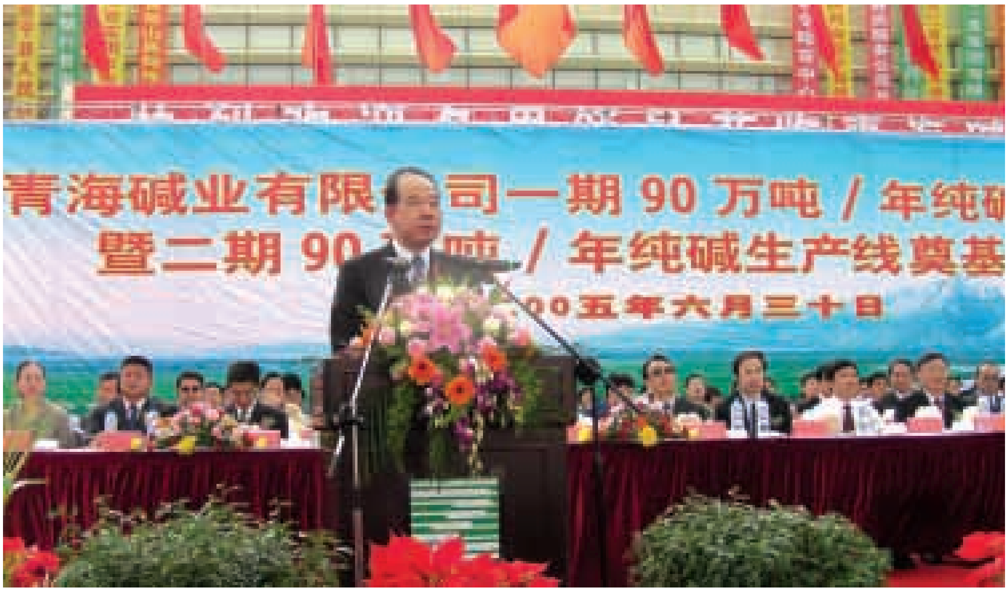
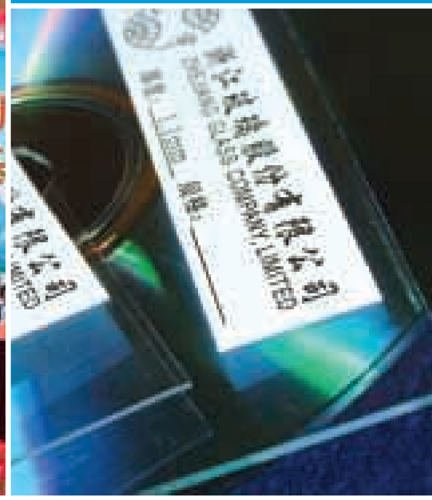
# Management Discussion and Analysis



The Group mainly produces and sells high quality float flat glass to the construction sector and automotive and electronics industries. It also produces processed glass by processing flat glass into value-added products with additional properties and sells them mainly to the construction sector.

To implement vertical integration, the Group established Qinghai Soda Ash in July 2003 with a goal of constructing two soda ash production lines, each with annual production capacity of 900,000 tonnes, over a period of five years. The first soda ash production line started trial production at the end of September 2005 and began commercial production in mid-December 2005. It is expected to reach full capacity in the second quarter of 2006.

## BUSINESS REVIEW

### Glass business

*Flat glass*

According to the National Bureau of Statistics of China, the output of flat glass in China rose by about 17% to approximately 366 million weight cases in 2005. In particular, statistics of the China Building Materials Industry Association ("CBMIA") shows that China's 42 major domestic flat glass makers' production output increased by about 17% to approximately 279 million weight cases in 2005, and their sales rose by about 14% to approximately 265 million weight cases. Their combined inventories increased to approximately 18 million weight cases as at the end of 2005, or about 104% more than that at the end of 2004. The major glass makers' sale-production ratio was about 95% in 2005, compared with about 97% in 2004.

The bright outlook for the market enticed a wave of investments to flow into the glass industry from 2003. According to the China Architectural And Industrial Glass Association, 24 new flat glass production lines commenced production in the country in 2004, increasing an annual production capacity by about 68 million weight cases. In 2005, 23 new flat glass production lines started production, increasing the country's annual production capacity by about 72 million weight cases. As a result, China's annual flat glass production capacity reached about 400 million weight cases in 2005. Consequently, China's flat glass production capacity has been growing faster than the national demand since 2004, resulting in overcapacity and thus oversupply that dragged down the average selling price of flat glass in 2005. The selling price of the mainstream products, 4mm to 8mm regular flat glass commonly used in the construction industry, in particular, fell by approximately 20% during the year.

