

### (3) Marketing and Distribution Segment

In 2002, the Company faced a harsh situation and huge pressures arising from the excessive supply of refined oil products in the Company's principal markets, higher inventory and the drop of prices to a trough in early 2002, however, the Company has been able to raise total sales volume, retail volume, distribution volume of refined oil products and its operating results significantly and further increased the Company's market control and profitability through adjusting market perceptions, multi-channel marketing, marketing structure adjustment, improving information system construction, strengthening structural reform, improving management and establishing a sales incentive system.

In 2002, the Company's total domestic refined oil products sales volume increased to 70.09 million tonnes, representing an increase of 3.5% over the preceding year, in which, the retail volume was 34.73 million tonnes, representing an increase of 14% over the preceding year. The Company's

retail share in its principal markets reached 68%, representing an increase of three percentage points over the previous year. In the retail volume, gasoline of high octane number of 93# and above was 4.3 million tonnes, representing an increase of 44.7% over the previous year. The efficiency of petrol stations has continuously been improving and the annual average throughput per station reached 1,560 tonnes, representing an increase of 87 tonnes over the previous year. The total distribution volume in 2002 was 12.63 million tonnes, representing an increase of 8.5% over the previous year. The retail and distribution volume of refined oil products accounted for 67.6% of the Company's total domestic sales volume, representing an increase of 5.5 percentage points over the preceding year. By the end of 2002, the Company had 24,000 COCO (Company Owned and Company Operated) petrol stations and 4,127 franchised petrol stations. The Jingmen-Shashi Pipeline and Zhenhai-Kangqiao Pipeline had been put into operation and the marketing network was further improved. In 2002, the Company

also actively explored international markets and exported 5.02 million tonnes of refined oil products, representing an increase of 34.58% over the preceding year.

In 2002, the Company continuously sped up the progress of reform in the Marketing Segment, improved the integrated management of prefecture- and county-level sales companies, reduced administrative levels, promoted intensive operation, further optimized the transportation and storage facilities, closed down inefficient and small storage terminals and consequently raised its operating efficiency. The Company continuously used advanced information technology to improve sales enterprise management. The successful operation of ERP in Tianjin and Jiangsu sales companies, the start of primary and secondary logistics optimization, the information system improvement of sales management and the pilot application of IC card for petrol stations all brought about new vigor to increase the competitiveness of the Company's Marketing and Distribution Segment.

