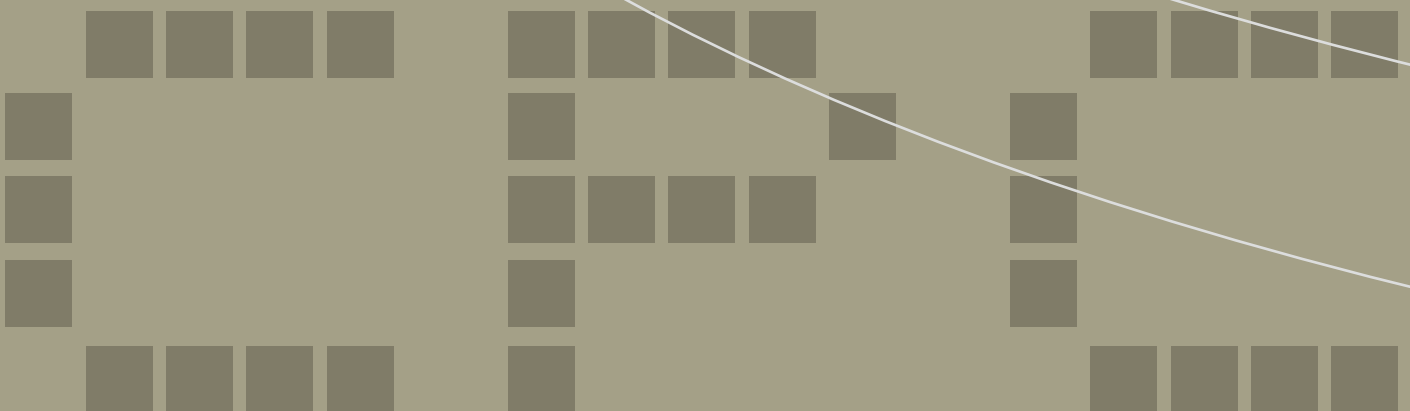




2009 CPC Corporation, Taiwan



*Supreme Quality*

*Superb Service*

*Selfless Contribution*







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## Message from the Chairperson and President

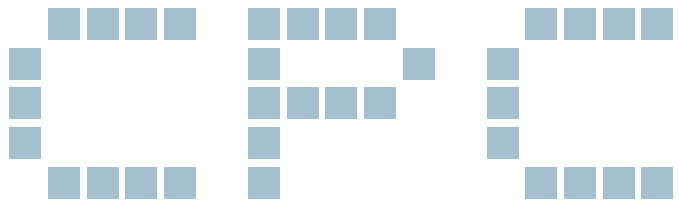
The international oil price reached a record high US\$145.29 per barrel on July 3, 2008, but fell to US\$40 per barrel at the end of the year. The soaring of the oil price beyond our expectations increased the CPC's costs of oil and gas procurement. Furthermore, the floating pricing mechanism for domestic products was suspended from December 2007 to May 2008 in accordance with government strategy. Although the floating pricing mechanism resumed as of May 28, 2008, the economic situation prevented the CPC from reflecting the real costs fully in domestic oil and gas prices. As a result, the CPC suffered a huge loss of NT\$ 136 billion in 2008.

Even though the CPC suffered losses because of its inability to control the difference between costs and selling prices, the company continued shouldering the responsibility of satisfying domestic needs. While domestic gasoline and diesel prices were far below international levels, all CPC employees continued to provide our customers with the finest of service with a smile. The CPC reported record revenues of NT\$ 957 billion in 2008, and our share of the domestic market was the highest in five years. In response to internal and external influences the CPC is planning a renovation project that is expected to improve overall performance and achieve the target of NT\$ 1,500 billion in annual revenues and an EPS of NT\$ 2 within five to 10 years.

Taiwan relies on imports for most of its energy. The CPC plans to increase investment in overseas exploration, and to more than double its oil and gas reserves within five years to shield the country against the rising cost of crude imports. The company will seek to create a more promising situation in overseas exploration and production by heightening the asset value of its existing overseas oil fields including Block 16 and 17 in Ecuador and Sanga Sanga in Indonesia, and gas fields including Caviar and Manahuilla in the United States, participating actively in bidding for open blocks and seeking opportunities to take over fields from large oil companies to add more to the company's reserves. With the government's support, the CPC signed three accords with the China National Offshore Oil Corp. (CNOOC) to expand the joint search for oil and gas. The three accords include the renewal of an agreement for joint exploration in the Tainan Basin in the Taiwan Straits, studying the feasibility of exploring in the Nanridao Basin off northern Taiwan, and transfer of a 30% stake of the CNOOC's onshore Block 9 in Kenya to the CPC. This begins a new era of cooperation between Mainland China and Taiwan, and the two companies expect to create a win-win situation through their new cooperation.

