, 2004.

A subsidiary of the Company, Chalco Western Qinghai Int'l Trading Co., Ltd. ("Western Trading"), located in Xining Economic and Technology Developing District had registered and commenced business in October 2003. Pursuant to Qinghai Province Development of Western Region Policy (Qing Zheng 2003 No. 35), starting from the commencement of its business, Western Trading was exempted from PRC income tax for the first 5 years and at a preferential rate of 15% for the years after. In July 2004, the exemption of PRC income tax amounting to RMB21,165,000 for the year ended December 31, 2003 was approved by the Qinghai Province Tax Bureau and the whole amount has been written-back in the current year.

Pursuant to the Statement of Supporting Fund for Development of Enterprises issued by the local government of Caolu Town, Pudong New Areas, Shanghai, Chalco Kelin Aluminum of Shanghai Co., Ltd., a subsidiary of the Company, was exempted from PRC income tax for the first year and at a preferential rate of 15% for the two years after. As approved by the State Tax Bureau and local tax bureau of Shanghai Pudong New Area, this subsidiary was exempted from enterprise income tax for 2003 and was taxed at an income tax rate of 15% in 2004 and 2005.

The current PRC income taxes of the Company, its subsidiaries and jointly controlled entities have been provided at the basic tax rate of 33% on the assessable profits for the respective years, except for those related to the above operations in the Group.

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 12 Taxation (continued)

- (c) The tax on the Group's net income before income tax differs from the expected amount that would arise using the basic tax rate in the PRC applicable to the Group as follows:

	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB
Income before income tax	1,631,820	4,628,262	8,547,018
Tax calculated at a tax rate of 33%	538,501	1,527,327	2,820,516
Deferred tax benefit arising from tax losses not recognized	2,951	2,704	3,750
Income not subject to tax	(86,124)	(60,094)	(47,592)
Expenses not deductible for tax purposes	71,303	47,594	79,262
Utilization of prior years' unrecognized tax losses (Note (i))	-	(142,288)	(26,624)
Differential tax rate on the income of certain branches and subsidiaries	(171,670)	(339,728)	(519,688)
Tax credit for capital expenditure (Note (ii))	-	(63,546)	(208,921)
Over provision in prior year (Note (b))	(171,568)	(53,107)	(21,165)
Tax charge	183,393	918,862	2,079,538

- (i) Prior to the group reorganization of Chinalco, which took place in 2001 for the purposes of the incorporation of the Company ("the group reorganization"), the various assets, liabilities and interests related to the alumina and primary aluminum business transferred from the promoters pursuant to the group reorganization (collectively the "Core Units") now comprising the Group were separate independent entities for tax reporting and filing purposes. Certain of these Core Units had incurred tax losses in previous years which were not recognized as deferred tax assets in prior years' financial statements as the Company was then awaiting the final agreement by the relevant tax authorities regarding the use of such tax losses.

In March 2004, the resulting deferred tax benefit arising from these tax losses of

approximately RMB142,000 was recognized in the financial statements and utilized as a tax deductible item for the 2003 PRC income tax filing following the approval by the State Tax Bureau to the PRC (the "STB") in Beijing regarding the use of such tax losses.

- (ii) This primarily represents incentive in the form of tax credit given by the relevant tax authorities in respect of production plant and equipment purchased in the domestic market.
- (iii) In February 2004, a notice ("Guo Shui Han 2004 No. 261") was issued by the STB clarifying the tax matters in relation to the group reorganization of Chinalco. Pursuant to the notice, where the income tax of the Core Units for the year ended December 31, 2001 was paid through Chinalco, the tax provision based on the profits of the Core Units that are in excess of the actual tax amount paid by Chinalco based on the combined tax filing of Chinalco should be the entitlement of Chinalco. Accordingly, the tax difference has been accounted for by the Company in accordance with the provision of the notice.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

12 Taxation (continued)

- (d) Deferred income tax is calculated in full on temporary differences under the liability method using the respective applicable rates.

The movements in the deferred tax balances are as follows:

	Provision for receivable and inventories			Impairment of property, plant and equipment			Accrued payroll			Others			Total	
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003
	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB
As of January 1,	33,594	29,258	33,761	-	-	37,060	-	-	61,775	10,121	3,476	4,282	43,715	32,734
Transfer (to)from statement of income	(4,336)	4,503	26,920	-	37,060	9,842	-	61,775	121,015	(6,645)	806	12,715	(10,981)	104,144

As of  
December

31, 29,258 33,761 60,681 - 37,060 46,902 - 61,775 182,790 3,476 4,282 16,997 32,734 136,878 30

The temporary difference associated with the Group's certain underlying investment in subsidiaries amounted to approximately RMB81,880 as of December 31, 2004 (2003: RMB90,374) for which deferred tax liabilities have not been recognized, as such amount will not be reversed in the foreseeable future.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 13 Dividend

	Year ended December 31,	
	2003 RMB	2004 RMB
Final, proposed, of RMB0.176 per share on 11,049,876,153 total outstanding shares as of March 28, 2005 (As of March 29, 2004: RMB0.096 per share on 10,499,900,153 total outstanding shares as of December 31, 2003) (Note 30(a))	1,060,788	1,944,778

The proposed final dividend for each of the years ended December 31, 2003 and 2004 was declared at meetings held on March 29, 2004 and March 28, 2005, respectively. The proposed dividend for a particular year is not reflected as a dividend payable in the financial statements of the same year, but will be reflected as an appropriation of retained earnings in the coming year.

#### 14 Net income per share

The calculation of net income per share for the year ended December 31, 2002 is based on the Group's consolidated net income of RMB1,401,605 and the weighted average number of

10,495,862,841 shares in issue during the period since the legal formation of the Company.

The calculation of net income per share for the year ended December 31, 2003 is based on the Group's consolidated net income of RMB3,552,030 and the weighted average number of 10,499,900,153 shares in issue during the year.

The calculation of net income per share for the year ended December 31, 2004 is based on the Group's consolidated net income of RMB6,223,940 and the weighted average number of 11,040,835,452 shares in issue during the year.

As there are no dilutive securities, there is no difference between basic and diluted net income per share.

15 Cash and cash equivalents

As of December 31, 2003 and 2004, the Group had no pledged cash at bank.

	As of December 31,	
	2003	2004
	RMB	RMB
Renminbi (Note)	2,310,247	5,763,753
Other foreign currency deposits	286,193	460,010
	2,596,440	6,223,763
	2,596,440	6,223,763

Note: Renminbi is not a freely convertible currency. The restrictions on foreign exchange imposed by the PRC government may result in material difference between future exchange rate and the current exchange rate or historical exchange rate. The Group believes that it is able to obtain sufficient foreign exchange for the performance of its relevant obligations.

	As of December 31,	
	2003	2004
	RMB	RMB
Trade receivables (Note (a))	384,992	262,627
Bills receivables (Note (b))	402,899	1,524,195
	<u>787,891</u>	<u>1,786,822</u>

## (a) Trade receivables

	As of December 31,	
	2003	2004
	RMB	RMB
Gross trade receivables	721,943	567,864
Less: provision for doubtful accounts	(336,951)	(305,237)
	<u>384,992</u>	<u>262,627</u>

The Group performs periodic credit evaluation on its customers and different credit policies are adopted for individual customers accordingly.