#### Summary of the Marketing and Distribution Segment

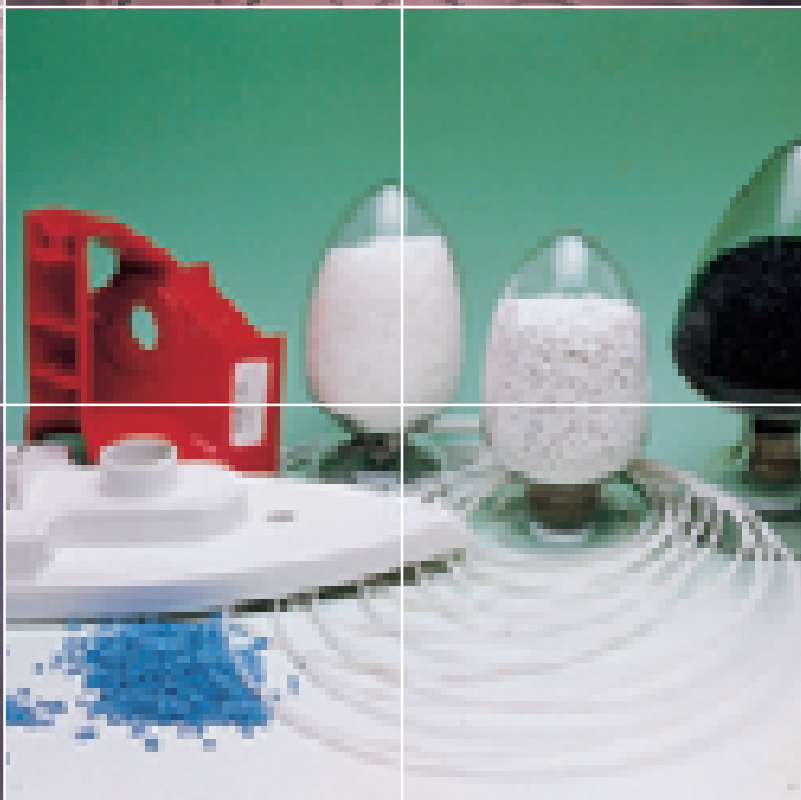
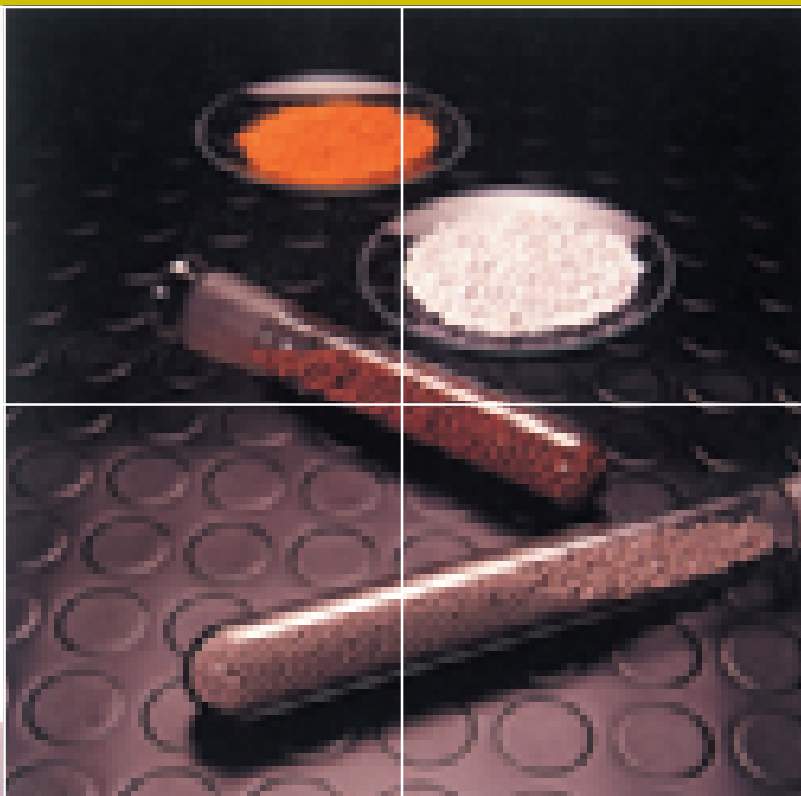
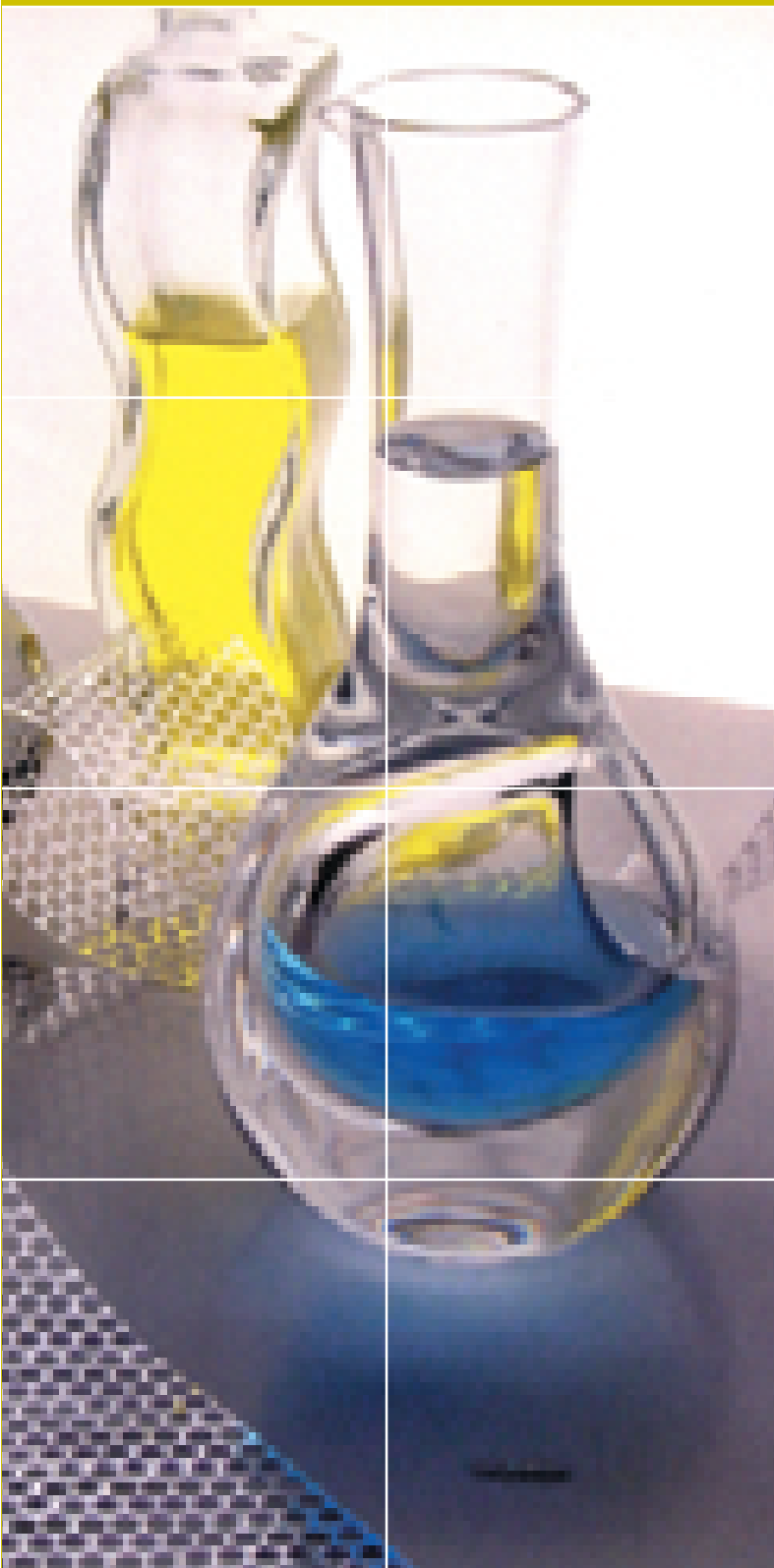
	2002	2001	2000	Change in 2002 compared to 2001 (%)
Total domestic sales of refined oil products (thousand tonnes)	70,090	67,740	67,690	3.5
Of which: Retail volume (thousand tonnes)	34,730	30,430	23,940	14.1
Distribution volume (thousand tonnes)	12,630	11,640	-	8.5
Wholesale volume (thousand tonnes)	22,730	25,670	43,750	-11.5
Average annual throughput / petrol station (tonne/station)	1,560	1,473	1,402	5.9
Total number of petrol stations under Sinopec Corp. brand	28,127	28,246	25,493	-0.4
Of which: Number of COCO petrol stations	24,000	24,062	20,259	-0.3
Number of franchised petrol stations	4,127	4,184	5,234	-1.4
Proportion of retail volume to total domestic sales (%)	49.6	44.9	35.4	4.7 percentage points
Year-end capacity of oil storage (thousand cubic metres)	13,970	15,134	14,640	-7.7