The CPC's major investments include projects to improve the refinery structure, renovate the No. 3 naphtha cracker, finance the KuoKuang Petrochemical Technology plan, and relocate the Kaohsiung Refinery. These projects are expected to be completed by 2019 at a total cost of more than NT\$855.6 billion. Due to opposition from residents of Linyuan Town and environmental groups, the No. 3 naphtha cracker renovation project did not obtain government approval until Dec. 29, 2008 after much active communication and publicity work. In the future, the CPC will speed up completion of this project to strengthen the competitiveness of its petrochemical products and fill the gap between demand and supply. The location of the KuoKuang Petrochemical Technology project has been





switched to Changhua because of the difficulty of obtaining the agreement of landowners and the local government at the original site. The CPC expects the KuoKuang Petrochemical Technology project to enhance the company's competitiveness through the vertical integration of upstream and downstream industries, and to heighten its profitability through expanded exports of petrochemical products. It will also create local jobs and encourage domestic petrochemical industries to stay in Taiwan. The project is now being promoted as a major national investment project with full government support. The CPC will adopt the best available control technology (BACT) to make sure all investment projects do not cause pollution or damage the environment. We will do our best to ensure a clean and beautiful tomorrow for all residents of Taiwan.

To cope with market changes, the CPC is working to transform its organization, improve its manpower and its ranking structure, and enhance its bonus and welfare systems. Organizational re-engineering depends, more than anything else, on the establishment of a corporate culture that instills in the minds of the staff a working attitude of proactiveness, responsibility, and ambition to advance, along with the overall promotion of the principle of accountability. Under the principles of resource sharing and process standardization, the CPC will carry out organizational rationalization, integration of information systems, and simplification of operating processes, and will improve its manpower and ranking structure so as to achieve the early hiring of future retirees, provide training in professional skills, and carry out personnel replacement in order to lower the average age of employees and avoid technology gaps.

In line with the government's policy of reinforcing corporate governance, the CPC observes the relevant laws and regulations and vigorously implements a corporate governance system. At the same time, it makes use of the expertise of its directors and supervisors to carry out the major principles of corporate governance—reinforcement of the functions of the board of directors, realization of the functions of supervisors, strengthening of internal auditing, and disclosure of important information, among other things—with the aim of enhancing the company's competitiveness and risk control capabilities and reinforcing its operations.

Industrial safety, environmental protection, and social responsibility are the major foundations of a company's sustainable development. To achieve the goal of "100% industrial safety and zero accidents," the CPC holds to a policy of "safety discipline and thorough inspection, health promotion and responsible care, risk management in system operation, and continuous improvement and sustainable operation" in the constant upgrading of its culture of safety. The company's industrial safety performance is carefully evaluated every year. As it works to boost the production of its refinery system, the CPC also strives to reduce greenhouse gas emissions; from 2005 to 2008, the company succeeded in cutting CO<sub>2</sub> emissions by 1.05 million metric tons. Other CPC contributions to environmental protection include planting trees, adopting a mangrove forest, cleaning up streams near CPC refineries, and studying algal reefs. In the area of social care, the CPC donates used PCs to students in rural area, hires handicapped people to work in service stations, and installs facilities for the convenience of handicapped people. The company also works for the development of bio-fuel, and supplies ethanol gasoline and bio-diesel in the domestic market. In the future, the CPC will carry out more research and development in new and substitute energies.

With the onslaught of the global financial crisis, industries all over the world are facing unparalleled operating difficulties; to cope, the CPC will exert full efforts toward corporate re-engineering designed to improve the company's financial situation and upgrade its operating efficiency. The CPC's growth and continuous development over the past 60 years has depended upon the assistance and support of its customers and cooperating companies, both at home and abroad. We hope that as we progress toward the vision of becoming an international energy group encompassing petroleum products, petrochemicals, and high technology, we will continue to enjoy the utmost of this support; and, for this, we extend our most heartfelt respects and appreciation.

Yen-Shiang Shih  
Chairperson

S.H. Chu  
President







## Sustainable Development |



Established in Shanghai on June 1, 1946, the Chinese Petroleum Corp. (CPC) was funded and operated by the government under the direction of the Resources Committee (the forerunner of the State-Owned Enterprise Commission, Ministry of Economic Affairs). In 1949, the CPC followed the government in relocating to Taiwan, setting up headquarters in Taipei under the direction of the Ministry of Economic Affairs. With service facilities all over the island, its operations include the active exploration, development, refining, transportation, marketing, and sale of petroleum and natural gas, as well as the production and supply of petrochemicals. The CPC's total capital stands at NT\$130.1 billion, and its total revenues reached NT\$957 billion in 2008.

