

## MANAGEMENT'S DISCUSSION & ANALYSIS

### INTRODUCTION

LG Chem was established in 1947 and has led the development of the Korean petrochemical industry for more than 60 years. A holding company structure was completed in March 2003, turning LG Chem into a subsidiary that concentrates solely on mainstay business lines. The groundwork has been laid to boost value for both the company and the shareholders.

The company consists of the Chemicals & Polymers, Industrial Materials, and Information & Electronic Materials Business Units, the last of which is being developed intensively as a high-growth area for the future. LG Chem is investing aggressively to secure an early lead and bolster competitiveness in the high-growth Chinese market. At the same time, the groundwork is being laid for LG Chem to assume global leadership.

The company also continues to develop technology and R&D capabilities as well as to innovate company-wide, relying on advanced technology, vertical solutions and cutting-edge products to bolster its position in the global chemical industry.

### 2003 OVERVIEW

Over the years, we at LG Chem have solidified our financial foundation through the pursuit of new revenue sources and our practice of sound business management. Despite the sluggish Korean economy, in 2003 the Company posted a double-digit sales increase of 11%. Price increases of major petrochemical products, an increase in exports and outstanding employee performance, all contributed to sales growth. However, soaring prices of some feedstock and lackluster domestic demand resulted in a 7% decline in operating income from the previous year.

The Chemicals & Polymers Business Unit registered an 11% sales increase on the strength of increases in exports and product prices. This is significant considering squeezed consumer spending and dormant domestic construction industry. Aggressive global marketing by the Industrial Materials Business Unit offset a domestic downturn, maintaining sales at the prior year's level. The 59% sales increase enjoyed by our Information & Electronic Materials Business Unit is due, in large part, to the growing global demand for mobile handsets and expansion of the company's in-house battery production.

Operating income from petrochemicals rose 11% on the strength of sales price increases and growth in overseas demand including China. However, operating income from performance polymers dropped 48% year on year due to soaring feedstock prices and declining demand on acrylonitrile, butadiene, and styrene (ABS).

A slumping construction industry caused industrial materials consumption to slow in Korea. The sales price for value-added items such as artificial marble fell, weakening the product mix, and bringing operating income down 22% from the year before. By contrast, the portion of value-added items in the Information & Electronic Materials segment rose and productivity was improved, driving operating income up 151% year on year.

Ongoing R&D investment resulted in the development of core materials for organic light emitting diode as well as the capability to produce various new devices. LG Chem developed an environment-friendly, economical production process for polycarbonate. Resources have also been directed heavily into new areas with high growth potential such as environmental protection and optical electronics.

The mid-term investment strategy calls for the establishment of a global R&D network and technical service centers in China and Europe. An expansion of the Tokyo Information and Technology Center (TITC) is planned. The Company will increase production capacity at China subsidiary for PVC and ABS, core materials in the petrochemical industry. These efforts, combined with continued expansion of domestic battery and polarizer production, will provide steady profit growth. The continued investment to R&D will reach ₩700 billion by 2008, representing 4.5% of estimated total sales. LG Chem has worked steadily to improve its financial structure by generating new revenue, but borrowings increased ₩420 billion in 2003 with the additional ₩300 billion investment for acquiring Hyundai Petrochemical. As a result, the debt-to-equity ratio rose 2%, from 164% at the end of 2002 to 166% a year later.

## FINANCIAL STRUCTURE

### Liabilities

Total liabilities exceeded ₩1.7 trillion as of December 31, 2003, up ₩418 billion over 2002. The acquisition of Hyundai Petrochemical was a major factor impacting liabilities. The breakdown of debt is as follows: long-term borrowings represents 80% and short-term 20% at year's end, a near reversal of the prior year's trend of 41% in long-term debt and 59% in short-term. The surge in long-term borrowing was the result of a rollover of ₩680 billion in loans that reached maturity in 2003. The debt-to-equity ratio of 166% represents a 2% increase, showing no improvement from 164% in 2002.