In 2005, all of the Group's five (2004: five) flat glass production lines with a combined daily melting capacity of 2,350 tonnes (2004: 2,350 tonnes) were in full operation. During the year, the Group produced 15.5 million weight cases (2004: 15.4 million weight cases), or 775,000 tonnes (2004: 770,000 tonnes), of flat glass, with the sale-production

# Management Discussion and Analysis (cont'd)

ratio standing at approximately 99%. Sale of flat glass amounted to RMB1,006 million in 2005 (2004: RMB1,119 million), accounting for 85.1% (2004: 93.4%) of the Group's turnover.

Automotive grade glass (higher quality with higher average selling price) accounted for approximately 90% of the Group's flat glass output in 2005 (2004: 88%), and construction grade glass (lower quality with lower average selling price) accounted for the remaining 10% (2004: 12%).

To lessen the impact of the anticipated low tide of the industry, the Group diversified into ultra-thin flat glass products, which have higher and more stable selling prices. The sales of the higher-margin ultra-thin flat glass of 0.6mm to 3mm, which are commonly used in the automotive and electronics industries, enabled the Group to mitigate the impact of the declining selling prices of the Group's regular flat glass products. The overall average selling price of the Group's flat glass products, as a result, dropped by only about 9% on a year to year basis to RMB70 per weight case.

The price of heavy oil, the major fuel for flat glass production, surged from about RMB1,700 per tonne (exclusive of tax) in the first half of 2005 to about RMB2,600 per tonne in the second half of 2005. The Group spent 29% more on heavy oil per tonne, at approximately RMB2,070 (exclusive of tax) in 2005 when compared with the year 2004.

The market price of soda ash, a key raw material for manufacturing flat glass, rose substantially in 2004 and remained high in 2005 after a slight downward adjustment. The Group spent 19% more on soda ash per tonne (exclusive of tax) at the average price of approximately RMB1,500 during 2005, when compared with 2004. There were no significant cost fluctuations for other major raw materials.

As a result, the increased costs of heavy oil and soda ash pushed up the unit cost of sale of the Group's flat glass products by 14% on a year to year basis to RMB56 per weight case in the year.

In short term, the Group expects overcapacity and high production costs to persist and exert pressure on the glass makers' profitability. It will take the market some time to absorb the excess production capacity.

*Processed glass*

The Group processed approximately 6% of its flat glass output into processed glass in 2005 (2004: approximately 3%). The increased proportion was due to the commencement of the commercial production of Low-E glass (a type of energy efficient glass) at the beginning of 2005.

# Management Discussion and Analysis (cont'd)

In 2005, the Group's six (2004: six) production lines for manufacturing mirror glass, tempered glass, insulating glass and laminated glass were in normal operation. A new Low-E glass production line, which belongs to the Group's wholly-owned subsidiary, Zhejiang Engineering Glass Company Limited, started commercial operation in early 2005. The production line has an annual production capacity of 2 million square metres ("sq.m.").

The Low-E glass production boosted the production volume and average selling price of the products of the Group's processed glass business. During the year, the Group sold approximately 3.7 million sq.m. (2004: 2.8 million sq.m.) of processed glass products at the average selling price of RMB46 per sq.m. (2004: RMB28 per sq.m.), achieving turnover of RMB172 million (2004: RMB79 million). Sale of processed glass accounted for 14.6% of the Group's turnover in 2005 (2004: 6.6%).

**Soda ash business**

According to China Soda Industry Association ("CSIA"), China's soda ash output rose by 13.3% to about 14.1 million tonnes in 2005. The country also imported about 70,554 tonnes of the commodity, or 64.2% less than it did in 2004. Its soda ash export rose by 24.1% to about 1.8 million tonnes in 2005. The supply and demand were basically balanced in 2005.

Domestic soda ash price (exclusive of tax) surged from more than RMB1,000 per tonne at the beginning of 2004 to more than RMB1,600 per tonne at the end of 2004, and continued to stay at above RMB1,600 per tonne in the first quarter of 2005 before a downward adjustment to about RMB1,300 per tonne towards the end of 2005.

China's top five soda ash makers together produced about 6.0 million tonnes of soda ash, or a combined 43% share of the national output in 2005, compared with the 45% in 2004.