## CHEMICALS

THE COMPANY IS THE LARGEST PRODUCER AND THE LARGEST DISTRIBUTOR OF CHEMICAL PRODUCTS IN CHINA, WITH AN YEAR-END ETHYLENE PRODUCTION CAPACITY OF APPROXIMATELY 2.8 MILLION TONNES. IN 2002, THIS SEGMENT PRODUCED 2.716 MILLION TONNES OF ETHYLENE, AND PRODUCTION OF ALL MAJOR CHEMICAL PRODUCTS WAS INCREASED AFTER THE COMPLETION OF CERTAIN CHEMICAL FACILITIES.





#### (4) Chemicals Segment

The Company maintained a high utilization rate of the major chemical facilities in 2002 and concurrently sped up the revamping of existing chemical facilities. With the completion of the second round revamping of Beijing Yanhua Petrochemical's ethylene facilities, the second round revamping of ethylene facilities of Sinopec Shanghai Petrochemical Company Limited ("Shanghai Petrochemical") and Sinopec Yangzi Petrochemical Company Limited ("Yangzi Petrochemical") which was also completed in 2001 and such facilities were put into production, thereby further improving product mix, increasing productivity and significantly raising the outputs of the major petrochemical products. The total output of ethylene in 2002 was 2.7164 million tonnes, representing an increase of 26.17% over the

preceding year. The output of major chemical products such as synthetic resins, synthetic fibers, monomers and polymers for synthetic fibers, synthetic rubbers and urea also showed relatively large increases. To meet the market demand and increase its profit margin, the Company further increased its production volume of higher value-added products. In 2002, the Company produced 1.8469 million tonnes of performance compound resins and 402 thousand tonnes of differential fibers, representing an increase of 38.66% and 23.3% respectively over those in the preceding year. The proportion of direct sales of chemical products was increased and the petrochemical products sales through the e-commerce network reached RMB 16.942 billion, accounting for about 24.35% of the total chemical products sales revenue.

#### Production of Major Chemicals

Unit: 10,000 tonnes

	2002	2001	2000	Change in 2002 compared to 2001 (%)
Ethylene	271.64	215.3	217.0	26.2
Synthetic resins	400.48	320.4	318.3	25.0
Of which: Performance compound resins	184.69	133.2	128.0	38.7
Synthetic rubbers	45.77	39.8	31.7	15.0
Monomers/polymers for synthetic fibers	383.35	359.8	379.5	6.5
Synthetic fibers	115.30	102.8	106.8	12.2
Of which: Differential fibers	40.2	32.6	28.3	23.3
Urea	266.63	234.2	292.3	13.8

**(5) Research and Development**

In 2002, the Company made a number of important achievements in scientific and technological innovation and won one first prize for national technological advancement, two second prizes for national invention and seven second prizes for national technological advancement. The Company applied for 760 patents in China in 2002, of which 320 have been awarded patent rights.

**Exploration and production:** To enhance crude oil recovery rate and reduce costs, the Company successfully developed under-balance pressure drilling technology, large displacement well drilling technology and integrated technique of acquisition, processing and interpretation in full three-dimensional seismic exploration. The Company also achieved satisfactory progress in the geological studies of the new areas in western China, e.g. Tarim Basin, Jungel Basin and old areas in eastern China, thereby providing a technological support for increasing its oil and natural gas reserves.

**Refining:** To upgrade the quality of clean gasoline and diesel, the Company successfully developed a 1.3 million tonnes/year RIPP (Sinopec Research Institute of Petrochemical Processing) medium-pressure hydrocracking (RMC) technology, a Maximizing Iso-Paraffins technology (MIP), the second generation Gasoline Olefine Reduction-II (GOR-II) and Additives (LAP-2), a Flexible Dual-riser Fluid Catalytic Cracking technology (FDFCC) and a RIPP Increase Cetane Index Hydroprocessing technology (RICH).

**Chemicals:** To reduce investment and increase competitiveness of technology and products, the Company developed a complete set of 30,000 tonnes/year acrylic fiber production technology and a 30,000 tonnes/year melt-direct spinning technology for PET staple fiber. In addition, the Company's co-developed 100 thousand

tonnes/year ethylene cracking furnace was successfully applied to the ethylene facilities revamping projects of Shanghai Petrochemical and Yangzi Petrochemical, and the self-developed 200 thousand tonnes/year second generation loop reactor polypropylene production facilities were also successfully put into operation. To increase higher value-added products production, the Company successfully developed 18 new synthetic resin products (e.g. high speed Bi-Oriented Polypropylene Process (BOPP)) and 22 types of new synthetic fiber products with 40 specifications (e.g. superfine sea-island bicomponent fiber).

