

In 2001, as a result of the global economic slowdown and a cyclical downtrend of the petrochemical industry, the Company experienced one of the most difficult periods in its history characterised by volatility of international crude oil prices, poor demand in the petrochemical market and a significant drop in product prices. Operating results dropped to a record low as we faced various challenges in production, equipment maintenance and project construction. Despite the market pressure faced by the Company, through hard work and persistent efforts to improve management, the Company was able to achieve positive results on the production and R&D fronts while maintaining normal operations and satisfactory business development.

### **Weakness in petrochemical market with sharp drop in prices**

The domestic market for petrochemical products experienced imbalance in supply and demand in 2001 with prices of most products falling continuously since the beginning of the year, as the slowdown in global economic growth resulted in a cyclical downturn of the petrochemical industry with domestic manufacturers of downstream petrochemical products suffering setbacks in exports. Due to the above effects, prices of the Company's synthetic fibres, resins and plastics, intermediate petrochemicals and petroleum products dropped significantly compared to the corresponding period of the previous year. As at 31 December 2001, the consolidated average prices of the Company's four major product categories, namely synthetic fibres, resins and plastics, intermediate petrochemicals and petroleum products fell significantly by 10.87%, 11.72%, 18.30% and 9.03%, respectively as compared with last year.

### **Impact of crude oil costs**

The volatility of crude oil costs had a direct impact on the Company's operating results. The year 2001 saw international crude oil prices undergo a roller-coaster ride. The Company's crude oil costs increased substantially in the first half of the year comparing to the corresponding period of the previous year as international crude oil prices fluctuated at high levels, but then sharply decreased on a year-on-year basis in the second half in tandem with falling international crude oil prices. As at 31 December 2001, the Company had processed 6.6321 million tons of crude oil, including 832,500 tons from Daqing, 595,900 tons from Shengli, 819,400 tons from offshore oilfields and 4.3843 million tons of imported crude oil. Crude oil costs accounted for RMB10.97 billion or 58.34% of the Company's cost of sales. The average cost of crude oil processing was RMB1,654 per ton (excluding VAT but including transportation costs), dropping 8.21% year-on-year. Despite the fall in crude oil prices, the expansion of the Company's processing volume resulted in an increase of the Company's processed crude oil costs by RMB279 million.

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### **Significant results achieved in internal controls and efficiency enhancements**

Confronted with the sluggish petrochemical market, the Company focused on energy conservation and intensified efforts on exploring opportunities for cost savings and efficiency enhancements. Remarkable results were achieved, with a drop of 6.28% in the consolidated energy consumption rate of the Company's major products as compared to last year. As a result of strengthened operational management and process optimization, the unit cost of raw material consumption was further lowered. The Company also made ongoing improvements to its internal supervision system underpinned by a threefold focus on finance, audit and supervision, standardized managerial procedure, reinforced internal controls in terms of budget control, fund appropriation and cost management; budget controls were enforced throughout the Company and adherence to the budget were monitored to ensure costs and expenditures were contained within a reasonable limit. Finance costs were lowered through effective management of fund applications. Meanwhile, more efforts were also devoted to performance supervision, to reduce efficiency loss, improve corporate governance and standardise business conduct.

### **High utilisation rates with record highs in production volume**

During 2001, the Company faced a string of difficulties including major changes in the crude oil structure, imbalance in the supply of raw materials, the entering into the critical stages in the Phase IV project and overhauls of 11 major production units. Underpinned by a persistent focus on market requirements and efficiency, the Company devoted its efforts in enhancing operational and physical management of its operating units, seeking balance in raw materials application, optimising production structures, maintenance programs and operational patterns and resolving production problems in a timely manner. As a result, the Company succeeded in maintaining safe and stable operation of its major production units with an extended operating cycle. The utilisation rate and loading rate of major equipment reached 92.55% and 93.83%, respectively. The frequency of unscheduled shutdowns was reduced by 11.24% and the duration by 28.13% as compared with last year.

The Company processed a record high 6.6321 million tons of crude oil, representing an increase of 10.32% (of which 4.3843 million tons were imported, accounting for 66.11% of the total volume and increasing by 58.77%, year-on-year). Gasoline output decreased by 10.12% to 790,700 tons, while diesel output increased by 36.32% to 2.1552 million tons, compared to the corresponding period of the previous year. The output of ethylene increased by 6.86% to 631,000 tons, while the output of propylene increased by 0.21% to 321,600 tons, year-on-year. The output of synthetic fibre feedstock and synthetic fibre polymers amounted to 357,700 tons and 428,900 tons, respectively, representing increases of 1.36% and 4.99% compared to the corresponding period of the previous year. The output of synthetic fibres amounted to 228,300 tons, reduced by 25.22%, year-on-year. A total of 441,900 tons of synthetic resins were produced, reduced by 23.71% as compared with last year. Targets for output volumes of major products set out in our annual plans were met and the Company continued to be the largest ethylene producer in China. Meanwhile, the high quality standard of the Company's products was maintained.



