# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION

The following discussion and analysis should be read in conjunction with our consolidated financial statements and the accompanying notes as set out in this interim report.

#### CONSOLIDATED RESULTS OF OPERATIONS

The following table sets forth, for the periods indicated, information relating to certain income and expense items from our statements of income:

#### For the six months ended June 30,

	Consolidated 2003 %	Consolidated 2002 %
Turnover	100.0	100
Cost of goods sold	69.6	79.1
Gross profit	30.4	20.9
Other revenues	2.2	3.1
Expenses related to other revenues	1.9	3.0
Other revenues, net	0.3	0.1
Selling and distribution expenses	2.4	3.1
General and administrative expenses	5.3	4.1
Research and development expenses	0.5	0.5
Other (income) expenses, net	(0.1)	0.2
Operating profit	22.6	13.1
Finance costs	2.2	3.4
Operating profit after finance costs	20.4	9.7

### Revenue

The total revenue of the Group for the six months ended June 30, 2003 was RMB10,566.2 million, representing an increase of RMB2,320.6 million or 28.1% as compared with RMB8,245.6 million of the same period last year.

Total revenue includes sales of goods and other revenues. Sales of goods accounted for 97.0% and 97.9% of our total revenue for the first half of 2002 and 2003 respectively. Our sales of goods increased by 29.3%, from RMB7,994.8 million in the first half of 2002 to RMB10,339.5 million in the first half of 2003. The increase was primarily due to the rise in the sales prices of the Group's products and the increase in sales volume.

The average external sales price per tonne for our alumina increased by 32.6% from RMB1,678.2 (exclusive of VAT) for the first half of 2002 to RMB2,224.9 (exclusive of VAT) for the first half of 2003. The average sales price for our primary aluminum increased by 8.6% from RMB11,262.5 (exclusive of VAT) per tonne for the first half of 2002 to RMB12,228.1 (exclusive of VAT) per tonnne for the first half of 2003. This price increase was primarily due to the increase in international alumina and primary aluminum spot prices for the first half of 2003 as compared with the same period last year. The amount of increase in the domestic product price was basically the same as that of the international product price. The external sales volume of our alumina increased by 9.6% from 1,801,800 tonnes for the first half of 2002 to 1,974,200 tonnes for the first half of 2003. The sales volume of our primary aluminum decreased by 6.7% from 332,600 tonnes for the first half of 2002 to 310,400 tonnes for the first half of 2003.

# **Cost of Goods Sold**

The total cost of goods sold of the Group increased by 13.8% from RMB6,323.5 million for the first half of 2002 to RMB7,196.8 million for the first half of 2003. The increase was mainly due to the increase in sales volume of alumina. In addition, as a result of the rise in the prices of raw materials, the unit production costs of primary aluminum increased in the first half of 2003.

### **Selling and Distribution Expenses**

Our selling and distribution expenses decreased by 2.8% from RMB248.6 million for the first half of 2002 to RMB241.6 million for the first half of 2003. The decrease was primarily due to the improvement of the market in the first half of 2003 such that the expenses which were paid by the Company on behalf of clients were cancelled gradually. Despite an increase of 9.6% in the sales volume of alumina during the period and a consequential increase in the direct expenses in connection thereto, the Group has been able to reduce sales expenses by adjusting sales strategies and integrating sales networks.

#### **General and Administrative Expenses**

General and administrative expenses increased by 67.0% from RMB329.6 million for the first half of 2002 to RMB550.4 million for the first half of 2003. This was primarily due to the recovery by the Group in the first half of 2002 of its accounts receivable prior to 1999, thereby writing back this portion of the bad debts provision and reducing the general and administrative expenses by RMB71.865 million in the first half of 2002. The Company plans to carry out technological renovation to the anode baking production line of the Guizhou branch and the power supply rectifying equipment of the Qinghai branch in the second half of the year by dismantling some of the aged production equipment. As a result, a provision of RMB94.18 million was made in the first half of 2003 for impairment in the value of fixed assets and a provision of RMB38.70 million was made in the first half of 2003 for obsolete of inventories (spare parts).