Certain of the Group's sales were on advance payment or documents against payment. A credit period, which may be extended for up to one year, may be granted, subject to negotiation, in respect of sales to large or long-established customers.

As of December 31, 2004, aging analysis of trade receivables, net of provision made, were as follows:

	As of December 31,	
	2003	2004
	RMB	RMB
Within 1 month	163,065	162,331

Between 2 and 6 months	111,614	32,763
Between 7 and 12 months	27,764	18,838
Between 1 and 2 years	53,895	37,065
Over 2 years	28,654	11,630
	384,992	262,627
	384,992	262,627

(b) Bills receivable are bills of exchange with maturity dates of within six months.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

17 Due from related parties

The amounts due from related parties can be analyzed as follows:

	As of December 31,	
	Trade	
	2003	2004
	RMB	RMB
Fellow subsidiaries	71,108	122,134
Jointly controlled entities	13	-
Other related parties	71,490	56,171
	142,611	178,305
	<u>Other</u>	
	2003	2004
	RMB	RMB

Holding company	3,539	-
Fellow subsidiaries	289,528	242,735
Jointly controlled entities	15,990	17,618
Other related parties	830	-
	<hr/>	<hr/>
	309,887	260,353
	<hr/>	<hr/>

Total

	2003	2004
	RMB	RMB
Holding company	3,539	-
Fellow subsidiaries	360,636	364,869
Jointly controlled entities	16,003	17,618
Other related parties	72,320	56,171
	<hr/>	<hr/>
	452,498	438,658
	<hr/>	<hr/>

Aging analysis of amounts due from related parties, which are trading in nature, were as follows:

	As of December 31,	
	2003	2004
	RMB	RMB
Within 1 month	12,080	55,927
Between 2 and 6 months	6,946	8,428
Between 7 and 12 months	48,058	8,010
Between 1 and 2 years	5,778	44,195
Over 2 years	69,749	61,745
	<hr/>	<hr/>
	142,611	178,305
	<hr/>	<hr/>

Amounts due from the holding company, fellow subsidiaries, the jointly controlled entities and other related parties are unsecured, non-interest bearing and are repayable on demand. On March 28, 2005, the Group and the holding company has mutually agreed that all the balances aged over



one year as of December 31, 2004 will be settled within five years.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

18 Inventories

	As of December 31,	
	2003 RMB	2004 RMB
Raw materials	1,080,058	2,161,964
Work in progress	1,492,592	1,578,971
Finished goods	1,031,064	987,603
Production supplies	522,104	503,369
	4,125,818	5,231,907
	4,125,818	5,231,907

As of December 31, 2004, included in inventories of the Group were inventories stated at the net realizable values as follows:

	As of December 31,	
	2003 RMB	2004 RMB
Costs	368,941	573,033
Less: Provision for obsolete inventories	(33,917)	(73,508)
	335,024	499,525
	335,024	499,525

19 Other current assets

	As of December 31,	
	2003	2004
	RMB	RMB
Purchase deposits to suppliers	301,845	353,777
Other deposits and prepayments	158,943	118,462
Value-added tax recoverable	7,072	6,595
Short-term listed investments, at fair value (Note (a))	50,080	41,530
Other receivables (Note (b))	157,979	144,214
	<u>675,919</u>	<u>664,578</u>

Note:

- (a) As of December 31, 2003 and 2004, short-term listed investments primarily represented PRC treasury bonds held at fair value.
- (b) As of December 31, 2003 and 2004, the balances of the Group were stated net of provision for doubtful receivables of RMB169,646 and RMB164,523, respectively.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

20 Investments in securities

	As of December 31,	
	2003	2004
	RMB	RMB
Unlisted equity investments, at cost (Note a)	10,800	10,800
Unlisted held-to-maturity securities (Note b)	10,509	-
	<u>21,309</u>	<u>10,800</u>

Unlisted held-to-maturity securities - mature within 1 year (Note b)	-	10,860
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Note:

- (a) Unlisted equity investments are investments in shares of fellow subsidiaries.
- (b) Held-to-maturity securities are stated in the balance sheet at cost less/plus any discount/premium amortized to date. The debt securities mature on July 23, 2005.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

21 Interests in jointly controlled entities/an associated company

(a) Interests in jointly controlled entities

	As of December 31,	
	2003 RMB	2004 RMB
Share of net assets	21,330	66,877

Name	Place of Incorporation and operation	Legal status	Particulars of issued capital	Equity interest held	Principal Activities
Shanxi JinXin Aluminum Co., Ltd. (Chinese Characters)	PRC	Company with limited liability	Paid up capital of RMB20,000	50%	Production and distribution of primary aluminum
Guangxi Guixi Huayin	PRC	Company with limited liability	Paid up capital	33%	Production and distribution of

Aluminum Co.,  
Ltd.  
(Chinese Characters)

of  
RMB10,000

alumina

## (b) Interest in an associated company

	As of December 31,	
	2003 RMB	2004 RMB
Share of net assets	-	45,000

This represents investment in Jiaozuo Coal Group Zhaogu (Xinxiang) Energy Corporation Co., Ltd. (Chinese Characters) which was set up between the Company and Jiaozuo Coal (Group) Co., Ltd. (Chinese Characters) on May 15, 2004. The Company has invested RMB45,000 and has a 30% equity interest in this associated company. The principal activity of the associated company is the organization of coal production project in Henan. As of December 31, 2004, this associated company was still at the establishment stage.

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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 22 Property, plant and equipment

	Construction in progress RMB	Buildings RMB	Plant and machinery RMB	Motor vehicles and transportation facilities RMB	Office and other equipment RMB	Total RMB
Cost						
As of January 1, 2003	3,545,084	11,555,721	21,534,770	838,801	141,623	37,615,999
Additions	5,150,417	131,607	43,088	16,147	42,159	5,383,418
Transfers	(3,627,747)	1,103,618	2,323,377	172,770	27,982	-
Disposals	-	(74,757)	(738,201)	(63,850)	(2,937)	(879,745)

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As of December 31, 2003	5,067,754	12,716,189	23,163,034	963,868	208,827	42,119,672
<hr/>						
Accumulated depreciation and impairment						
As of January 1, 2003	-	3,830,944	10,658,919	494,886	67,685	15,052,434
Charge for the year	-	435,550	1,600,055	52,787	25,138	2,113,530
Impairment loss	10,420	3,364	60,559	142	-	74,485
Transfers	-	1,991	(78,914)	77,266	(343)	-
Disposals	-	(27,499)	(605,116)	(40,543)	(1,816)	(674,974)
<hr/>						
As of December 31, 2003	10,420	4,244,350	11,635,503	584,538	90,664	16,565,475
<hr/>						
Net book value						
As of December 31, 2003	5,057,334	8,471,839	11,527,531	379,330	118,163	25,554,197
<hr/>						
Cost						
As of January 1, 2004	5,067,754	12,716,189	23,163,034	963,868	208,827	42,119,672
Additions	10,190,116	44,641	19,646	10,379	17,562	10,282,344
Transfers	(4,632,259)	906,242	3,477,081	192,979	55,957	-
Disposals	-	(18,987)	(272,572)	(115,504)	(7,916)	(414,979)
<hr/>						
As of December 31, 2004	10,625,611	13,648,085	26,387,189	1,051,722	274,430	51,987,037
<hr/>						
Accumulated depreciation and impairment						
As of January 1, 2004	10,420	4,244,350	11,635,503	584,538	90,664	16,565,475
Charge for the year	-	453,425	1,656,016	100,579	44,115	2,254,135
Impairment loss	10,902	5,646	3,651	28	-	20,227
Transfers	-	(12,378)	7,027	(400)	5,751	-
Disposals	-	(12,834)	(198,545)	(98,535)	(7,461)	(317,375)
<hr/>						
As of December 31, 2004	21,322	4,678,209	13,103,652	586,210	133,069	18,522,462
<hr/>						
Net book value						
As of December 31, 2004	10,604,289	8,969,876	13,283,537	465,512	141,361	33,464,575
<hr/>						

All the buildings of the Group are located in the PRC on land held by Chinalco with operating lease period of 48 years (Note32(g)).

