

The petrochemical industry showed signs of resurgence in the year under review, supported by a steady albeit slow recovery of the global economy and the continued strong growth of China's economy. China's market conditions were stable and petrochemical product prices recovered on the back of stronger demand. The overall completion and operation of the Company's "Phase IV" project since June 2002 resulted in record-high crude oil processing, volume, product output and sales. The Company's operating results improved significantly. Normal operation volume and business developments were achieved.

### **Completion of Phase IV project boosted production output to historic high**

The Phase IV project, including the construction of a 200,000-ton polypropylene plant and a 250,000-ton polyethylene plant, the expansion of the coal-fired power plant and the upgrade and expansion of the 700,000-ton ethylene plant, were officially completed and put into operation in the first half of 2002. The objective of safe and economic operation was duly achieved, with the plants being put into operation successfully at the first attempt. The expansion and technology upgrade of the ethylene glycol and polyester staple units, as well as another key project, the higher sulphur bearing crude oil refining facility featuring a newly constructed 1.5 million-ton medium pressure hydro-cracking unit, were completed as scheduled. The successive completion and operation of these key technology upgrades has brought the Company significantly closer to top international standards and has raised the quality standards and technological component of the Company's products. This lays solid foundations for enhancements in the economic efficiency of the Company, with a view to becoming a stronger and larger enterprise.

In 2002, the Company processed 7.4284 million tons of crude oil, representing an increase of 12.00% (of which 5.2014 million tons were imported, an increase of 18.64% compared to the same period last year and accounting for 70.02% of total refining volume) and setting yet another record-high level. Compared to the same period last year, gasoline output increased by 12.17% to 886,900 tons, while diesel output increased by 3.6% to 2.232 million tons. The output of ethylene increased by 26.78% to 800,000 tons, while output of propylene increased by 33.21% to 428,400 tons, compared to the same period last year. Output of synthetic fibre monomers and synthetic fibre polymers amounted to 380,500 tons and 474,300 tons, respectively, representing respective increases of 6.37% and 10.59% compared to the same period last year. The output of synthetic fibre amounted to 302,500 tons, an increase of 32.50% over the same period last year. A total of 668,400 tons of synthetic resins were produced, an increase of 51.26% compared to the same period last year. The Company exceeded the annual production targets for all major products. The Company still remains the largest ethylene maker in China. Meanwhile, the Company continued to deliver consistently high quality products.

### Prices improved as petrochemical market showed signs of resurgence

The petrochemical industry bottomed out in late February 2002. Prices for most petrochemical products fluctuated at relatively higher levels after taking off in March and gradually rising in tandem with crude oil prices, although the overall price level was still lower than that of the previous year. Prices of the Company's synthetic fibres, resin and plastics, intermediate products and petroleum products in the last three quarters of the year all compared favorably to the first quarter. As at 31 December 2002, the weighted average prices of the Company's synthetic fibres and petroleum products rose 3.45% and 0.85%, respectively, while the weighted average prices for resins and plastics and intermediate products dropped by 8.56% and 0.27%, respectively, compared to the same period last year.

### Impact of crude oil cost

International crude oil prices were on a roller-coaster ride for much of 2002. Generally speaking, prices gradually rose from their low at the beginning of the year, mainly affected by the average offshore crude oil price in major spot markets rising to US\$28.4 per barrel in December from US\$18.5 per barrel in January. For the year ended 31 December 2002, the Company had processed 7.4284 million tons of crude oil, of which 179,000 tons were from Daqing, 1.3752 million tons were from Shengli, 672,800 tons were from offshore oilfields and 5.2014 million tons were imported crude oil. Crude oil costs amounted to RMB11.445 billion, accounting for 57.64% of the Company's cost of sales. The average cost of crude oil processed was RMB1,541 per ton (before VAT but after transportation costs), a decrease of 6.83% compared to the same period last year. This decrease was a result of lower crude oil purchasing costs, benefits of changes of international crude oil prices and the Company's timely actions to adjust the structure of crude oil supply. Despite the fall in crude oil prices, the expansion of the Company's processing volume resulted in an increase of the Company's crude oil costs by RMB475 million.



### **Further enhancements in internal corporate management**

In 2002, the Company made further improvements to its financial management, auditing and efficiency management. By means of further enhancement of budget management, cost management and accounting standards management, costs and expenses indicators were effectively controlled. Through enhancements in fund management, such as adjusting capital payments methods when appropriate and carrying out refinancing on differentiated interest rates, finance expenses were reduced by RMB50 million. The Company booked RMB66 million in profit tax exemption through enhanced tax management, savings in project investments costs and tax concessions available from the State. So long as the quality of our projects was not affected, domestic equipment was used wherever practicable to secure tax exemptions for domestic equipment used in technology upgrade projects. Meanwhile, the Company was also engaged in various auditing initiatives in respect of production and operations, engineering construction, repair and maintenance and other specific areas, with the aim of cost reduction and efficiency enhancement. Advanced auditing methods based on internal controls were actively explored and the Company was able to increase efficiency and reduce losses through various auditing measures.

