The following is the discussion and analysis of the Company's 2002 annual results. The financial data mentioned in such discussion and analysis is mainly extracted from the Company's financial statements prepared under IFRS. The investors are advised to pay attention to the Company's audited financial statements for the years 2002 and 2001 when reading this discussion and analysis.

Achieving production targets of products

In 2002, the Company's management had implemented all the Board resolutions in an earnest manner. To cope with the declining prices of copper resulting from the weak global market of copper, the Company actively adopted a number of effective monitoring measures and endeavoured to realign its product structure so that the Company was still able to achieve its production targets for the year notwithstanding that the operation period was shorter than that of last year.

A comparison between the output quantity of the Company's main products in 2002 and the comparative figures in 2001:

| | 2002 | 2001 | Increase (decrease) | Increase (decrease) % |
|---|---------|---------|------------------------|--------------------------|
| Copper cathode | | | | |
| (inclusive of processing copper)(tonne) | 231,613 | 226,263 | 5,350 | 2.4 |
| Of which: Processing copper (tonne) | 93,094 | 98,673 | (5,579) | (5.7) |
| Gold (kg) | 8,079 | 6,723 | 1,356 | 20.2 |
| Silver (kg) | 120,980 | 115,043 | 5,937 | 5.2 |
| Sulphuric acid (tonne) | 729,293 | 823,103 | (93,810) | (11.4) |
| Pyrite concentrates (tonne) | 882,615 | 728,133 | 154,482 | 21.2 |

Turnover and its composition

The device by the Company's management of such operating strategies as realignment of product and sales structure, increasing the production and sales percentage of gold and silver early in this year in light of the declining prices of copper and their full implementation during the year were the main reasons leading to a rise of RMB331.28 million (or increase: 11.1%) in turnover despite the fact that prices of copper and processing fee had decreased.

Of which, the sale of gold was 8,000kg, representing an increase of 19.0% from the previous year; and the average selling price was RMB82,107/kg, representing an increase of 13.3% from last year; the sale of silver was 121 tonnes, representing an increase of 2.7% from the previous year; the average selling price (inclusive of tax) was RMB1,212/kg, representing a growth of 17.0% from last year; turnover of gold and silver increased by RMB194.38 million, surged by 31.9%.

The Company sold approximately 15,500 tonnes of part of its work in progress, scrap copper anode. This was main reason for a 84.6% increase in the Company's turnover of products of other category.

A comparison between turnover and its composition in 2002 and 2001 is set out as follows:

| | 2002 | | 2001 | | Increase/ (decrease) | |
|--|---------------------|-----------------|---------------------|-----------------|----------------------|--------|
| | Percentage of | | _ | Percentage of | | |
| | Turnover RMB'000 | turnover (%) | Turnover RMB'000 | turnover (%) | RMB'000 | (%) |
| Copper cathode | 1,827,731 | 54.9 | 1,855,765 | 62.0 | (28,034) | (1.5) |
| Processing copper | 252,350 | 7.6 | 290,690 | 9.7 | (38,340) | (13.2) |
| Gold and silver Others (scrap copper anode/ sulphuric acid/ pyrite | 803,388 | 24.2 | 609,008 | 20.3 | 194,380 | 31.9 |
| concentrates, etc.) | 443,604 | 13.3 | 240,330 | 8.0 | 203,274 | 84.6 |
| | 3,327,073 | 100 | 2,995,793 | 100 | 331,280 | 11.1 |

Table of principal businesses by industries and products (Prepared in accordance with IFRS)

| | Turnover | Cost of sales and services | Gross Profit (%) | Increase (decrease) in turnover from previous year (%) | Increase (decrease) in cost of sales and services from previous year (%) | Increase (decrease) in gross profit from previous year (%) |
|----------------------|-----------|-------------------------------|------------------------|---|--|---|
| Non-ferrous metals | 2,274,475 | 2,149,297 | 5.5 | 6.0 | 15.5 | (7.8) |
| Precious metals | 842,638 | 380,644 | 54.8 | 38.4 | 27.9 | 3.7 |
| Chemical products | 209,960 | 180,903 | 13.8 | (12.6) | | |
| | 3,327,073 | 2,710,844 | 18.5 | 11.1 | 15.7 | (3.4) |
| Of which: connected | 257 167 | 284 820 | 20.2 | (10.0) | (20.2) | 10.2 |
| transactions (notes) | 357,167 | 284,829 | 20.3 | (10.0) | (20.2) | 1(|

Notes:

(1) Pricing policy for connected transactions

The sale prices of copper cathode were based on the settlement prices as quoted by the Shanghai Futures Exchange for the spot month. The prices of processing copper were based on the processing prices of international copper upon entering into of the Agreement for the Processing of Copper, and the agreed prices of tax preferential treatment.