#### **Research and Development Costs**

Our research and development expenses increased by 40.5% from RMB38.181 million for the first half of 2002 to RMB53.634 million for the first half of 2003. In the first half of 2002, the emphasis of the exchange of advanced technologies developed internally among our branches had reduced the investment in research and development. However, in the first half of this year, the Group has selected some key projects to carry out research and development, and as a result expenses on research and development have increased.

#### Other Expenses/Income

Our other net expenses/income were set from net expenses of RMB18.92 million for the first half of 2002 to net income of RMB4.05 million for the first half of 2003. The increase is primarily due to an interest waiver arrangement made between the Company and the Construction Bank of China in the first half of 2003, under which the Group was waived from paying an interest of RMB44.48 million.

# **Operating Profit**

Our operating profit increased by 122.0% from RMB1,051.1 million for the first half of 2002 to RMB2,333.2 million for the first half of 2003. Our operating profit as a percentage of sales of goods increased from 13.1% for the first half of 2002 to 22.6% for the first half of 2003.

# 34 CHALCO INTERIM REPORT 2003

#### **Finance Costs**

Our finance costs decreased by 16.2% from RMB272 million for the first half of 2002 to RMB228 million for the first half of 2003 primarily due to the decrease in the average interest rate of bank loans of the Group.

#### Income Tax

Our income tax expenses increased by 146.7% from RMB187.7 million for the first half of 2002 to RMB463.1 million for the first half of 2003 primarily due to the increase in our taxable profits for the first half of 2003. Besides, the income tax expenses for 2002 were reduced because of the Group's entitlement to the government's policy on income tax reduction for equipment purchased domestically as opposed to importation.

For the first half of 2003, our effective income tax rate was 22.0%, which was lower than the statutory rate of 33.0%. This is primarily because our Guizhou, Pingguo and Qinghai branches in the western part of China were entitled to the government's "Go West" preferential policy at a reduced income tax rate of 15%, and also because of a reduced income tax rate of 15% for our non wholly-owned subsidiary, Shandong Aluminum Co., Ltd., in Shandong.

#### **Minority Interests**

Minority interests increased by 267.4% from RMB18.64 million for the first half of 2002 to RMB68.48 million for the first half of 2003 primarily as a result of the increases in net income of the Company's non wholly-owned subsidiary, Shandong Aluminum Co. Ltd..

#### **Profit for the Period**

As a result of the foregoing, our profit for the period increased by 175.2% from RMB572.4 million for the first half of 2002 to RMB1,575.0 million for the first half of 2003.

#### DISCUSSION OF SEGMENT OPERATIONS

The Group accounts for its operating results by segment which is organized into alumina segment, aluminum segment and corporate and other services segment as of July 1, 2001.

Unless otherwise indicated, we also include in these segments 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 segment. For additional data relating to our business segments and segmental presentation, see Note 2 of our condensed interim financial statements.

There were substantial changes in the respective weightings of the turnover of the two operation segments to the total turnover as compared with those in the first half of 2002 (refer to Note 2 of our condensed interim financial statements). The percentage of turnover of alumina in the total turnover of the two segments increased from 51.8% in the first half of 2002 to 60.5% in the first half of 2003.

### **Alumina Segment**

Sales of Goods

The total sales of goods from our alumina segment amounted to RMB7,124.4 million for the first half of 2003, representing an increase of 49.1% as compared with RMB4,777.8 million for the same period last year. The increase was primarily a result of increases in both the sales prices and the sales volume of alumina.

Sales of alumina constituted 90.5% of the sales of our alumina segment for the first half of 2003. We sell alumina to our smelters as well as to external domestic smelters.

Revenue from the external sales of alumina amounted to RMB4,392.5 million for the first half of 2003, representing an increase of 45.3% or RMB1,368.8 million from RMB3,023.7 million for the first half of 2002. The increase was mainly due to the increases both in the sales prices and the sales volume of alumina. Revenue from sales of alumina to our smelters amounted to RMB1,473.5 million, representing an increase of 29.2% as compared with RMB1,140.1 million for the same period last year.