The Company has developed a sound management system and emphasised the importance of safety in operations throughout the years. Nevertheless there were violations of operational rules during the year and consequently two relatively serious accidents occurred at the production units. The Company and all its employees were taught a serious lesson and have taken steps to ensure strict observance of operational rules.

### **Marketing and sales show steady progress**

During 2002, in view of the expanded physical output of the Company following the completion of the Phase IV project and ongoing changes in the petrochemical market, the Company's marketing and sales department strived to launch new marketing initiatives and adjust its marketing strategies in a timely manner, with the aim of optimising its sales channels, expanding its sales network and speeding up integration of domestic and export sales. As a result, the Company was able to achieve steady sales amid a substantial increase in output volume for the year. A 100% production to sales ratio was maintained, while the receivable collection ratio reached 100.19%.

The Company's logistical supplies operation has been increasingly standardised, rationalised and professionalised. Our logistical supplies system was revised and improved and, with enhanced management and supervision of supplies and purchases, purchasing costs were effectively reduced. A quality-based mechanism for the selection of suppliers was developed on the principles of "overall quantity control, quality improvement, competitive prices and quality and fairness" to optimise the structure of the Company's portfolio of suppliers. Through enhanced management and delegation of authority, the Company carried out adjustment, substitution and alternative utilisation of static resources during the course of maintenance works and construction works. As a result, the structure of inventories was properly adjusted and inventory value as a percentage to reserve funds was decreasing each year. The ratio of centralised purchases for the year was 96.69%.

### **Notable achievements in product development and application of new technologies**

In 2002, the Company continued to enhance the adoption of R&D results in production and fulfilling market needs. Technological advancement projects centered around major production flow and market requirements. Commercialization of research achievements was actively promoted. Products were developed and commercialized from a number of technological advancements and R&D projects. The process package for the upgrade of the acrylonitrile plant to 130,000 tons from 60,000 tons per year was developed. The process package based on domestic technology of the 200,000-ton polypropylene unit was successfully applied to the new 200,000-ton polypropylene plant and six new polypropylene grades were developed on our pilot plant research. Construction of the 1, 3-polypropylene glycol pilot plant was completed, while the optimization of the PTT polymerization process and the trial commercial production of DTY are currently underway. The process package design for selective hydro-desulphurization of catalytic cracking gasoline and trial production of a new catalyst were completed. Engineering technology for the 30,000-ton polyester staple unit, developed with proprietary intellectual property rights, was successfully applied. The integrated staple units numbers 4, 5 and 6 were upgraded and expanded using domestically-produced equipment. Some of these new products were marketed in large quantities. Industrial application of high-speed special-grade BOPP was carried out at the 100,000-ton polypropylene unit, while the 20,000-ton industrial ethyl acetate unit and the isopentenyl unit, the first industrial-scale unit of its kind in China, were completed and commissioned. As a result, the Company was able to launch new products on a large scale, ensuring competitiveness and profitability. During 2002, the Company produced a total of 1.4285 million tons of new products (including 758,300 tons of clean gasoline), an increase of 10.71% over the same period last year. The sales to output ratio for new products was 87.90%, while the output value ratio was 17.57% (excluding clean gasoline). The ratio of special synthetic resins was 69.77%. The ratio of differentiated synthetic fibre was 30%.

### **Smooth progress of capital expenditure projects**

The Company's capital expenditure items, mainly under the Phase IV project, progressed smoothly in 2002. Mechanical completion of the 700,000-ton ethylene expansion project was achieved in February and the plant was commissioned in June, achieving first-attempt success in operations. The 200,000-ton polypropylene plant was commissioned in June achieving first-attempt success in operations. Mechanical completion of 250,000-ton polyethylene plant was achieved in January and the plant was commissioned in June, achieving first-attempt success in operations. Operations of Unit 5#A, Furnace B and Generator Unit 5# of the coal-fired power plant expansion project commenced successfully in August.

Mechanical completion of the higher sulphur bearing crude oil processing project was achieved in April 2002, among which the 32,000-standard-cubic-meter/hour hydrogenmaking plant, the 42,000-ton sulphur recovery unit and the dry-gas/LPG desulphurisation unit, the 1.50 million-ton medium pressure hydro-cracking unit and the 800,000-ton Jet Fuel hydrogenation unit were commissioned in the second half of 2002 with feedstock input.