(2) Explanations on necessity and ongoing nature of connected transaction

Sale of copper cathode:

Since JCC and its subsidiaries own copper material processing plants which need copper cathode as raw materials, the Company sold copper cathode to them at market prices. In this way, the Company was able to secure steady clients and save transportation

Processing of copper cathode:

As a major and key State-owned enterprise in the PRC, JCC is entitled to the policy of refund of value-added tax (the term was in force until the end of 2002) from import of copper raw materials for processing into copper cathode for sale in the PRC upon approval of the relevant authorities in the PRC. The Company provided copper cathode processing service for the imported copper raw materials of JCC, thereby increasing the supply of high quality raw materials and stabilizing the gross profit of the Company accordingly.

Should the relevant government authorities extend the term of the above policy, the Company will accordingly extend the Agreement for the Processing of Copper entered into with JCC for one year, save and except for any changes made to the provisions of the policy.

Principal businesses by geographical territories

| | Increase (decrease) in turnover from | | |
|----------------|---|---------------|--|
| | Turnover | previous year | |
| | RMB'000 | % | |
| Mainland China | 3,096,039 | 5.8 | |
| India | 90,945 | 181.9 | |
| Hong Kong | 43,410 | 1723.9 | |
| Taiwan | 33,456 | 24.3 | |
| Australia | 26,934 | _ | |
| Korea | 20,688 | _ | |
| Other areas | 15,601 | 85.6 | |
| | 3,327,073 | 11.1 | |

Operating results

Changes in the main profit and loss items during the year prepared in accordance with the IFRS are as follows:

| | 2002 <i>RMB'000</i> | 2001 <i>RMB'000</i> | Increase (decrease) <i>RMB'000</i> | Increase (decrease) % |
|--------------|------------------------|------------------------|--|-----------------------------|
| Turnover | 3,327,073 | 2,995,793 | 331,280 | 11.1 |
| Gross profit | 616,229 | 653,284 | (37,055) | (5.7) |
| Net profit | 169,504 | 312,373 | (142,869) | (45.7) |

Main reasons for the significant change in net profit during the year:

During the year, profit decreased by approximately RMB53.49 million due to the impact of the prices of various products. Among these products, the selling prices of copper cathode products dropped by 6.3% and the prices of processing copper dropped by 7.0% and hence reduced profit by RMB141.22 million in total. However, profit increased by approximately RMB89.72 million due to the changes in the prices of gold, silver and other products.

A comparison between the selling prices (inclusive of tax) of the Company's main products in 2001 and 2002 is set out as follows:

| | | | Increase | Increase |
|---------------------------------|--------|--------|------------|------------|
| | 2002 | 2001 | (decrease) | (decrease) |
| | RMB | RMB | RMB | % |
| | | | (1, 22.2) | () |
| Copper cathode (RMB/tonne) | 15,554 | 16,592 | (1,038) | (6.3) |
| Processing copper (RMB/tonne) | 3,205 | 3,447 | (242) | (7.0) |
| Gold (RMB/Kg) | 82,107 | 72,438 | 9,669 | 13.3 |
| Silver (RMB/Kg) | 1,212 | 1,036 | 176 | 17.0 |
| Sulphuric acid (RMB/tonne) | 223 | 242 | (19) | (7.9) |
| Pyrite concentrates (RMB/tonne) | 63 | 66 | (3) | (4.5) |

(2) During the year, profit increased by RMB55.36 million due to the changes in the sales volume and structure. Among these, profit increased by RMB51.39 million due to the rise in portion of the sale of gold and silver. In addition, the Company seized market opportunities on a timely basis by increasing the sale of pyrite concentrates to 49.3%, which eased the pressure on the pyrite concentrate inventories.