Production Cost and Cost of Goods Sold

The cost of goods sold of our total alumina segment increased by 23.5% from RMB3,800.4 million for the first half of 2002 to RMB4,694 million for the first half of 2003. This was primarily due to the increase in sales volumes of our alumina which resulted in increased sales cost, although such increase was partially mitigated by the decrease in the unit production costs of alumina.

The unit production costs of alumina decreased by 1.07% from the same period of 2002. This was mainly because of a decrease of 1.44% in consumption costs as a result of technological renovation, and a decrease of 2.88% as a result of the increase in production volume. A rise in the fuel prices in the PRC, however, had increased the cost by 3.25%.

#### Operating Profit

Total operating profit for our alumina segment increased by 211.6% from RMB693.5 million for the first half of 2002 to RMB2,160.7 million for the first half of 2003 primarily as a result of increases in both sales prices and the sales volume. Our alumina segment operating profit as a percentage of alumina segment sales of goods increased from 14.5% for the first half of 2002 to 30.3% for the first half of 2003.

#### **Primary Aluminum Segment**

Sales of Goods

The total sales of goods of our primary aluminum segment increased by 4.7% from RMB4,446.4 million for the first half of 2002 to RMB4,656.5 million for the first half of 2003.

Our revenue from the sales of primary aluminum for the first half of 2003 accounted for 81.5% of our total sales of goods of this segment. Sales of goods of primary aluminum increased by 1.3% from RMB3,746 million for the first half of 2002 to RMB3,793 million for the first half of 2003. The increase in sales of goods of primary aluminum was due to the increase in primary aluminum sales prices. However, in order to reduce product risks, we adjusted the product mix by increasing the output of other primary aluminum products thereby decreasing the contribution of the output of primary aluminum to the segment and partially offsetting the effect of the rise in sales prices of primary aluminium

# 36 CHALCO INTERIM REPORT 2003

#### Cost of Goods Sold

The total cost of goods sold for our primary aluminum segment increased by 5.9% from RMB3,725.3 million for the first half of 2002 to RMB3,944.2 million for the first half of 2003. The increase is primarily due to the increase in the unit production costs of primary aluminum products.

The unit production costs of primary aluminum increased by 12.0% for the first half of 2003 over the same period of 2002 mainly due to an 8.5% increase in unit production costs as a result of the rise in alumina prices, a 1.5% increase in costs as a result of the surge in electricity prices and a 2.0% increase in costs as a result of a decrease in output.

#### Operating Profit

Primary aluminum segment operating profit decreased by 24.0% from RMB636.4 million for the first half of 2002 to RMB483.9 million for the first half of 2003 mainly due to the surge in the prices of raw materials for alumina. Our primary aluminum segment operating profit as a percentage of primary aluminum segment sales of goods decreased from 14.3% for the first half of 2002 to 10.4% for the first half of 2003.

#### **Corporate and Other Services Segment**

Our corporate and other services segment reflected our headquarters' expenses, research and development services and product sales of our Research Institute to external customers. The segment had an operating loss of RMB108.3 million for the first half of 2003.

# LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of funding have been cash derived from operating activities, short-term and long-term borrowings, while our primary uses of funds have been production-related working capital, repayment of short-term and long-term borrowings and capital expenditures.

We have taken advantage of significantly lower interest rates on short-term debt to lower the finance costs of our capital expenditures. Interest rates on short-term debt in the PRC have generally been approximately 1% to 2% per annum lower than those on long-term debt. As a result, we have incurred substantial short-term borrowings. As of June 30, 2003, our short-term debt amounted to RMB4,909 million (including the current portion of long-term debt of RMB949 million), which accounted for 49.05% of our total debt owed to banks. Our current liabilities as of June 30, 2003 exceeded our current assets by RMB2,115 million.

In addition, funding for our capital expenses has been mainly in the form of loans from state-owned banks and commercial banks. As of December 31, 2002, and June 30, 2003, we had RMB10,053 million and RMB10,008 million, respectively, of total outstanding obligations under these loans.

Our leverage ratio, or our total loans divided by the aggregate of our total loans plus owners' equity, had decreased from 39.30% as of December 31, 2002 to 37.57% as of June 30, 2003, primarily as a result of an increase in retained earnings.

In addition to internally generated funds and a portion of the proceeds from the Global Offering, we may rely on bank borrowings to finance our capital expenditure plans.