### **Stability in marketing and sales cushioned by effective logistic support**

During 2001, facing the increase in the supply of domestic petrochemical products, the decline of demand in the petrochemical market as well as the influx of imported products for the traditional target markets, the Company's marketing and sales department strived to expand sales volume by exploring new marketing approaches, introducing timely adjustments to its strategies, making improvements in marketing means and re-aligning target market segments. As a result, steady sales were achieved despite weaknesses in external markets and increased domestic production. The sales to output ratio for the period was 100.42%, while the receivable collection ratio reached 100.77%.

The primary task of the Company's logistics department was to safeguard production operations and a smooth rollout of Phase IV construction. Purchasing costs were lowered through improvements in the logistics system and the regulation of purchasing activities against tight schedules, rigid requirements and extreme difficulties in allocating raw materials for production and supplies for project construction. The quality of logistical supplies was significantly enhanced with the implementation of a tracking system on purchase quality, the appointment of third-party supervising the manufacture of key equipment, the establishment of an intermediate quality inspection system for major supplies and an accountability system under which third party liability shall be specifically pursued in case of quality problems.

### **Encouraging results in technological innovation and new product development**

During 2001, the Company enhanced its efforts in the development of complete sets of technologies with the aim of securing technological support for core operations. The Company also increased its efforts in the development and marketing of new products, with a view to lifting product quality and improving the structure of its product mix. More research was conducted on extended processing and the production of fine chemicals in a bid to strengthen extended processing, increase the utilisation rate of resources and enhance the added value of its products. During 2001, the Company produced a total of 1.2903 million tons of new products (including 790,700 tons of environmentally friendly gasoline). The sales to output ratio for new products was 97.32%, while the new product output value ratio during the period was 17.31%. The ratio of dedicated utilisation rate for plastics was 70.36%. The ratio of differentiated synthetic fibres was 31.02%.

The Company completed the process of package and basic designs for the complete set 30,000-ton acrylic fibre plant and applied such technology to the domestic upgrade of the 66,000-ton acrylic fibre plant in the Phase IV project. The first process package and engineering design for a 200,000-ton second-generation loop-reactor polypropylene plant was completed based on domestic technology and is currently on trial run. As to the domestic process package for the three-stage 400 tons/day polyester project, studies on cold and thermal moulding were conducted and passed the Sinopec Group's assessment for the process package and basic designs in March and November 2001, respectively. Process research and process package design for selective hydrodesulphurisation of catalytic cracking gasoline and new technology development and its industrial application for diesel desulphurisation and dearomatisation have been completed. Their respective industrial installations process condition and data setting up are expected to be completed by the end of 2002. The successful application of CTV-4 catalyst to the vinyl acetate unit and the industrial production of the new generation CTP-III palladium/carbon catalyst has brought significant economic benefit to the Company.

### Smooth progress of capital expenditure plans

The Company's "Phase IV" project and other capital expenditure plans progressed smoothly in 2001. The equipment for the 66,000-ton acrylic fibre plant was delivered for installation on 20 January. Mechanical completion was achieved on 18 June and successful commissioning with its product up to specification was achieved on 26 July. The unit cost of production has been reduced by approximately RMB1,000/ton after the upgrade and sales of the products has also been improved. Civil construction for the major units of the 700,000-ton expansion ethylene project was fully completed. All equipment was installed and the piping was 98% completed. Mechanical completion was achieved and preliminary inspection for delivery was completed on 28 December. Mechanical completion was achieved for the 200,000-ton polypropylene unit on 25 December. Civil construction, steel structure installation and equipment purchase were basically completed and equipment installation was 95% completed for the 250,000-ton polyethylene unit. The main substation for the polyolefine complex among the supporting facilities was connected to the power network on 12 October 2001. The central control room, recycle water station and air compression station were put into operation in December. Civil construction for the expansion project of the main thermal power plant was 90% completed and the purchase of equipment and raw materials was basically completed, with 95% of the equipment having been installed.

In addition, the renovated No. 3 polyester staple line, an upgrade project designed on the basis of our own technological strengths using in-house process technology and domestic equipment, was officially put into operation on 18 December. Other important technological advancement projects, such as high sulphur-content crude oil processing unit and the phase-two upgrade of the EO/EG unit were progressing as scheduled. Preparatory works for key projects listed for the Tenth Five-Year Plans were also underway.

Moreover, the Company made significant progress in its ethylene joint venture with Sinopec and BP with the establishment of Shanghai Secco Petrochemical Co Ltd in November 2001. Infrastructure facilities are now being constructed as scheduled.