As of December 31, 2003 and 2004, no property, plant and equipment had been pledged.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

23 Intangible assets

	Goodwill	Mining rights	Total
	RMB	RMB	RMB
As of January 1, 2003	455,982	280,955	736,937
Additions	-	17,542	17,542
Amortization charge for the year (Note 6, 10)	(24,648)	(23,816)	(48,464)
As of December 31, 2003	431,334	274,681	706,015
As of December 31, 2003			
Cost	492,954	322,723	815,677
Accumulated amortization	(61,620)	(48,042)	(109,662)
Net book amount	431,334	274,681	706,015
As of January 1, 2004	431,334	274,681	706,015
Additions	-	81,606	81,606
Amortization charge for the year Note 6, 10)	(24,648)	(33,820)	(58,468)
As of December 31, 2004	406,686	322,467	729,153
As of December 31, 2004			
Cost	492,954	404,329	897,283

Accumulated amortization	(86,268)	(81,862)	(168,130)
	<hr/>	<hr/>	<hr/>
Net book amount	406,686	322,467	729,153
	<hr/>	<hr/>	<hr/>

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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 24 Accounts payable

	As of December 31,	
	2003	2004
	RMB	RMB
Trade payables (Note (a))	1,441,175	1,919,330
Bills payable (Note (b))	426,491	49,093
	<hr/>	<hr/>
	1,867,666	1,968,423
	<hr/>	<hr/>

## (a) Trade payables

As of December 31, 2004, aging analysis of trade payables was as follows:

	As of December 31,	
	2003	2004
	RMB	RMB
Within 1 month	1,071,310	1,280,298
Between 2 and 6 months	241,040	479,408
Between 7 and 12 months	46,504	71,739
Between 1 and 2 years	34,689	21,739
Between 2 and 3 years	10,550	9,916

Over 3 years	37,082	56,230
	<u>1,441,175</u>	<u>1,919,330</u>

(b) Bills payable are repayable within six months.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

25 Due to related parties

The amounts due to related parties can be analyzed as follows:

	As of December 31,	
	Trade	
	2003	2004
	RMB	RMB
Fellow subsidiaries	60,443	79,408
Other related parties	10,816	-
	<u>71,259</u>	<u>79,408</u>
	Others	
	2003	2004
	RMB	RMB
Fellow subsidiaries	315,340	556,204
Jointly controlled entities	-	603
Other related parties	1,265	-
	<u>316,605</u>	<u>556,807</u>





## 26 Other payables and accruals

	As of December 31,	
	2003	2004
	RMB	RMB
Accrued construction costs	763,095	1,587,818
Sales deposits from customers	696,678	1,507,443
Accrued payroll and bonus	412,727	745,200
Taxes other than income taxes payable (Note)	279,358	517,148
Staff welfare payable	275,641	287,396
Accrued contributions to retirement schemes	40,507	31,006
Interest payable	29,574	20,651
Other accruals	336,516	291,098
	<u>2,834,096</u>	<u>4,987,760</u>

Note: Taxes other than income taxes payable mainly comprise accrual for value-added tax, land use tax, city construction tax and education surcharge payables.

## 27 Long-term loans

Long-term loans include bank loans and loans from other financial institutions which are analyzed as follows:

	As of December 31,	
	2003	2004
	RMB	RMB
Unsecured bank loans		
Wholly repayable within five years	2,261,380	3,365,000
Not wholly repayable within five years	3,788,115	5,081,321
	<u>6,049,495</u>	<u>8,446,321</u>
Loans from other financial institutions		
Wholly repayable within five years	178,978	19,000
	<u>178,978</u>	<u>19,000</u>

	6,228,473	8,465,321
Current portion of long-term loans	(815,845)	(1,073,658)
	<u>5,412,628</u>	<u>7,391,663</u>

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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 27 Long-term loans (continued)

The Group's bank loans and other borrowings were repayable as follows:

	As of December 31,	
	<u>Bank loans</u>	
	2003	2004
	RMB	RMB
Within one year	686,867	1,054,658
In the second year	1,054,566	1,621,658
In the third to fifth year	3,557,137	4,419,635
After the fifth year	750,925	1,350,370
	<u>6,049,495</u>	<u>8,446,321</u>
	<u>Loans from other financial institutions</u>	
	2003	2004
	RMB	RMB

Within one year	128,978	19,000
In the second year	-	-
In the third to fifth year	50,000	-
	<u>178,978</u>	<u>19,000</u>

Total

	2003	2004
	RMB	RMB
Within one year	815,845	1,073,658
In the second year	1,054,566	1,621,658
In the third to fifth year	3,607,137	4,419,635
After the fifth year	750,925	1,350,370
	<u>6,228,473</u>	<u>8,465,321</u>

As of December 31, 2003 and 2004, bank loans of the Group of RMB3,426,515 and RMB1,485,161, respectively, were guaranteed by Chinalco.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

27 Long-term loans (continued)

The characteristics of the Group's long-term loans are analyzed as follows:

Loan	Interest rate and final maturity	As of December 31,	
		2003	2004
		RMB	RMB

Bank loans:

Renminbi-denominated  
loans:

Development of production facilities	Variable interest rates ranging from 4.9% to 5.9% per annum as of December 31, 2004 with maturity dates through 2009 (2003: 5% to 6% per annum with maturity dates through 2009)	1,827,000	5,104,000
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Working capital	Variable interest rates ranging from 4.9% to 5.5% per annum as of December 31, 2004 with maturity dates through 2012 (2003: 4.9% to 5.8% per annum with maturity dates through 2009)	4,209,970	3,330,160
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## Euro-denominated loans:

Development of production facilities	Fixed interest rates at 9.4% as of December 31, 2003 with maturity dates through 2004	272	-
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Danish Krone-denominated  
loans:

Development of production facilities	Fixed interest rates ranging from 0.3% to 9.2% per annum as of December 31, 2004 with maturity dates through 2015 (2003: fixed interest rates ranging 0.3% to 9.2% per annum with maturity dates through 2015)	12,253	12,161
		<u>6,049,495</u>	<u>8,446,321</u>

Loans from other financial  
institutions:Renminbi-denominated  
loans:

Working capital	Fixed interest rates at 5.3% per annum as of December 31, 2004 with maturity dates through 2006 (2003: 0.3% to 6.2% per annum with maturity dates through 2006)	178,978	19,000
		<u>178,978</u>	<u>19,000</u>

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 27 Long-term loans (continued)

The analysis of the fair value of the Group's long-term loans is as follow:

	As of December 31,			
	2003		2004	
	Carrying value RMB	Estimated fair value RMB	Carrying value RMB	Estimated fair value RMB
Long-term loans:				
Bank loans	6,049,495	6,047,096	8,446,321	8,443,798
Loans from other financial institutions	178,978	178,978	19,000	19,000

The fair values of long-term loans are based on discounted cash flows using applicable discount rates from the prevailing market rates of interest offered to the Group for debts with substantially the same characteristics and maturity dates. Such discount rates ranged from 2.9% to 4.0% and 2.9% to 4.0% as of December 31, 2003 and 2004, respectively, depending on the type of the debt.