Qinghai Soda Ash, with the present production capacity of 900,000 tonnes a year, began commercial production in mid-December, 2005, achieving turnover of RMB4 million (2004: nil). Sale of soda ash accounted for 0.3% of the Group's turnover in 2005 (2004: nil).

The first lot of finished product of Qinghai Soda Ash was delivered by railway to the Group's glass production base in Zhejiang as raw materials in the end of 2005. In December 2005, the soda ash company convened its first customer order-placing meeting at its production base in Qinghai Province, and secured from clients letters of intent for purchasing a total of 1.2 million tonnes of soda ash for 2006.

## FINANCIAL REVIEW

In 2005, the gross profit margin of the Group was 21%, compared with 35% in 2004. The decrease in the Group's gross profit margin was mainly attributable to the decline in average selling price of flat glass products and the increase in costs of major raw materials.

The Group achieved a net profit of RMB74.1 million and a net profit margin of 6% in 2005, compared with the net profit of about RMB205.0 million and net profit margin of about 17% in 2004. The decrease in the net profit margin resulted from the squeezed gross profit margin and increased borrowings. During the year, the Group increased bank borrowings significantly from approximately RMB1.6 billion as at 31 December 2004 to approximately RMB3.2 billion as at 31 December 2005, mainly to finance the development of the soda ash business.

The Group's average inventory turnover in 2005 was 43 days, compared with 30 days in 2004. The increase was mainly due to the commencement of commercial production of Low-E glass and soda ash during the year.

## OUTLOOK

**Glass business**

*Flat glass*

China's economy and construction industry are expected to continue to grow fast enough to sustain the growth momentum in the demand for flat glass. Industrialization and urbanization of China are expected to continue at quick pace in the next few years. The scope of glass usages will also widen. These developments will be beneficial to the glass industry in the long term.

# Management Discussion and Analysis (cont'd)

The national glass production capacity has been expanding faster than the demand has been growing. It is estimated that 29 new float flat glass production lines with a combined annual production capacity of about 90 million weight cases would come on stream during 2006 and 2007. The oversupply that results from these developments may persist in the short term.

The costs of soda ash – the major raw material, heavy oil and transportation have been rising since 2004 and remained high in 2005, exerting pressure on the profitability of the glass industry.

The Group believes the profit margins of the flat glass industry will still be under pressure in 2006.

*Processed glass*

Low-E glass is widely used as glass panels on the outer walls of buildings. Power shortage and high power tariffs are common in many of China's large cities such as Beijing and Shanghai and the local governments introduced policies to encourage the use of energy saving Low-E glass in commercial and residential buildings. The Group believes there will be an increasing demand for Low-E glass and other processed glass with higher energy saving capability such as insulating glass, which consists of two layers of flat glass with inert gas filled in between.

**Soda ash business**

Qinghai Soda Ash will capitalize on its economy of scale and proximity to natural resources to develop quickly in the industry.

The soda ash company has set a production target of 700,000 tonnes for the year 2006. The Group intends that the soda ash company will supply about 20% of its output to Zhejiang Glass's production base in Zhejiang province and sell the remaining 80% to other glass makers and producers of detergents, alumina and monosodium glutamate, etc.

Qinghai Soda Ash will distribute its product through both ordinary and regional exclusive distributors and direct sales. It will broaden the sales channel by distributing through industry associations to their members.

In early 2006, the soda ash company signed an agreement with a logistics company of China's Ministry of Railway which agreed to provide uninterrupted transportation of its products to buyers across the country.

Depending on the performance of the first soda ash production line, the Group may consider constructing the second production line of same capacity to double its soda ash production capacity.

**Proposed A share issue**

In January 2005, the Group announced its plan to apply to the China Securities Regulatory Commission ("CSRC") for the allotment and issuance of not more than 280 million A shares to institutional and public investors in China through a proposed listing on the Shanghai Stock Exchange. The proceeds from the proposed A-share issuance was intended for the construction of production lines for soda ash, Low-E glass and ultra-thin and ultra thick glass.

However, the proposed issue did not materialize due to a policy change under which CSRC did not process new applications for domestic listing. The Group will closely follow the latest developments of CSRC policies and market conditions before deciding whether the Group will pursue the A share issue.

## CONCLUSION

The Group believes the conditions of the regular flat glass industry in China will remain difficult because overcapacity and high production cost will persist. However, we believe products of high quality and high technology, such as ultra-thin flat glass and processed glass products and, in particular, Low-E glass, will have better prospects.