**(6) Cost Reduction**

In 2002, the Company made great efforts in carrying out its cost reduction plan. On the basis of reducing major procurement costs of raw materials (e.g. crude oil), special focus was given to concrete measures such as to minimize material and energy consumption and administrative expenses. As a result, cost reduction achieved relatively good results.

In 2002, the Company reduced costs by RMB 2.52 billion, and fulfilled the original target of cost reduction. Cost reduction in exploration and production segment was RMB 700 million and the cash operating cost was reduced from US\$ 6.15/barrel to US\$ 6.12/barrel; the cost in the refining segment was reduced by RMB 700 million and the cash operating cost was reduced from US\$ 2.07/barrel to US\$ 2.03/barrel; the cost in the chemicals segment was reduced by RMB 500 million and the cash operating cost of ethylene production was reduced from US\$ 160/tonne to US\$ 150/tonne; and the cost in the marketing segment was reduced by RMB 620 million and the cash operating cost was limited to RMB 166/tonne while continuously increasing the ratio of retail and distribution. Moreover, the Company continuously implemented its employee reduction plan and reduced about 25,000 employees in the year.

### (7) Capital Expenditure

In 2002, the Company continuously adhered to the investment policy of “Capital expenditure based on operating cash flow; controlling total investment size; centralizing decision making, rationalizing investment variety, individually optimizing projects and increasing return on investment”. The Company’s total capital expenditure was about RMB 41.6 billion, in which the capital expenditure for the Exploration and Production Segment was RMB 20.23 billion. With the investment, the Company raised production of crude oil and production of natural gas significantly. In certain promising areas, a number of oil and gas wells of high production potential and blocks with high reserves were identified. The Company’s year-end proven recoverable economic reserves of oil and gas further increased and the Company had a greater than 100% annual reserve replacement ratio in six consecutive years. The capital expenditure in the Refining Segment was RMB 6.53 billion. 21 sets of new and revamped facilities were put into commissioning test run successively, thereby raising the Company’s clean fuel production capacity and sour crude oil processing capacity. The commencement of the construction of the Ningbo-Shanghai-Nanjing Crude Oil Pipeline would facilitate optimizing crude oil resources allocation and reducing the cost of crude oil purchase. The expenditure in the Chemicals Segment was RMB 7.32 billion. A total of 12 new and revamped facilities were put into commissioning test run successively, an additional production capacity of 600 thousand tonnes/year for ethylene, 885 thousand tonnes/year for synthetic resins and 223.9 thousand tonnes/year for monomers/polymers for synthetic fibers were achieved. The capital expenditure in the Marketing and Distribution Segment was RMB 6.98 billion, which was mainly used to build new pipelines and further improve the refined oil products marketing network through building new and revamped petrol stations and transforming old ones, thereby reinforcing the Company’s leading position in principal markets and further raising its brand recognition and customer loyalty in its principal markets. Other capital expenditure was RMB 550 million, which was mainly used for construction of information system.

The Company’s actual capital expenditure in 2002 was RMB 5.4 billion more than the amount RMB 36.2 billion as originally estimated. The excess was mainly due to the following reasons: first, the success rate of exploration in the Exploration and Production Segment increased from 42.3% to 43.9%, which led to about RMB 500 million more than the amount originally estimated; secondly, the capital expenditure in the Marketing and Distribution Segment was RMB1.8 billion more than the amount originally estimated because of the acquisitions of the petrol stations in 2001 which became the Company’s fixed assets after transfer in 2002 and the construction of more petrol stations on expressways and in rural areas in order to seize market opportunities at the end of the year; and thirdly, the capital expenditure in the Refining and Chemicals Segments was about RMB 1.4 billion more than the amount originally estimated for the early completion and commissioning of new and revamping facilities in order to meet the strong domestic market demand.