## Banking facilities

As of December 31, 2004, the Group had total banking facilities of approximately RMB33,894,000, (2003: RMB28,308,000) inclusive of long-term facilities of approximately RMB13,963,000 (2003: RMB9,274,000) and other facilities of approximately RMB19,931 million (2003: RMB19,034,000). Out of the total banking facilities granted, amounts totaling RMB11,895,000 have been utilized as of December 31, 2004 (2003: RMB7,939,000). Banking facilities of approximately RMB26,198,000 require renewal during 2005. The Directors of the Company are confident that such banking facilities can be renewed upon expiry.

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 28 Commitments

## (a) Capital commitments for property, plant and equipment

	As of December 31,	
	2003	2004
	RMB	RMB
Contracted but not provided for	4,494,778	3,024,071
Authorized but not contracted for	11,756,110	5,672,804
	<u>16,250,888</u>	<u>8,696,875</u>

## (b) Commitments under operating leases

As of December 31, 2004, the Group had future aggregate minimum lease payments in relation to land and buildings under non-cancellable operating leases as follows:

	As of December 31,	
	2003	2004
	RMB	RMB
Not later than one year	173,611	245,984
Later than one year and not later than five years	694,444	983,934
Later than five years (Note)	7,233,286	9,529,497
	<u>8,101,341</u>	<u>10,759,415</u>

Note: Mainly commitments under operating leases in relation to land later than five years but not later than forty-eight years. (2003: forty-nine years)

ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

29 Litigation and contingent liabilities

(a) Litigation

As of December 31, 2003 and 2004, the Group has no significant pending litigation.

(b) Compensation with regard to the formation of an equity joint venture

Pursuant to a memorandum of understanding dated November 12, 2001 (the "MOU") signed between the Company and Alcoa International (Asia) Limited ("Alcoa"), the two parties have agreed to form a 50/50 equity joint venture which will own and operate the alumina and primary aluminum production facilities owned by the Guangxi branch of the Company (the "Pingguo JV"). Pursuant to the Subscription Agreement pertaining to which Alcoa acquired shares in the Company, if the final joint venture agreement of the Pingguo JV is not executed within eight months of the closing of the Company's global offering or if all necessary relevant PRC government approvals for the Pingguo JV are not obtained within 12 months of the closing of the Company's global offering due to the failure of a party to abide by its expressions of intent in the MOU, then that party would be obligated to pay US\$7.5 million (equivalent to RMB62.1 million) to the other party as compensation.

Although the final joint venture agreement was not executed, pursuant to the Supplementary Agreement of the Strategic Investor Subscription Agreement, the Company continues to work actively and closely with Alcoa to conclude the joint venture agreement consistently with its expressed intentions in the MOU. The Company has not made a claim against Alcoa nor, according to the Directors, has Alcoa asserted a claim against the Company for compensatory payment.

With effort contributed by both parties, significant progress has been made, including the finalization of the joint venture agreement, articles of association and electricity supply arrangement. On March 29, 2004, the establishment of the Pingguo JV was approved by the National Development and Reform Commission.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS



(RMB and US\$ amounts in thousands, except per share data)

## 30 Issued capital and reserves

## (a) Share capital

	As of December 31,	
	2003 RMB	2004 RMB
Registered, issued and fully paid:		
11,049,876,153 (2003: 10,499,900,153) shares of RMB1.00 each	10,499,900	11,049,876

In January 2004, pursuant to a placing agreement between the Company and a placing agent, the Company issued an aggregate of 549,976,000 new H shares of RMB1.00 each to certain independent professional and institutional investors at a price of HK\$5.658 per H share on a fully underwritten basis ("the Placing"). The net proceeds to the Company from the Placing amounted to approximately RMB3,200,000 of which, approximately RMB2,000,000 will be used to fund the alumina expansion project in the Company's Shanxi branch. The Directors plan to use the balance of the net proceeds for the funding of any possible acquisitions of domestic primary aluminum projects.

As of December 31, 2004 the registered, issued and fully paid share capital of the Company has been increased to RMB11,049,876, divided into 11,049,876,153 shares of par value of RMB1.00 per share, comprising 7,750,010,185 domestic shares and 3,299,865,968 H shares.

As of December 31, 2003 the registered, issued and fully paid capital of the Company were amounted to RMB10,499,900, consisting of 7,750,010,185 domestic shares and 2,749,889,968 H shares of par value of RMB1.00 per share.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 30 Issued capital and reserves (continued)

## (b) Reserves

## (i) Capital reserve

	As of December 31,	
	2003	2004
	RMB	RMB
Capital reserve represents:		
Premium on issue of shares upon reorganization	2,403,804	2,403,804
Premium on subsequent issue of shares to the public	803,454	3,504,128
Gain on waiver of interest (Note 7(b))	147,476	157,253
Other reserve	138,860	138,860
	3,493,594	6,204,045

Capital reserve can only be used to increase share capital. Pursuant to the PRC accounting standard on debt restructuring, any gains arising from debt restructuring which represent the difference between the final settlement and the carrying value of the debt concerned are directly reflected in capital reserve and therefore not distributable. Accordingly, a transfer has been made from retained earnings to reflect its non-distributable nature.

Other reserve represents contributions from Chinalco in respect of subsidies received by Chinalco from the Ministry of Finance of the PRC to support certain technical improvement projects of the Group. Pursuant to relevant PRC regulations, these subsidies should be treated as the equity interest of Chinalco; therefore can only be used to increase Chinalco's shares in the Company in the event that new issuance of shares is made in the future.

## (ii) Statutory surplus reserve

In accordance with the relevant PRC laws and financial regulations, every year the Company is required to transfer 10% of the income after taxation prepared in accordance with PRC accounting standards to the statutory surplus reserve until the balance reaches 50% of the paid-up share capital. Such reserve can be used to reduce any losses incurred and to increase share capital. Statutory surplus reserve balance should not falling below 25% of the registered capital after the transfer.

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 30 Issued capital and reserves (continued)

## (b) Reserves (continued)

## (iii) Statutory public welfare fund

In accordance with the relevant PRC laws and financial regulations, every year the Company is required to transfer between 5% to 10% of the income after taxation prepared in accordance with PRC accounting standards to the statutory public welfare fund. The use of this fund is restricted to capital expenditure for employees' collective welfare facilities, the ownership in respect of which belongs to the Group. The statutory public welfare fund is not available for distribution to shareholders except under liquidation. Once any capital expenditure on staff welfare facilities has been made, an equivalent amount must be transferred from the statutory public welfare fund to the discretionary surplus reserve, a reserve which can only be used to reduce any losses incurred or to increase share capital.