The Group's diversification into soda ash will also help it reduce such business risk because the commodity can be sold to various other industries apart from glass manufacturing. The soda ash business will become a major income source in the future.

In view of the market and industry conditions, the Group will slow down its investment in the glass production capacity expansion. As to the soda ash business, which has a better outlook in the foreseeable future and long term, the Group may expand its production capacity subject to the performance of the first soda ash production line.

# Management Discussion and Analysis (cont'd)

## CAPITAL STRUCTURE, LIQUIDITY AND FINANCIAL RESOURCES

As at 31 December 2005, the Group's current assets amounted to approximately RMB1.21 billion (2004: RMB1.08 billion), with cash and cash equivalents totaling approximately RMB561 million (2004: RMB707 million). In addition, the Group has pledged deposits, which amounted to approximately RMB329 million as at 31 December 2005 (2004: RMB230 million). Pledged deposits represent deposits placed with certain banks as security for the grant of certain bank loans and trade finance facilities made by the banks. As at 31 December 2005, the Group's total equity amounted to approximately RMB1.43 billion (2004: RMB1.38 billion).

As at 31 December 2005, the Group's total bank loans amounted to approximately RMB3.23 billion (2004: RMB1.65 billion). Net book value of our pledged assets (including certain land use rights, plant and buildings and machinery and equipment) and pledged bank deposits for those bank loans were approximately RMB749 million and RMB68 million respectively (2004: RMB502 million and RMB95 million respectively). The effective interest rate of bank borrowings as at 31 December 2005 was 6.36% per annum (31 December 2004: 5.82%).

The net debt to equity ratio (total borrowings net of cash and pledged deposits divided by total equity) increased from 51% as at 31 December 2004 to 164% as at 31 December 2005. The change was mainly due to the increase in borrowings during 2005 to finance the construction and commercial operation of the first phase of the soda ash plant in Qinghai province. The Group had to rely heavily on bank borrowings after the plan to raise fund through an issue of A shares in the PRC stock market did not materialize due to a policy change. Part of the borrowings was also used to finance the construction of three additional flat glass production lines. As most of the bank borrowings were in the form of short-term bank loans, the Group had recorded net current liabilities of approximately RMB1.94 billion. (2004: RMB1.10 billion). Nevertheless, we believe it is a common practice of the PRC banks to grant short-term loans and renew them every year upon expiry and indeed, the Group did not experience any major problem in renewing its short-term bank loans upon expiry.

In order to improve its balance sheet, the Group has been actively seeking to re-finance its short-term bank loans with long-term bank loans. As at the date of this annual report, the Group was negotiating with two foreign financial institutions for long-term loan facilities which amounted to approximately US$68 million (equivalent to approximately RMB544 million), and the Directors are confident that the Group would reach a definite agreement with the two foreign financial institutions within 2006 and obtain the relevant funding from them.

In addition, the Group will restrict the expected cash outlays on existing production line construction projects in 2006 in order to better control the cash flow.

## EXCHANGE RATE RISK

Most of the Group's businesses were settled in Renminbi, which is not freely convertible into foreign currencies. The export, which was conducted in foreign currencies, accounted for an insignificant portion of the Group's turnover. The overseas purchase of materials also accounted for a very small portion of the Group's total materials purchase in value. The Group's bank borrowings were also predominantly denominated in Renminbi. The Group neither entered into any foreign exchange forward contracts nor adopted other hedging instruments to hedge against possible exchange rate fluctuations because it believed such measures were not necessary.

## CAPITAL COMMITMENT AND CONTINGENT LIABILITIES

Capital expenditure of the Group amounted to approximately RMB1.90 billion for the year (2004: RMB1.22 billion). Capital expenditure was mainly for the construction of the soda ash plant in Qinghai Province and also the construction of three flat glass production lines in Zhejiang Province. As at 31 December 2005, the Group had total capital commitment of approximately RMB7.55 billion, which was mainly related to the proposed investment in the construction of the second soda ash production line in Qinghai Province (approximately RMB1.23 billion) and the proposed investment in the construction of several glass production lines in Zhejiang Province (approximately RMB6.32 billion). However, the Group is entitled to adjust the schedule of these proposed investments, and in particular, the Group has the right to adjust the amount or to terminate the execution of the investments in the construction of several glass production lines in Zhejiang Province. Indeed, it is the Group's intention to restrict the capital expenditure in 2006 aiming to improve the Group's liquidity position. The Group did not have any contingent liabilities during the year ended 31 December 2005.