As of 2003, Korean currency borrowings totaled ₩1.421 trillion, or 83% of total borrowings. The ₩1.421 trillion figure breaks down to ₩1.1 trillion in corporate bonds and ₩321 billion in regular loans. Foreign currency borrowings are ₩203.6 billion in floating rate notes and ₩85.3 billion combined to ₩288.9 billion, or 17% of total borrowings.

The Company's ongoing initiatives to generate greater revenues, advanced accounts receivable collection system, selective investment decisions, debt retirement, and inventory reductions are expected to lower that figure to around 148% by 2004.

### Major Financial Indicators

	Dec. 31, 2002	Dec. 31, 2003
Debt to equity ratio	163.9%	165.9%
Net debt to equity ratio	88.6%	95.5%
Interest coverage ratio	5.3%	5.6%
Return on assets	9.0%	8.4%
Return on equity	24.7%	22.3%

### Debt by Currency

	Dec. 31, 2002	Dec. 31, 2003	Change
Korean won	1,090.5	1,421.0	330.5
Foreign	201.1	288.9	87.8
Total	1,291.6	1,709.9	418.3

### >> DEBT TO EQUITY RATIO (unit: %)



### >> NET DEBT TO EQUITY RATIO



### >> INTEREST COVERAGE RATIO



### >> RETURN ON ASSETS

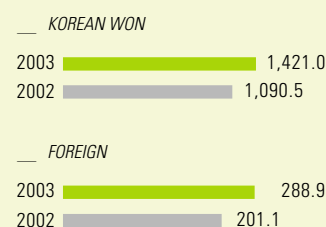


### >> RETURN ON EQUITY



### >> DEBT BY CURRENCY

(unit: in billions of won)



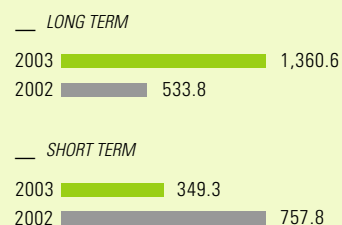
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## Debt by Maturity

	in billions of won		
	Dec. 31, 2002	Dec. 31, 2003	Change
Long term	533.8 (41%)	1,360.6 (80%)	826.8
Short term	757.8 (59%)	349.3 (20%)	(408.5)

## > > DEBT BY MATURITY

(unit: in billions of won)



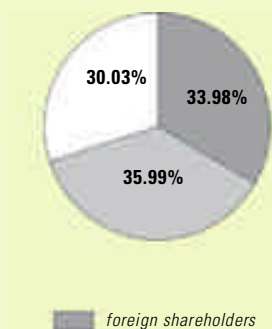
## Equity

Common stock ownership at the end of 2002 was as follows: LG Chem Investment and other majority shareholders held 30.03%, foreign shareholders 33.98%, and Korean individual and institutional investors 35.99%. The breakdown as of 2003 was 34.03% by LG Corp., 29.67% by foreign shareholders, and 36.30% by Korean individual and institutional investors.

Korean trade regulations stipulated LG Corp. secure at least 30% of the total outstanding shares by March 31, 2003 to maintain holding company status. The holding company conditions were satisfied as of the end of 2003, with LG Corp. owning a 34.03% (common stock) equity stake in LG Chem.

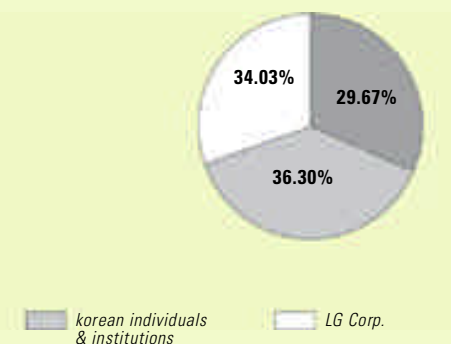
## > > SHAREHOLDER COMPOSITION

(common stock as of December 31, 2002)



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(common stock as of December 31, 2003)



## Funding Strategy

LG Chem's basic funding strategy is based on hedging liquidity risk and enhancing profitability through a mix of short- and long-term instruments at floating and fixed rates in a variety of currencies.