The Company decided to make a 10% (2003: 10%) transfer as statutory public welfare fund for the year ended December 31, 2004 and December 31, 2003.

## (iv) Retained earnings (accumulated losses)

	As of December 31,	
	2003	2004
	RMB	RMB
Company and subsidiaries	3,594,250	7,415,179
Jointly controlled entities	(1,102)	(5,055)
An associated company	-	-
	<u>3,593,148</u>	<u>7,410,124</u>

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 31 Notes to the consolidated cash flow statements

## Analysis of changes in financing:

	Issued capital and reserves			Minority interests			Loans		
	2002 RMB	2003 RMB	2004 RMB	2002 RMB	2003 RMB	2004 RMB	2002 RMB	2003 RMB	2004 RMB
As of January 1,	14,096,085	15,523,947	18,742,341	429,880	437,809	651,928	10,869,410	10,052,572	10,029,758
Issue of shares	215,170	-	3,300,648	-	-	-	-	-	-
Share issue expenses	(10,415)	-	(49,998)	-	-	-	-	-	-
Net income for the year	1,401,605	3,552,030	6,223,940	-	-	-	-	-	-
Injection of capital by minority shareholders	-	-	-	600	80,600	360,500	-	-	-
Minority interests' share of net income	-	-	-	46,822	157,370	243,540	-	-	-
Net cash (outflow)inflow from financing related to loans	-	-	-	-	-	-	(956,879)	(22,814)	1,884,473
Interest payable transferred to bank loan	-	-	-	-	-	-	140,041	-	-
Dividends paid to minority shareholders	-	-	-	(39,493)	(23,851)	(16,885)	-	-	-
Other reserve	-	138,860	-	-	-	-	-	-	-
Dividend paid	(178,498)	(472,496)	(1,060,788)	-	-	-	-	-	-
	<u>15,523,947</u>	<u>18,742,341</u>	<u>27,156,143</u>	<u>437,809</u>	<u>651,928</u>	<u>1,239,083</u>	<u>10,052,572</u>	<u>10,029,758</u>	<u>11,914,231</u>

As of December  
31,

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

32 Related party transactions

Related parties refer to entities in which Chinalco has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions, or directors or officers of the Company. Given that the PRC government still owns a significant portion of the productive assets in the PRC despite the continuous reform of the government structure, the majority of the Group's business activities had been conducted with enterprises directly or indirectly owned or controlled by the PRC government ("state-owned enterprises"), including Chinalco, in the ordinary course of business. The management of the Company are of the view that it has provided meaningful disclosures of related party transactions through the disclosure of transactions with Chinalco and entities in which Chinalco has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions, or Directors or officers of the Company.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

32 Related party transactions (continued)

Saved as disclosed elsewhere in the financial statements, significant related party transactions which were carried out in the normal course of the Group's business are as follows:

Note	Year ended December 31,		
	2002 RMB	2003 RMB	2004 RMB

Sales of materials and finished goods to:	(a)			
Holding company and fellow subsidiaries		671,085	1,106,919	1,700,746
Jointly controlled entity		21,496	33,701	52,424
		<u>692,581</u>	<u>1,140,620</u>	<u>1,753,170</u>
Provision of utility services to the holding company and fellow subsidiaries	(b)	195,519	234,067	219,952
Provision of engineering, construction and supervisory services by the holding company and fellow subsidiaries	(c)	665,337	784,163	830,582
Purchase of property, plant and equipment from a fellow subsidiary	(d)	-	-	115,098
Purchases of key and auxiliary materials from:	(e)			
Holding company and fellow subsidiaries		212,654	391,730	427,727
Other related parties		151,747	128,956	205,937
		<u>364,401</u>	<u>520,686</u>	<u>633,664</u>
Provision of social services and logistics services by the holding company and fellow subsidiaries	(f)	541,731	744,575	927,252
Land and building rental charged by the holding company	(g)	141,995	173,611	239,810
		<u>141,995</u>	<u>173,611</u>	<u>239,810</u>

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

32 Related party transactions (continued)

- (a) Materials and finished goods sold to Chinalco, fellow subsidiaries and other related parties, during the periods mainly comprised sales of alumina, primary aluminum and scrap materials. These transactions during the periods are covered by General Agreement on Mutual Provision of Production Supplies and Ancillary Services entered into between the Company and Chinalco. The pricing policy is summarized below.
- (i) Adoption of the price prescribed by the PRC government ("State-prescribed price");
  - (ii) If there is no State-prescribed price then adoption of State-guidance price;
  - (iii) If there is neither State-prescribed price nor State-guidance price, then adoption of market price (being price charged to and from independent third parties); and
  - (iv) If none of the above is available, then adoption of a contractual price (being reasonable costs incurred in providing the relevant services plus not more than 5% of such costs).
- (b) Utility services, including electricity, heat, gas and water, were supplied to Chinalco and fellow subsidiaries at the pricing policy as set out in (a)(i) above.
- (c) Engineering, project construction and supervisory services were provided by Chinalco and other related parties to the Company mainly for construction projects during all the periods. Provision of these services are covered by the Provision of Engineering, Construction and Supervisory Services Agreement. The State-guidance price (a)(ii) or prevailing market price (a)(iii) (including tender price where by way of tender) is adopted for pricing purposes.
- (d) A subsidiary of the Company, Shandong Aluminum Industry Co., Ltd., purchased two kilns from a fellow subsidiary, Shandong Aluminum Co. Ltd., of the Company. The purchase price is based on an independent valuation report.
- (e) The purchases of key and auxiliary materials (including bauxite, limestone, carbon, cement, coal) from Chinalco, fellow subsidiaries and other related parties are covered by the General Agreement on Mutual Provision of Production Supplies and Ancillary Services and Mineral Supply Agreement. The pricing policy is the same as that set out in (a)(i) above.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

32 Related party transactions (continued)

- (f) Social services and logistics services were provided by Chinalco and fellow subsidiaries and cover public security and fire services, education and training, school and hospital services, cultural and physical education, newspaper and magazines, publications and broadcasting and printing as well as property management, environmental and hygiene, greenery, nurseries and kindergartens, sanatoriums and canteens, guesthouses and offices, public transport and retirement management, and other services. Provision of these services are covered by the Comprehensive Social and Logistics Services Agreement entered into between the Company and Chinalco. The pricing policy is the same as the General Agreement on Mutual Provision of Production Supplies and Ancillary Services.
- (g) Rental fee is payable to Chinalco for the rental of land, inclusive of both for industrial or for commercial purposes, occupied and used by the Company during the period at prevailing market lease rates as covered by the Land Use Rights Leasing Agreement entered into between the Company and Chinalco. The annual rent payable for the current year is approximately RMB239,810 (2003: RMB173,611; 2002: RMB141,995). Besides, according to the Buildings Leasing Agreement entered into between the Company and Chinalco, the Company is required to pay rental fee for the use of buildings and properties which are retained by Chinalco.