A comparison between the sales volume of the Company's main products in 2001 and 2002 is set out as follows:

| | 2002 | 2001 | Increase (decrease) | Increase (decrease) % |
|-----------------------------|-----------|---------|------------------------|--------------------------|
| | | | | |
| Copper cathode (tonne) | 137,642 | 130,863 | 6,779 | 5.2 |
| Processing copper (tonne) | 92,149 | 98,673 | (6,524) | (6.6) |
| Gold (Kg) | 8,000 | 6,722 | 1,278 | 19.0 |
| Silver (Kg) | 120,980 | 117,830 | 3,150 | 2.7 |
| Sulphuric acid (tonne) | 753,410 | 829,764 | (76,354) | (9.2) |
| Pyrite concentrates (tonne) | 1,113,841 | 751,956 | 371,011 | 49.3 |

- (3) Profit decreased by approximately RMB51.00 million as a result of an increase in cost due to rising prices of raw materials procured outside and of oil as well as the declining quality of ores at mines, etc.
- (4) Profit decreased by approximately RMB84.27 million due to the increase in distribution and administrative expenses.
 - An allowance of RMB19.34 million was made for bad and doubtful debts this year. An allowance for bad and doubtful debts of RMB28.14 million was reversed in last year. Profit decreased by approximately RMB47.48 million from the previous year. Rise in the staff costs also increased the administrative expenses of the Company accordingly.
 - Expansion of the export sales business increased the distribution costs by RMB8,905,000 accordingly.
- (5) Profit decreased by RMB11.60 million due to the loss of RMB25.41 million (2001: RMB13.81 million) from the disposal of property, plant and equipment and impairment loss recognised in respect of property, plant and equipment this
- (6) Profit decreased by RMB10.94 million due to an interest income earned from the proceeds received for the issue of A Shares in 2001, whereas there was nil in the year. As such, there is a decrease of profit in the amount of RMB10,938,000
- (7) Gain on settlement of forward contracts before their maturity dates was RMB17.48 million (2001: a loss of RMB4.37 million) this year among other operating revenue, representing an increase in profit of approximately RMB21.85 million from previous year.

Financial status

During the year, the Company's total assets under IFRS amounted to RMB8,824.76 million; total liabilities amounted to RMB4,021.26 million; asset-liability ratio was 45.6%.

Changes in the asset and liability items prepared in accordance with IFRS

| | 2002 <i>RMB'000</i> | 2001 <i>RMB'000</i> | Increase (decrease) <i>RMB'000</i> | Increase (decrease) % |
|-----------------------------------|------------------------|------------------------|--|-----------------------------|
| | | | | |
| Total assets | 8,824,764 | 8,470,761 | 354,003 | 4.2 |
| Total liabilities | 4,021,756 | 3,764,065 | 257,691 | 6.8 |
| Of which: non-current liabilities | 2,306,151 | 1,881,831 | 424,320 | 22.5 |
| Minority interests | 60,704 | 694 | 60,010 | 8647.0 |
| Shareholders' equity | 4,742,304 | 4,706,002 | 36,302 | 0.8 |

The increase in non-current liabilities was mainly due to the need for financing the Guixi Smelter Phase III technological renovation project.

Receivables and credit risk

The credit risk of the Company mainly involved receivables. However, sufficient allowance for bad and doubtful debts was made in the light of the Company's past experience and the economic situation.

In addition, the Company did not have any major credit concentration risk since its has spread over the risk to a large number of customers.

Working capital and capital resources

As at the end of the year, the balance of the Company's net current assets was RMB427.34 million and the current ratio was

As at the end of the year, the Company's bank loans totalled RMB3,247.12 million of which loans of approximately RMB984.01 million are payable within one year, loans of approximately RMB686.00 million are payable within one to two years; loans of approximately RMB1,020.40 million are payable within two to five years and loans of approximately RMB556.71 million are payable after five years. The interest rates of all the bank loans ranged from 3.0% to 6.2% (2001: 4.5% to 6.2%). In addition, notes payable by the Company within one year amounted to approximately RMB187.90 million.

As at the end of the year, the Company held approximately RMB257.50 million in cash and cash equivalents, decreased by RMB423.56 million from the end of the previous year. The decrease in cash was mainly attributable to the application of all the proceeds from A Shares issued at the end of the previous year to the investment projects during the year.

Under IFRS, the net cash inflow arising from the Company's operating activities during the year amounted to RMB765.84 million, representing an increase of RMB125.99 million (or 19.7%) from the previous year. The increase in the net cash flow was mainly attributable to the plan carried out by the Company during the year for mobilizing asset inventories, minimizing the use of funds for other purposes and recovering arrearages from clients as well as the sale of approximately 15,500 tonnes of anode copper scrap so that there was a substantial rise in the net cash flow.