- Debt term: The short-term corporate paper portion of debt is between 80% and 90% of net operating capital. Long-term debt maturities are staggered to ensure liquidity.
- Interest: The fixed-rate portion of debt is decided by an analysis of the tradeoff between current fixed and floating rates. About 80% is fixed for Won currency debt, while between 20% and 40% of foreign currency debt is held at floating rates.
- Currency: The foreign currency-denominated portion of debt is set at a level that facilitates both cash flow and natural hedging. For LG Chem, the current level is US\$241 million, and an additional US\$205 million is hedged by currency swap transaction.

**Cost of Capital**

	in billions of won		
	2003 Results	2003 Target	Difference
Interest paid	97.5	97.2	(0.3)
Interest rate	6.11%	5.47%	(0.64%)

**Debt by Currency**

	in billions of won		
	Dec. 31, 2003	Dec. 31, 2004 (est.)	Change
Korean won	1,421.0	1,454.6	33.6
Foreign	288.9	226.8	(62.1)
Total	1,709.9	1,681.4	(28.5)

\*Figures reflect the acquisition of Hyundai Petrochemical.

**Dividends and Dividend Policy**

LG Chem bases the dividend rate on net income and the amount of earnings available for distribution. The company paid out a dividend of 15% the face value (₩5,000) for common stock and 16% for preferred stock over the three-year period between 1999 and 2001. Improved operational performance in 2002 allowed the company to double the payout to 30% the face value of common stock and 31% the face value of preferred stock. In 2003, LG Chem will increase the dividend rate another 5% to 35% the face value of common stock and 36% the face value of preferred stock. Backed by a consistent revenue stream and a solid financial structure, the company intends to increase the dividend payout ratio still more in the future as part of an ongoing commitment to enhancing shareholders' value.

**Dividend Summary**

	in millions of won, EPS in won		
	2001	2002	2003
Net income	132,469	345,277	362,108
EPS	1,949	5,152	5,382
Earnings avail. for distrib.	55,245	110,037	128,116
Total dividends	55,235	110,029	128,106
Dividends to net income	41.70%	31.90%	35.40%
Dividend payout, common	15%	30%	35%
Dividend payout, preferred	16%	31%	36%
Dividend yield ratio	3.45%	3.69%	3.18%

\* Figures for 2001 do not include Q1 income. The dividend payout is based on the percentage of face value.

**>> DIVIDEND SUMMARY**

— NET INCOME (unit: in billions of won)



— EPS (unit: won)

**ACQUISITION OF HYUNDAI PETROCHEMICAL****I. Acquisition of Hyundai Petrochemical**

On June 27, 2003, LG Chem and Honam Petrochemical Corp. each invested ₩300 billion in a 50:50 takeover of Hyundai Petrochemical. The total value of the acquisition is ₩1.827 trillion, which includes the ₩600

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billion in paid-in capital and ₩1.227 trillion in borrowings.

### II. Synergy Effect of Acquisition

The Hyundai Petrochemical acquisition ensures a stable supply of raw materials (ethylene, styrene monomer, butadiene, etc.) for PVC and ABS, allowing LG Chem to bolster the vertical integration of these two key business lines. The high degree of synergy generated from the takeover is expected to strengthen styrene monomer, butadiene and LDPE operations and improve LG Chem's market position. Moreover, the petrochemical industry has shown signs of recovery since the end of 2002, and LG Chem can look forward to significant benefits from the petrochemical cycle upswing.

### III. Division of Operations

The Korean Fair Trade Commission (FTC) allowed LG Chem and Honam Petrochemical Corp. to acquire Hyundai Petrochemical under the following conditions: "LG Chem and Honam Petrochemical Corp. must divide up ownership of the Hyundai Petrochemical LDPE, HDPE and PP facilities, marketing and operational control within 18 months from the date of acquiring the Hyundai Petrochemical shares.