For lines numbers 4, 5 and 6 for the polyester staple upgrade project, developed on the basis of our own technological strengths using in-house production technology and domestic equipment, removal of existing equipment and civil construction commenced in May; installation of new equipment began in July and trial operation was launched in October. The upgrade of the ethylene glycol unit, which involved the expansion of installed capacity from 150,000 tons to 225,000 tons per year, was completed in January. The 130,000-ton acrylonitrile upgrade project is progressing as scheduled.

The ethylene joint venture between the Company, China Petroleum & Chemical Corporation and BP made significant progress during the year. The groundbreaking ceremony for Shanghai Secco Petrochemical Company Limited was held in March and all construction works are progressing smoothly.

### **Prospects and plans for 2003**

The fundamental global situation is expected to remain unchanged in 2003, underpinned by tension and turmoil in certain areas while the overall environment for China and the Company is expected to be peaceful and stable. Signs of global economic recovery have emerged but the foundations for recovery are far from solid, with a number of uncertainties reigning. On the domestic front, China's economy is expected to maintain its trend of healthy growth in 2003. The Chinese government will continue to adopt a proactive fiscal policy and a prudent monetary policy in pursuit of the objective of stimulating domestic demand. Rectification and standardisation of the market economy will continue to ensure that the market operates in an orderly manner, while ongoing improvements will be made to the modern market economy system. Enterprises are encouraged to increase their exports and engage in different forms of joint ventures with multi-national corporations. Corporate reforms of medium and large state-owned enterprises will continue with a special focus on listed companies. These developments are set to expose state-owned sectors and enterprises to even more business opportunities.

The Company shall continue to grasp opportunities arising from this favorable environment and capitalise on the full commencement of major works such as the Phase IV project, endeavoring to enhance the overall operating quality of the production system to ensure steady growth of physical output. The Company will consolidate and expand its market share both at home and abroad, striving for improved results in 2003.

**In 2003, the Company shall focus on:**

- (1) Enhancing the overall operating quality of the production system to ensure steady growth of physical output

The load factor of units and the operating quality of systems shall be improved with emphasis on safety, stability, optimisation and improvement to address the issues of excess and bottlenecks in the production systems. Integrated use and rational allocation of resources shall be realised to provide solid foundations for steady growth in physical output.

- (2) Reinforcing the principles of being market-driven and customer-oriented to strive for progress in sales and supply

Market-driven and customer-oriented principles shall be reinforced and the pattern of enterprise logistics operations in a market economy shall be actively explored. Sales operations shall be based on market demands, executed in coordination with production operations and attuned to profitability, in accordance with the principles of "production determined by sales" and "production driven by sales". Efforts in centralising procurement will continue with a view to both ensuring supplies and lowering purchasing costs.

- (3) Continuing reforms of corporate structures and mechanisms to energise the Company

Efforts will continue to deepen reforms in corporate structure. Delegating management authority, enhancing fundamental structures and improving management efficiency will become our priorities in the first half of 2003. Reforms in labour and work allocation policies will assist the Company to achieve the continued progress of structural reforms in tandem with production operations and technological advancement projects.

- (4) Major efforts in technological advancement and industry upgrade to uplift the Company's core competitiveness

The Company's positioning and objectives for development shall be further refined to reflect continued emphasis on the pursuit of intrinsic qualities. Efforts will be made to further enhance progress in technological advancement, product development and industry upgrades. Commercialisation is to be spearheaded by developments in information systems and propagating a corporate culture underpinned by the drive for excellence and management of details to enhance the Company's core competitiveness.

- (5) Strengthening management at basic levels to improve the Company's overall management standards

The Company shall enhance corporate governance and rigorously enforce internal discipline in the current call for fine-tuning and adjustments. Management at basic levels will be reinforced and on-site management will be strengthened. Emphasis will be put on adopting a systematic, regulated and standardised management to carry out supervision and day-to-day operations, in an effort to continuously enhance the Company's overall management standards.

- (6) Furthering specialisation-focused restructuring and optimisation of asset structure to increase the competitiveness of the Company's diversified operations and investment enterprises

Objectives will be set for the Company's business development affiliates to achieve operational independence and financial accountability. Transitional periods will be shortened and major efforts will continue in restructuring and streamlining affiliate companies based on their business specialties with a view to improving their competitiveness in the market. Investment enterprises shall further optimise their asset structures in order to achieve further development, innovation and efficiency in their capital operations.