As of December 31, 2004, there existed the following arrangements between the Group and Chinalco, fellow subsidiaries and other related parties:

- (i) Guarantees granted by Chinalco to banks for the loans borrowed by the Group are covered by the Guarantee of Debts Contract entered into between the Company and Chinalco. According to the "Solution of Chinalco Guarantee Management" issued in May 2004, the Company paid a one-off guarantee fee of RMB14,395 (2003: Nil) to Chinalco.
- (ii) The Company granted to Chinalco a non-exclusive right to use two trademarks for a period of ten years started from July, 2001 to June 30, 2011 at no cost pursuant to the Trademark License Agreement. The Company will be responsible for the payment of a total annual fee of no more than RMB1 to maintain effective registration. Under the terms of the agreement, Chinalco may negotiate extension upon terms to be agreed upon.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

33 Significant differences between HK GAAP and U.S. GAAP



The financial statements have been prepared in accordance with HK GAAP which may differ in various material respects from accounting principles generally accepted in the United States ("U.S. GAAP"). Such differences involve methods for measuring the amounts shown in these financial statements, as well as additional disclosures required by U.S. GAAP.

In preparing the summary of differences between HK GAAP and U.S. GAAP, the Directors are required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the estimates of revenues and expenses. Accounting estimates have been employed in these financial statements to determine reported amounts, including realizability, useful lives of tangible assets and income taxes. Actual results could differ from those estimates.

Effect on net income of significant differences between HK GAAP and U.S. GAAP is as follows:

		Year ended December 31,			
	Note	2002	2003	2004	2004
		RMB	RMB	RMB	US\$
Net income under HK GAAP		1,401,605	3,552,030	6,223,940	752,001
U.S. GAAP adjustments:					
Capitalization of finance costs, net of related depreciation	(a)	39,497	3,494	249,131	30,101
Depreciation of revalued fixed assets	(b)	268,600	268,600	269,999	32,622
Amortization of goodwill	(c)	24,648	24,648	24,648	2,978
Amortization of mining rights	(d)	9,307	9,307	9,307	1,125
Income tax effect of U.S. GAAP adjustments, as restated	(e)	(250,075)	(60,904)	(154,109)	(18,620)
Net income under U.S. GAAP, as restated		1,493,582	3,797,175	6,622,916	800,207
Basic and diluted net income per share under U.S. GAAP, as restated		RMB0.14	RMB0.36	RMB0.60	US\$0.07
Net income under U.S. GAAP					
As previously reported		1,679,877			
Restatement adjustment:					
- Income tax adjustments from revaluation					
of fixed assets and mining rights		(186,295)			

As restated	1,493,582
<hr/>	
Basic and diluted net income per share under U.S. GAAP	
As previously reported	RMB0.16
Restatement adjustment:	
- Income tax adjustments from revaluation	
of fixed assets and mining rights	RMB(0.02)
<hr/>	
As restated	RMB0.14
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## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 33 Significant differences between HK GAAP and U.S. GAAP (continued)

Effect on owner's equity of significant differences between HK GAAP and U.S. GAAP is as follows:

		As of December 31,		
	Note	2003 RMB	2004 RMB	2004 US\$
Owner's equity under HK GAAP		18,742,341	27,156,143	3,281,114
U.S. GAAP adjustments:				
Capitalization of finance costs, net of related depreciation	(a)	328,575	577,706	69,801
Revaluation of fixed assets, net of related depreciation	(b)	(3,115,790)	(2,861,717)	(345,764)
Amortization of goodwill	(c)	49,296	73,944	8,934
Revaluation of mining rights, net of related amortization	(d)	(261,728)	(252,421)	(30,499)
	(e)	891,805	742,951	89,766

Income tax effect of U.S. GAAP  
adjustments, as restated

Owner's equity under U.S. GAAP, as restated	16,634,499	25,436,606	3,073,352
Owners' equity under U.S. GAAP			
As previously reported	15,477,879		
Restatement adjustment:			
- Income tax adjustments from revaluation of fixed assets and mining rights	1,156,620		
As restated	16,634,499		

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 33 Significant differences between HK GAAP and U.S. GAAP (continued)

##### Restatement of US GAAP Information

As the amount of the revaluation of fixed assets and mining rights amortizes, the company has recorded the deferred tax effect relating to the adjustment for amortization expense. Accordingly, as the effect of these items is reduced, the related tax benefit is also reduced. However, the company inadvertently did not record the original deferred tax benefit relating to the adjustment for revaluation of fixed assets and mining rights, and, thus, owner's equity on a US GAAP basis has been understated in prior periods. The Company has restated the amounts for 2003 to properly reflect this adjustment. The impact is to increase owner's equity at December 31, 2003 by RMB 1,157 million from RMB 15,478 million as originally reported to the amount presented above.

The adjustment described above would have been recorded at the end of 2001 using the statutory tax rate of 33%. As described in Note 12, a number of local tax authorities granted a tax concession to the company reducing the tax rate to 15% thereby reducing the deferred tax asset. This reduction would be recorded as a tax expense in 2002 when the concession was enacted. Net income for 2002 has been restated by RMB 186,295 from RMB 1,679,877 as originally reported to the amount presented above for this item. Earnings per share as originally reported of RMB 0.16 has been reduced to RMB0.14.

(a) Capitalization of finance costs

Under HK GAAP, finance costs are capitalized to the extent that such costs are directly attributable to the construction of a qualifying asset. Under U.S. GAAP, finance costs capitalized are limited to the lower of actual finance costs incurred or avoidable finance costs. Avoidable finance cost is the amount that could have been avoided if expenditure for the qualifying assets had not been made, when qualifying expenditures have occurred and activities necessary to prepare the asset have begun.

The periodic depreciation expense under HK GAAP and U.S. GAAP differs as a result of the difference in the amount of finance costs capitalized under the two accounting standards.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

33 Significant differences between HK GAAP and U.S. GAAP (continued)

(b) Revaluation of fixed assets

Under HK GAAP, fixed assets transferred from Chinalco to the Group as part of the group reorganization were accounted for under the acquisition accounting method at July 1, 2001, the date of the group reorganization. As a result, the Group's fixed assets were revalued at fair value under HK GAAP. The fixed assets were appraised by China United Assets Appraisal Co Ltd. and Chesterton Petty Limited as of December 31, 2000 and as of June 30, 2001, respectively. In addition, during 2004, a subsidiary of the Company purchased certain production facilities from one of the subsidiaries of Chinalco. The production facilities were revalued at fair value under HK GAAP. The production facilities were appraised by Beijing Liuhezhengxu Assets Evaluation Co., Ltd, a professional valuer in the PRC. Under U.S. GAAP, the new cost basis for the fixed assets was not established for the Group as the transfer was a transaction under common control. When an asset is transferred from the parent to its subsidiary, the subsidiary records the asset at the parent's carrying value.

(c) Goodwill

Under HK GAAP, goodwill resulting from acquisitions under purchase accounting is recognized as an intangible asset and amortized on a straight-line basis over its estimated useful economic life over not more than 20 years. Under U.S. GAAP, annual amortization of this amount ceased effective January 1, 2002. Goodwill is subjected to annual impairment testing and is written down if carrying value exceeds fair value.

(d) Revaluation of mining rights

As part of the group reorganization and pursuant to the Mining Rights Transfer Agreement, the Group acquired mining rights of eight bauxite mines and four limestone quarries from Chinalco for a consideration of RMB285,341. Under HK GAAP, mining rights acquired are capitalized and stated at acquisition cost less accumulated impairment losses. Amortization of mining rights is calculated on a straight-line basis over their estimated useful lives of no more than 30 years. Under U.S. GAAP, the new cost basis was not established for the Group as the transfer was a transaction under common control.