Marketing, however, must be separated within 6 months of the stock acquisition, and the details must be approved by the FTC in advance."

Therefore, LG Chem and Honam Petrochemical took over control of their respective portions of the Hyundai Petrochemical HDPE, LD/LLDPE, and PP marketing operations on October 1, 2003. Negotiations are now under way to assess the value and complete the division process by December 2004.

### IV. 2003 Performance & Gains on Equity Valuation

Looking into the performance of Hyundai Petrochemical in 2003 since the acquisition (June 27, 2003) by LG Chem and Honam Petrochemical Corp., sales were ₩2.38 trillion, operating income ₩313.2 billion (a 13.2%), ordinary income ₩190.1 billion, and extraordinary gains ₩350.9 billion. Net income came to ₩541 billion. As a result, the debt-to-equity ratio has improved from 265% at the end of 2002, prior to the acquisition, to 66% at the end of 2003, after the acquisition. LG Chem entered the ordinary income of ₩75.9 billion Hyundai Petrochemical fetched since the acquisition as a gain of on equity method of accounting for 2003.

#### **Hyundai Petrochemical Financials for 2003**

Balance Sheet	in billions of won	
	2002	2003
Assets	3,031.3	3,012.3
Liabilities	2,198.8	1,192.8
Paid-in capital	831.4	1,819.5
Shareholders' equity	216.6	373.3
(Surplus income)	614.8	1,446.2
Debt-to-equity ratio	265%	66%

Income Statement	in billions of won	
	2002	2003
Sales revenue	1,961.8	2,381.1
Operating income	203.2	313.2
Ordinary income	95.4	190.1
Net income	101.0	541.0*

\*Includes 350.9 in debt written off.

## HI-MACS IN US

LG Chem established a subsidiary in Georgia, USA in October 2003 to produce artificial marble, which will be sold under the HI-MACS brand. The US currently represents 60% of world demand for this item.

MMA, the primary raw material for artificial marble, is readily available in Georgia, as are favorable conditions for transportation and industrial facilities. The state government has also provided excellent incentives. Half the total investment of US\$31 million will be raised through local borrowing. The production is slated for the middle of 2005.

Artificial marble is a luxurious surface material widely used for desktops, kitchen countertops, and floors. LG Chem produces artificial marbles that are easily fabricated, highly resistant to stains, and extremely similar to real marble.

Demand for high quality surface materials is growing steadily, and future prospects for artificial marble are bright. The global market is expected to reach ₩1.3 trillion (over US\$1 billion) a year by 2008. LG Chem will continue to strengthen its global competitiveness and expand its global marketing channels. The company held 12% of the global artificial marble market in 2003 and aims to secure a 17-18% market share, the world's second largest, by 2005. At the same time, overseas sales will represent about 70% of total sales.

- Base material suppliers

LG CAI: import, local marketing & sales

LGSS: HI-MACS sales subsidiary

Plant: HI-MACS (est. 2003)

## OCHANG TECHNO PARK COMPLETION, LAYING THE GROUNDWORK FOR GLOBAL OPERATIONS

Ground was broken for the Ochang Techno Park on a 330,000m<sup>2</sup> site in Korea's North Chungcheong Province on December 3, 2002, and the completed facility was dedicated on March 26, 2004. By the end of 2003, more than ₩300 billion had been invested in this production complex for information & electronic materials, a business segment being intensively developed by LG Chem. Full startup began in early 2004.

The Ochang Techno Park carries the high-tech image of a semiconductor or advanced electronics plant. All aspects—technology, products and environmental protection — are at the top of the industry. The

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new facility will join the LG Chem plant at Cheongju to drive the company's information and electronic materials business. As of March 2004, the complex consisted of a rechargeable battery plant, an optical materials (polarizers for TFT-LCDs, screens for rear projection TVs, and filters for PDP modules) plant, and the Ace Center, a support facility for overall operations.