### Outlook and Work Plans for 2002

Continued uncertainties in the movement of international crude oil prices are expected in 2002 given the global economic downturn, poor demand and the disagreement among oil producing nations on the protection of crude oil prices and market. Moreover, the petrochemical industry, as a pillar industry, is set to encounter severe tests in light of the severe impact as a result of the opening of China's domestic market in the first year after WTO accession and the downturn of the petrochemical industry. Nevertheless, the Company believes that the domestic petrochemical market has bottomed out and further substantial decline of petrochemical prices is unlikely.

The Chinese government is expected to continue to adopt a proactive fiscal policy and a prudent monetary policy in 2002 to ensure the achievement of its goals in economic reforms and development. Demand in the domestic petrochemical market is expected to grow with structural adjustments in the economy and increase in consumer demand. Meanwhile, the increase in domestic vehicle consumption and export of downstream textile products following China's WTO accession is expected to stimulate demands for oil products and chemical fibre products. The completion of the Phase IV project will enable the Company to increase its production capacity for chemicals, plastics and acrylic fibres and to reduce costs of materials and energy consumption at the same time. In particular, the increase in the production of technologically advanced and high value-added products will further uplift the Company towards advanced international standards and enhance its competitive edge.

Although certain units will be overhauled in the first half of 2002 as a result of the upgrade of the 700,000-ton ethylene plant, the Company has already identified the best timing for such overhauls, and will optimise network plans, shorten maintenance hours and improve the quality of maintenance work so as to optimize overall production capacity. All these endeavours will be carried out based on the requirements for a balanced flow of supplies for the overall production system and a scientifically devised equipment maintenance program. This will help the Company achieve better operating results for 2002.

**In 2002, the Company will focus on:**

**1. Resolving problems in production and optimising operational management to ensure safety, stability, sustainability, high utilisation and high performance in the operation of its units**

The Company will resolve new problems in its production operations with a focus on the overall optimisation of the production system and will ensure an integrated use of resources with optimal balance. We will further our efforts in energy conservation, cost reduction and product quality improvements. The accountability system for production safety will be fully implemented and more resources will be devoted to environmental protection initiatives to guarantee safe and stable operation of our units.

### **2. Improving marketing and logistics to lower selling expenses and purchasing costs**

The Company will upgrade its sales and marketing functions. We will further expand and enhance our sales channels, re-align target market segments and improve after-sales service. New markets will be explored at home and abroad as we capitalise on opportunities presented by China's WTO accession, and new products generated from the Phase IV project will be marketed with extra efforts. Our marketing team will focus on capabilities to develop and respond to new markets. We will improve the control of our supplies, regulate our purchases and optimise our inventory structure with a view to reducing purchase costs and guaranteeing supplies for production and project construction.

### **3. Streamlining investment and project management systems and ensuring success and record achievements for Phase IV project and other major upgrades**

The Company shall streamline its investment and project management systems and ensure that preparatory works for projects that are crucial for the Company's long-term development are properly carried out. As the construction works for the Phase IV project are near completion, we will ensure a smooth transition to its commissioning and stable operation. The accountability system for investment projects will be implemented and major upgrade projects such as Phase II of the coking plant and the ethylene glycol unit will be smoothly carried out.

### **4. Enhancing competitiveness and technological advancement to quicken the pace of product development and commercialisation**

The Company will determine directions for the development of new products and technologies based on market requirements. We will develop an effective new system of product development by increasing relevance of our production to market requirements with a view to further commercialisation. The system and mechanism for technological innovation will also be improved.

#### **5. Rationalising the use and allocation of manpower, procuring training for all employees and recruiting high-level professionals to step up workforce enhancement**

The Company will enhance its manpower structure and improve its staff appraisal system, with superior domestic and international standards as a yardstick. We will continue to carry out reforms of our remuneration allocation mechanisms based on the conditions of the labour market. Training and recruitment of staff will be emphasized with the focus on meeting the requirements of corporate development. Efforts in downsizing and efficiency enhancement will continue with a view to reducing labour costs.

#### **6. Further strengthening internal controls, revising and improving management systems and streamlining management relations**

The Company will further strengthen its internal control efforts to improve its management system and standardise its management procedures with a focus on delivering results. The management system of the Company will be improved with the preparation of the documentation for its quality control system procedures. Internal controls will be strictly reinforced by initiatives in budget estimates, fund appropriation and cost management. The threefold internal control system of finance, audit and monitoring will be strengthened and improved. Production management standards will be enhanced with the deployment of advanced information technology.

#### **7. Advancing the pace of restructuring and rationalising our diversified operations and external investments**

The Company will step up the restructuring of its diversified operations and internal corporate reforms. Our external investment operations will gradually be set on a track for positive development with enhanced efficiency through rationalisation, improvements in corporate governance, regulation of corporate operations and improvements in our asset structures.