(e) Income tax effect of U.S. GAAP adjustments

Under U.S. GAAP, a deferred tax liability relating to the capitalized finance costs and deferred tax assets relating to the reversal of the fixed assets revaluation, goodwill amortization and mining rights are recognized.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

33 Significant differences between HK GAAP and U.S. GAAP (continued)

(f) Financial instruments

Under U.S. GAAP, it is required to discuss the various market risks that the Group is exposed to as well as disclose the fair values of its financial instruments. The Group is exposed to the following types of market risk:

(i) Credit risk

The carrying amount of accounts receivable included in the balance sheet represents the Group's maximum exposure to credit risk in relation to its financial assets. The Group performs periodic credit evaluations of its customers and believes that adequate provision for uncollectable accounts receivable has been made in the financial statements.

None of the Group's major customers exceed 10% of total revenue and do not individually present a material risk on the Group's sales.

The Group maintains substantially all of its cash and cash equivalents in interest bearing accounts in several major financial institutions in the PRC. No other financial assets carry a significant exposure to credit risk.

The Group uses the majority of its futures contracts traded on the Shanghai Futures Exchange and London Metal Exchange to hedge against adverse fluctuations in aluminum price and do not hold other derivative instruments. The futures contracts are marked to market at balance sheet date and corresponding unrealized holding gains (losses) are recorded in statement of income for the year. The unrealized holding gains (losses) for the years ended December 31, 2002, 2003 and 2004 were RMB13,180, RMB(10,244) and RMB(4,972), respectively.

(ii)

Interest rate risk

The Group is exposed to changes in interest rates due to its long-term debt obligations which are disclosed in Note 27 to the financial statements. The Group enters into debt obligations to support general corporate purposes including capital expenditures and working capital needs. The Group does not currently use any derivative instruments to modify the nature of its debt so as to manage its interest rate risk.

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ALUMINUM CORPORATION OF CHINA LIMITED

NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

33 Significant differences between HK GAAP and U.S. GAAP (continued)

(f) Financial instruments (continued)

(iii)

Foreign currency risk

The Group has assets and liabilities that are subject to fluctuations in foreign currency exchange rates. However, the Group does not use any derivative instruments to reduce its economic exposure to changes in exchange rates. As of December 31, 2003 and 2004, the Group had the following foreign currency denominated short-term deposits:

As of December 31,

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	2003	2004
	RMB	RMB
U.S. dollar denominated	268,742	459,744
Hong Kong dollar denominated	17,449	264
Euro denominated	2	2
	<u>          </u>	<u>          </u>

The Group also had foreign currency denominated accounts receivable as of December 31, 2003 and 2004:

	As of December 31,	
	2003	2004
	RMB	RMB
U.S. dollar denominated accounts receivable	-	23,742
	<u>          </u>	<u>          </u>

The Group also had short-term foreign currency denominated loans as of December 31, 2003 and 2004:

	As of December 31,	
	2003	2004
	RMB	RMB
U.S. Dollar denominated	405,905	1,052,770
	<u>          </u>	<u>          </u>

The Group had foreign currency denominated long-term bank loans as of December 31, 2003 and 2004, details of which are disclosed in Note 27 to the financial statements.

(iv) Commodity price risk

As the Group sells primary aluminum at market prices, it is exposed to fluctuations in these prices. The Group uses a limited number of futures contracts to reduce its exposure to fluctuations in the price of primary aluminum.

## ALUMINUM CORPORATION OF CHINA LIMITED

## NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

## 33 Significant differences between HK GAAP and U.S. GAAP (continued)

## (f) Financial instruments (continued)

## (v) Fair values

The carrying amounts of the Group's financial assets including cash and cash equivalents; time deposits; investments; trade accounts receivable; bills receivable; amounts due from related parties and other receivables, and financial liabilities, including trade accounts payable; bills payable; short-term debts; amounts due to related parties and other payables, approximate their fair values due to their short maturities. Accordingly, such financial instruments are not included in the following table that provides information about the carrying amounts and estimated fair values of other financial instruments on the balance sheets:

	As of December 31,					
	2003			2004		
	Contract value RMB	Market value RMB	Fair Value RMB	Contract value RMB	Market value RMB	Fair Value RMB
Futures contracts	179,244	189,488	(10,244)	220,961	225,933	(4,972)

The fair values of futures contracts are based on quoted market prices. As of December 31, 2003 and 2004, the Group held futures contracts covering 12,050 tonnes and 13,845 tonnes of aluminum maturing in the first 9 months of 2004 and in the first 3 months of 2005, respectively. Market prices of these aluminum futures contracts outstanding as of December 31, 2003 and 2004 ranged from RMB13.800 to RMB16.300 per tonne and from RMB16.214 to RMB16.430 per tonne, respectively.

Investments in unlisted equity securities are unquoted equity interests in which no quoted market prices for such investments are available in the PRC. Accordingly, a reasonable



estimate of fair value could not be made without incurring excessive costs and the amounts are not material to the Group's financial statements.

#### Aluminum future brokerage facilities

As of December 31, 2004, the Group had total aluminum future brokerage facilities of approximately US\$21,000 (2003: US\$6,000) to trade on the London Metal Exchange. Out of the total aluminum future brokerage facilities granted, amounts totalling US\$636 have been utilized as of December 31, 2004 (2003: Nil). The brokers reserve the right to cancel, withdraw, reduce or vary the amount of the facilities at any time.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 33 Significant differences between HK GAAP and U.S. GAAP (continued)

##### (g) Related party transactions

Chinalco is owned by the PRC government which also owns a significant portion of the productive assets in the PRC. Therefore, the majority of the Group's business activities had been conducted with enterprises directly or indirectly owned or controlled by the PRC government. For HK GAAP, the Group has disclosed in Note 32 to the financial statements transactions and balances with its immediate parent, Chinalco, and related companies. For U.S. GAAP purposes, the Group believes that it has provided meaningful disclosures of related party transactions through the disclosures of transactions with its immediate parent in Note 32 to the financial statements. Although the majority of the Group's activities are with PRC government authorities and affiliates and other PRC controlled enterprises, none individually constitutes a major customer or supplier other than those disclosed.

##### (h) Recent US accounting pronouncements

###### Inventory costs

Statement of Financial Accounting Standards No. 151, "Inventory Costs - an Amendment of ARB No. 43, Chapter 4" ("FAS 151") provides clarification that abnormal amounts of idle facility expense, freight, handling costs, and spoilage should be recognized as current-period charges. Additionally, this standard requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The provisions of this standard are effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The adoption of FAS 151 is not expected to have a material impact on the Group's financial

position and results of the operation.