The Ochang Techno Park will ensure the Information & Electronic Materials Business Unit can provide stable supplies to customers. An additional ₩200 billion will be invested in the Ochang Techno Park to expand rechargeable battery output to 15 million cells a month and polarizer production to 45 million sets a year by 2005. Annual sales from the Ochang Techno Park are expected to reach ₩1.3 trillion by 2006.

All LG Chem employees are committed to maximizing efficiency at operations old and new, inside and outside Korea, to exceed the 2003 performance in the coming year.

### RISK MANAGEMENT

#### Financial Risk Management

In the course of doing business, LG Chem is exposed to both liquidity and market risks from fluctuating foreign exchange and interest rates. The company's financial risk team is tasked with addressing these financial risks.

#### Foreign Exchange Risk

Exports will surpass imports in 2004, generating an estimated US\$900 million in surplus foreign currency.

- A set amount of foreign-denominated borrowings is maintained as a natural hedge against this foreign currency surplus.
- Part of the surplus foreign currency is hedged as futures exchange, helping to stabilize future cash flow.
- As for short-term exposure, exchange risk is minimized by matching inflow and outflow as closely as possible.

#### Interest Rate Management

- According to the company's basic policy, facilities capital is raised by long-term borrowings while working capital comes from short-term loans.
- An optimal balance is maintained between borrowings with fixed interest rates and those with variable interest rates. The company strives to minimize interest expenses within parameters that do not compromise financial structure stability.

#### Liquidity Risk

- Loan maturities are staggered in consideration of future operating cash flow to prevent possible liquidity risk as borrowings come due. The company also aims to keep short-term borrowings at 80-90% of net working capital.

### Capital Expenditure

LG Chem continues to invest intensively in strategic business areas for the future such as rechargeable batteries and other information & electronic materials, value-added industrial materials such as artificial marble, and specialty petrochemicals.

	in billions of won		
	2003	2004	Change
Total investment	841.4	621.0	(220.4)
Petrochemicals	33.7	76.0	42.3
Performance polymers	66.7	49.0	(17.7)
Industrial materials	56.0	96.0	40.0
Information & electronic materials	298.0	340.0	42.0
Common Investment	387.0	60.0	(327.0)

Fifty-five percent (₩340 billion) of the 2004 investment budget (₩621 billion) will be appropriated for information & electronic materials, a key business area for future growth. Overseas equity investments will reach ₩66 billion for LG Chem Information & Electronic Material in Nanjing, China. While ₩136.5 billion has been earmarked for expanding battery output and ₩66.1 billion has been allotted for increasing the production of optical materials such as polarizers in Korea. Outside Korea, a total of ₩28.5 billion will be invested in new facilities for industrial materials. These include the artificial marble plant in Georgia and new production lines for LG New Building Materials and LG Window & Door in Tianjin, China.

### **2004 OUTLOOK**

Prospects for the Korean market will be unclear again in 2004, but the company expects total sales to reach just under ₩6.27 trillion, a 10.5% year-on-year increase driven by growth in battery and polarizer sales. Steady economic recovery should boost sales of value-added, specialty items, and operating income is expected to be 23% higher in 2004 to reach ₩591.5 billion.

A robust petrochemical market in the coming year should fuel improvements in chemicals & polymers. At the same time, the newly acquired Hyundai Petrochemical operation will strengthen overall vertical integration, provide supplies of raw materials and boost cost competitiveness. The domestic construction industry is forecast to remain sluggish in 2004, but the Industrial Materials Business Unit will take advantage of outstanding R&D and marketing capabilities to increase the portion of value-added items sales. Efforts will also be focused on expanding business in the strategically important US and Chinese markets. The Information & Electronic Materials Business Unit will continue to increase both sales, stabilizing the new production lines quickly. The customer base will be expanded to solidify overall operations, and the portion of battery and polarizer operations conducted overseas will continue to increase as well.