In view of our credit and the availability of funds in the PRC, we currently do not foresee significant difficulties in obtaining bank borrowings. We plan to fund our capital and related expenditures principally through cash provided by operating activities, short-term and long-term loans and the proceeds we received from the Global Offering. We have also obtained conditional undertakings from certain PRC state-owned banks and commercial banks to establish standby credit facilities for an aggregate amount of RMB26,300 million to fund any capital shortfall related to our alumina and primary aluminum projects and related working capital purposes. We believe that our working capital is sufficient for our present needs.

# **CASH AND CASH EQUIVALENTS**

As of June 30, 2003, our cash and cash equivalents, including foreign currency deposits, amounted to RMB2,456.5 million, comprising US\$31.93 million and HK\$16.37 million.

#### **Net Cash Flow from Operating Activities**

Net cash provided by operating activities increased by 775.5% from RMB262.4 million for the first half of 2002 to RMB2,297.4 million for the first half of 2003. The increase was primarily due to the increase in alumina and primary aluminum prices and the increase in sales volume of alumina.

#### **Cash Flows from Investing Activities**

In the first half of 2003, all the net cash from investing activities was used for capital expenditures. Our cash outlays for capital expenditure projects amounted to RMB1,380 million and RMB1,663.1 million in the first half of 2002 and 2003, respectively.

#### **Cash Flows from Financing Activities**

Cash flows from financing activities were a net outflow of RMB473.9 million in the first half of 2003. This amount was mainly used for payment of dividends and repayment of some of the principals of loans.

# Use of proceeds

The net proceeds from the Global Offering amounted to approximately RMB3,303 million, including the net proceeds of approximately RMB205 million from the Over-allotment Option in connection with the Global Offering, which was exercised in January 2002. As of June 30, 2003, approximately RMB689 million was used to settle the current portion of the long-term liabilities and RMB1,401 million was used for capital expenditures. An amount of approximately RMB1,213 million worth of net proceeds from the Global Offering remains unused and is currently deposited with banks. The proceeds from the Global Offering, including the proceeds from the Over-allotment Option will continue to be used as described in the Hong Kong prospectus of the Company dated November 30, 2001.

#### **Designated Deposits and Overdue Time Deposits**

As of June 30, 2003, the Group had not placed any designated deposits with any financial institution in the PRC, nor had it failed to collect any time deposits upon maturity during the period.

#### Foreign Exchange Rate Risk

The Company conducts its business primarily in Renminbi.

The Renminbi is not a freely convertible currency. Limitations on foreign exchange transactions imposed by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates. The fluctuations in Renminbi exchange rates will affect our ability to perform our foreign currency-denominated obligations. Such fluctuations will also affect our ability to pay dividends in Hong Kong Dollars or to pay dividends in respect of American depositary receipts in United States Dollars. However, the Company believes that it is or will be able to obtain sufficient foreign exchange for the performance of such obligations.



#### **Risk Exposure of Futures**

During the first half of 2003, the Group conducted futures trading activities in primary aluminum on the Shanghai Futures Exchange. Futures trading activities are subject to inherent market risks. The Group carries out its futures business based on its self-produced primary aluminum only.

The Group is the largest primary aluminum producer in the PRC and imposes stringent control over futures trading. Therefore, we believe the Group is able to resist the risk exposure of futures trading.

#### EMPLOYEES, PENSION PLANS AND WELFARE FUND

As of June 30, 2003, there were approximately 67,150 employees in the Company. The remuneration package of the Company's employees includes salary, bonuses and allowances. Employees also receive welfare benefits including medical care, housing subsidies, child care and education, retirement and other miscellaneous items.

In accordance with applicable PRC regulations, the Company currently participates in pension contribution plans organized by provincial and municipal governments, under which each of the Company's branches 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 branch to branch, ranging from 18.0% to 22.9%, depending in part on the location of the branch and the average age of the employees. The Company also contributes to a welfare fund for its employees. The contributions of the Company to this fund are made at rates ranging from 5% to 10% of our after-tax profit. As of June 30, 2003, the Company had not paid discretionary retirement benefits to its employees.