#### Exchanges of nonmonetary assets

Statement of Financial Accounting Standards No. 153, "Exchanges of Nonmonetary Assets - an amendment of APB Opinion No. 29" ("FAS 153") amends and clarifies accounting for exchanges of nonmonetary assets under Accounting Principles Board ("APB") Opinion No. 29, "Account or Nonmonetary Transactions" ("APB 29"). APB 29 is based on the principle that exchanges of nonmonetary assets should be measured based on the fair value of the assets exchanged. The guidance in APB 29, however, included certain exceptions to that principle. FAS 153 amends APB 20 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. FAS 153 is effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005, with earlier adoption permitted. The adoption of FAS 153 is not expected to have a material impact on the Group's financial position and results of the operation.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 33 Significant differences between HK GAAP and U.S. GAAP (continued)

##### (i) Recent HK accounting pronouncements

HKICPA has issued a number of new HKFRSs which are effective for accounting periods beginning on or after January 1, 2005. The Group has not early adopted these new HKFRSs in the financial statements for the year ended December 31, 2004. The new HKFRSs which expected to have relatively significant impact to the Group are stated as below:

##### Leasehold land in PRC

Under Hong Kong Accounting Standards 17 ("HKAS17") "Leases", leasehold land in PRC will no longer be accounted for as property, plant and equipment. Instead, it will be accounted for as prepayment of lease and stated at cost less amortization under HKAS17. There is no material effect on the Group's policy. This new accounting standard is effective for accounting periods beginning on or after January 1, 2005. The adoption of HKAS17 is not expected to have a material impact on the Group's financial position and results of the operations.

##### Functional currency

Under HKAS21 "The Effects of Changes in Foreign Exchange Rates", allows the financial statements of the entity to be presented in any currency. The Group has re-evaluated the functional currency of each of the consolidated entities based on HKAS21. All the Group entities have the same functional currency(RMB) as their measurement currency. This new accounting standard is effective for accounting periods beginning on or after January 1, 2005. The adoption of HKAS21 is not expected to have a material impact on the Group's financial position and results of the operations.

#### Interests in joint ventures

HKAS31 "Interests in Joint Ventures" allows a venturer to recognize its interest in a jointly controlled entity using either the proportionate consolidation or equity method. The usage of proportionate consolidation will combines its share of each of the assets, liabilities, income and expenses of the jointly controlled entity with the similar items, line by line, in the consolidated financial statements or include separate line items for its share of the assets, liabilities, income and expenses of the jointly controlled entity in the consolidated financial statements. This new accounting standard is effective for accounting periods beginning on or after January 1, 2005.

Interests in jointly controlled entities for the year ended December 31, 2003 and 2004 represented share of net assets of Shanxi JinXin Aluminum Co., Ltd. and Guangxi Guixi Huayin Alumium Co., Ltd. using the equity method. The usage of proportionate consolidation will not have impact on the consolidated net income and net assets.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 33 Significant differences between HK GAAP and U.S. GAAP (continued)

##### (i) Recent HK accounting pronouncements (continued)

#### Intangible assets

HKAS38 "Intangible Assets" removes the assumptions that the useful life of intangible assets is always finite and cannot exceed twenty years the date the asset is available for use. It now requires an intangible asset to be regarded as having an infinite useful life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the Company.

The new standard does not allow amortization of an intangible asset with an indefinite useful life. However, the useful life of such asset should be reviewed each reporting period and if the useful life changes from indefinite to finite, this should be accounted for as a change in an accounting estimate in accordance with HKAS38. This new accounting standard is effective for accounting periods beginning on or after January 1, 2005.

Mining rights acquired are currently capitalized and stated at cost to the Group less accumulated amortization and accumulated impairment losses. Amortization of mining rights is calculated to write off their cost less accumulated impairment losses on a straight-line basis over their estimated useful lives of no longer than 30 years. As of December 31, 2003 and 2004, the group had unamortized mining rights of RMB274,681 and RMB322,467, respectively. Management is currently assessing the details of the standard and is preparing a plan of implementation. The adoption of HKAS38 is not expected to have a material impact on the Group's financial position and results of the operation.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 33 Significant differences between HK GAAP and U.S. GAAP (continued)

##### (i) Recent HK accounting pronouncements (continued)

###### Financial instruments

Under HKAS 39 "Financial Instruments: Recognition and Measurement", financial instruments will be carried at either amortized cost or fair value, depending on their classification. Movements in fair value will be either charged to the statement of income or taken to equity in accordance with the standard. In addition, all derivatives, including those embedded in non-derivatives host contracts will be recognized in the balance sheet at fair value. This new accounting standard is effective for accounting periods beginning on or after January 1, 2005.

###### Goodwill

Under HKFRS3 "Business Combinations", goodwill will no longer be amortized but instead will be subject to rigorous annual impairment test. This will result in a change in the Group's current accounting policy under which goodwill is amortized on a straight-line basis over its estimated useful life of not more than 20 years and assessed for an indication of impairment at each balance sheet date. Under the new policy, amortization will no longer be charged, but goodwill will be tested annually for impairment, as well as when there are indications of impairment. This new policy will be applied for accounting periods beginning on or after January 1, 2005.

The Group had unamortized goodwill of RMB406,686 as of December 31, 2004, and had recorded net goodwill amortization expense of RMB24,648 for the year ended December 31, 2004. The company is currently evaluating the effect and the application of HKFRS3 on the consolidated financial statements; it is expected to result in cessation of amortization of goodwill, in an annual amount of RMB24,648.

#### Intangible assets arising from business combinations

Under HKFRS3 "Business Combinations", intangible assets should be recognized separately from goodwill in a business combination when they arise from contractual or other legal rights, or if they are separable. This will result in more intangible assets and less goodwill being recognized on business combinations. Accordingly, intangible assets such as trademarks and customer relationships will be recognized on business combinations under the new standard, whereas such assets are not recognized under the Group

's current accounting policy. This new accounting standard is effective for accounting periods beginning on or after January 1, 2005.

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## ALUMINUM CORPORATION OF CHINA LIMITED

### NOTES TO THE FINANCIAL STATEMENTS

(RMB and US\$ amounts in thousands, except per share data)

#### 34 Ultimate holding company

The Directors regard Chinalco, a company incorporated in the PRC, as being the ultimate holding company. As of December 31, 2004 and May 23, 2005 (being the date of the approval of the financial statement), Chinalco held 42.14% of the Company's issued share capital.

#### 35 Subsequent events

Save as disclosed in Note 13, in respect of the declaration of a final dividend for the year ended December 31, 2004 and Note 17 regarding the settlement of balances due from related parties, the following events took place subsequent to the balance sheet date:

- (a) In January 19, 2005, the Company entered into an agreement with Lanzhou Aluminum Plant concerning acquisition of shares in Lanzhou Aluminum Corporation Limited (the "Lanzhou Aluminum") for a consideration of RMB767,305. Pursuant to the transaction, the Company holds a 28% interest in the equity of Lanzhou Aluminum.

- (b) On March 28, 2005, the Board of Directors resolved that the Company would apply to the China Securities Regulatory Commission for the issue of a maximum of 1,500,000,000 A Shares to the PRC public. The amount raised is expected to be not more than RMB8,000,000. The proposed A Share issue is subject to approval by the Company's shareholders at the Annual General Meeting to be held in June 9, 2005. (the "AGM")
  
- (c) On May 18, 2005, the Company announced that a shareholder's resolution was proposed by Chinalco for the issuance of a short-term debenture by the Company to certain PRC institutional investors in the principal amount of not more than RMB5,000,000. Proceeds from the proposed issuance are expected to be used as general working capital of the Company. The proposed short-term debenture issuance is subject to approval by the Company's shareholders at the AGM.

36 Approval of financial statements

The financial statements were approved by the board of directors on May 23, 2005.