### (8) Cooperation with Foreign Parties

In 2002, the Company also made remarkable progress in foreign cooperation. The joint venture ethylene projects implemented by the Company with BASF in Nanjing and bp in Shanghai respectively are both in all-round construction stage and will be put into production by the end of 2004 and early 2005 respectively. The coal gasification project jointly implemented by the Company and Shell in Hunan is in the stage of construction and is expected to be completed and put into production in 2005. The feasibility study report of the Fujian integrated refining and chemical project jointly implemented by the Company, ExxonMobil and Saudi Aramco has been approved by the State, and the Company is making preparations for the commencement of the project. Through these joint venture projects, the Company could learn the advanced technologies and management experience from multi-national corporations, increase the Company’s competitiveness in the market and meet the growing demand in China’s domestic market and the market in the Asia-Pacific region.



## BUSINESS PROSPECTS

### 1 Market Analysis

The Company anticipates that the macroeconomic situation in 2003 will have the following characteristics:

#### (1) Opportunities

Although there are many uncertainties regarding global economic growth, the PRC government will continuously implement the policy of increasing domestic demand, and the growth rate of China's GDP is expected to exceed 7% in 2003; according to these estimates, the domestic demand for refined oil products is expected to grow by more than 4% and the demand for chemical products (in terms of ethylene) is expected to maintain a growth rate of more than 10%, thereby providing favorable environment for the growth of the Company's production and sales of refined oil and petrochemical products. The PRC government's achievements in disciplining domestic refined oil products market in 2002 and the Company's continuous enhancement of its coordination with other domestic refined oil products marketing entities in 2003 may further improve the domestic market environment for refined oil products. At the same time, the new production capacity resulting from the revamping and construction of facilities, the application of new technologies and the continuous internal reform will strongly support the Company's cost reduction for increasing efficiency.

#### (2) Challenges

While fully recognizing the above-mentioned opportunities, the Company also recognises many challenges, which are mainly reflected in the following aspects: first, the slow growth of global economy and, in particular, the tense situation in the Middle East will probably lead to drastic fluctuation of prices of crude oil, refined oil products and chemical products in the international market and consequently bring challenges against the Company's understanding of the market,

production, operation and management. Secondly, the year of 2003 is the second year after China's accession to the WTO. The impacts arising from the reduction in tariff and the opening of the market will increase gradually. The increase of import quotas for non-State-owned oil products traders and the continuous reduction of import tariff rate for chemical products by 1 to 3 percentage points will lead to a more fierce market competition.

### 2 Production

Facing both opportunities and challenges in 2003, the Company will adopt flexible operating strategies and focus on the following aspects of work:

*Exploration and Production:* The Company will continue to adhere to the oil and natural gas development strategy of "stabilizing production of the existing fields in eastern China, developing the potential fields in western China, searching for the potential reserves in southern China, laying equal stress on oil and natural gas, relying on science and technology and reducing cost for increasing efficiency", insist on the principle of controlling reserves, output and efficiency as a whole, speed up the exploration of the new areas in western China and the other key blocks, steadily increase replacement resources and oil and natural gas production, carry out adjustment and potential tapping in the old areas, maintain the stable production of quality oil and natural gas and ensure the realization of a replacement ratio over 100%. The Company plans to build an additional crude oil production facility with capacity of 5.58 million tonnes and an additional natural gas production facility with capacity of 674 million cubic meters and produce 38.1 million tonnes of crude oil and 5.3 billion cubic meters of natural gas in 2003.

*Refining Segment:* Oriented to market demand and backed by managerial innovation and scientific and technological advancement, the Company will strengthen management, optimize resources, adjust product mix and strive for enhancing its profit ability. The Company plans to process

a total of 110.92 million tonnes of crude oil and produce 60.96 million tonnes of refined oil products and 17.15 million tonnes of chemical feedstock in 2003. The Company will continuously expand the market and strive to increase the output of high value-added products, such as LPG, propylene, high-grade asphalt and lubricants, continuously raise the major technical and economic indicators of refining and increase its light yield to 73.5% and its refining to 92.55%.

*Chemicals Segment:* To satisfy the growing market demand, the Company will strengthen management and maintain safe, stable and full-utilization production in a long period. The Company plans to produce a total of 3.05 million tonnes of ethylene, 4.46 million tonnes of synthetic resins, 470 thousand tonnes of synthetic rubbers, 1.24 million tonnes of synthetic fibers and 4.21 million tonnes of monomers and polymers for synthetic fibers in 2003. Laying particular stress on product quality, types and cost, the Company will enhance the competitiveness of its products, further raise the output of performance compound resins and differential fibers, strengthen its efforts in marketing and services and endeavor to increase the proportion of the direct sales of major chemical products.

*Marketing and Distribution Segment:* The Company will continuously strengthen its sense of market, competition and service, give full play to its role as a market leader, actively expand market, further improve its marketing network, build petrol stations on new expressways, on waterways and in rural areas, enhance its market control and sustain profit ability, further adjust its marketing structure, strive to raise the volume of retail, distribution and franchised sales, increase its share in the retail market, continuously strengthen its coordination and cooperation with other domestic refined oil products operators, improve the operating environment and reasonably arrange its domestic supply and export of refined oil products according to domestic and international demands to balance the supply and demand in the domestic market. While expanding the domestic market, the Company will further

increase its export volume, continuously optimize the flow direction of refined oil products, reduce costs and increase efficiency. The Company plans to sell a total of 73 million tonnes of refined oil products in the domestic market (including a retail volume of 37.5 million tonnes and distribution of 14 million tonnes) and export 5.5 million tonnes of refined oil products.

*Cost reduction:* In 2003, the Company will continuously rely on scientific and technological advancement to strengthen management, intensify reform and continuously increase efficiency. It plans to reduce cost by RMB 2.5 billion, including RMB 1 billion in the Exploration and Production Segment, RMB 600 million in the Refining Segment, RMB 400 million in the Chemicals Segment and RMB 500 million in the Marketing and Distribution Segment.

*Prudent investment:* The Company's planned capital expenditure in 2003 is RMB 37.6 billion which will mainly be attributable from the cash flow from business operations and financings from sources in China or outside China. This includes RMB 18 billion in the Exploration and Production Segment, RMB 6.34 billion in the Refining Segment, RMB 7.64 billion in the Chemicals Segment, RMB 5 billion in the Marketing and Distribution Segment and RMB 620 million for construction of ERP system and other purposes. The focuses of capital expenditure in 2003 will be on (1) further optimizing the structure of investment, maintaining the investment efforts in the Exploration and Production Segment and striving for increase in replacement resources, (2) more vigorously tapping the potential and increasing the efficiency of the old blocks of oilfields and the existing refining and chemical enterprises, (3) continuously upgrading petrol stations in central cities and build petrol stations in new urban areas and on newly built expressways, (4) completing the construction of the long-distance Ningbo-Shanghai-Nanjing crude oil pipeline, and (5) fully launch of the ethylene facilities revamping project of Qilu Petrochemical Corp and ensuring the

completion and commissioning of the paraxylene project of Zhenhai Refining and Chemical Co., Ltd. and the PTA project of Yizheng Chemical Fiber Co., Ltd.

In addition, the two world-scale ethylene joint venture projects between the Company, and BASF and bp, respectively, will also enter the peak construction period. The Company will make investment in the proportion of the shares held by the Company in the joint venture companies at appropriate time according to the construction plans made by the joint venture companies' boards of directors, and will then include the investments in its capital expenditure. It is estimated that the total construction investment for the two joint venture projects in 2003 will be about RMB 10 billion.

*Information system construction:* The Company will continue to extensively adopt information technology, speed up construction of its information system and make new achievements in increasing its technical level, enhancing its market adaptability and raising its internal control ability and efficiency. The Company will strengthen the construction of information infrastructure in all aspects, continuously expand the experimentation and popularization of ERP system, further improve the two management information systems for financial management and refined oil products sales management and the two e-commerce networks for purchase of resources and chemical products marketing, apply computer-aided decision-making system to crude oil resources optimization and supply chain optimization in an in-depth way, build and popularize an refined oil products distribution optimizing system and promote the application of IC oil filling card.

Facing both opportunities and challenges in the year ahead, the Company will, depending on the unremitting efforts of all its employees, further enhance its competitiveness and maintain excellent performance in production and operation.