At its 550<sup>th</sup> meeting in February 2007 the Board of Directors approved a change in the name of the company from Chinese Petroleum Corporation to CPC Corporation, Taiwan, retaining its "Chinese Petroleum" name in Chinese, its logo, and its "CPC" name in English. The objective of this change was to expand the firm's International business, reinforce the principle of keeping its roots in Taiwan, and extending the precious reputation that the company has built up over the decades.

During the more than 60 years since its establishment, the CPC has been fully able to fulfill its mission of providing a stable supply of oil products and stimulating the development of petrochemical industries, enabling Taiwan's economy to achieve soaring growth and the island's people to enjoy prosperity, and for this accomplishment the company has won the approbation of all sectors of society. Faced with the impact of the general opening of Taiwan's market for petroleum products in recent years, the CPC has moved to consolidate its operating advantages and deeply implant its competitive capabilities not only by engaging in organizational re-engineering and personnel downsizing but also by carrying out production-cost reductions in its advancement toward corporatized operations. At the same time it has vigorously sought out strategic investors to serve as cooperative partners in the hope of incorporating the advantages of large international oil companies for the development of upstream exploration, petrochemical development, and marketing channels. The CPC hopes, in this way, to transform itself smoothly into a private corporation and become a safe, clean, and competitive international energy company that advances toward sustainable operation and continues to provide the people of Taiwan with high-efficiency, high-quality energy products.

# Sustainable Development







As a government company, even as it pursues profit the CPC does not neglect its corporate social responsibility. In addition to continuously enhancing the quality of petroleum products, bringing in and promoting the use of liquefied natural gas (LNG) as a source of clean energy, striving for environmental protection, and carrying out responsible care by the petrochemical industry over the years, the company has, without regard to cost, also provided the oil needed by the military and the people of remote areas and offshore islands. At the same time it has continuously carried out social-care activities, promoting understanding of the petrochemical industry among the public, educating the people in the safe use of oil and gas, holding safety and health seminars, and guiding enterprises in strengthening the culture of safety. The company also supports disadvantaged groups, participates in social-benefit activities, sponsors cultural activities, and provides incentives for elite persons; in addition, it assists with construction around plants and oil exploration areas, works for ecological conservation, practices care for local cultures, promotes environmental education, and stimulates local advancement. These activities conform to the general 21<sup>st</sup>-century trend toward sustainable operation and the movement of corporate operations toward an emphasis on economic growth, environmental protection, and social benefit as well. Even as the company pursues commercial benefit, it also strives for social justice, human rights, safety and health, community development, and environmental protection.

To flow with global tides and follow the international trend toward environmental protection, the CPC initiated sustainable development policies at the end of 2003 to promote the spirit of sustainable development in its energy industry operations:

- Following government regulations and complying with international agreements
- Full-scale clean production and environmental protection
- The efficient usage of resources and consistent water and energy conservation
- Emphasizing social responsibility and expanding the scope of services
- Creating environmental policies and making information transparent
- An active commitment to research and development for the creation of new realms of operation

The CPC joined the World Business Council for Sustainable Development (WBCSD) in 2006 and has set up a Committee for the Promotion of Sustainable Development, which is divided into four subcommittees: Environment & Conservation, Social Consciousness, Policy and Research & Development, and Environmental Accounting & Information, all of which adopt appropriate strategies and formulate action plans to attain the ultimate goal of building a reputable corporate image and advancing toward sustainability. The CPC also completed a "Sustainable Development Report" in 2007 to fulfill the corporate social responsibility to disclose information. At a time when global petroleum resources are gradually being exhausted, the CPC will faithfully perform its role as the main domestic supplier of clean energy and will strive to create a win-win-win situation for environmental protection, economic development, and energy efficiency.

As the main supplier and producer of clean energy in Taiwan, the CPC hopes to create a win-win-win situation in the "Three Es": environmental protection, economic development, and energy efficiency.





## Board & Corporate Officers |



From left | VP W.T. Wu · VP Maw-Wen Lin · VP Arthur H. Kung · Chairperson Yen-Shiang Shih · President S. H. Chu · VP C. S. Lin · VP J. S. Yang · VP Chung-Chen Chiang

# Board & Corporate Officers

## Board of Directors

Chairperson of the Board	Yen-Shiang Shih
Standing Directors	Huei-Chu Liao S.H. Chu
Directors	Chia-Shen Chen Ssu-Li Chang Cheng-Liang Chen Neng-Chuan Chou A. H. Cheng D. C. Tsao J. W. Sun C. S. Lin Tung-Yi Lee Tiao-Tsan Lai
Supervisors	Guor-Terng Deng Chiun-Lin Hwang Yu-Hui Su

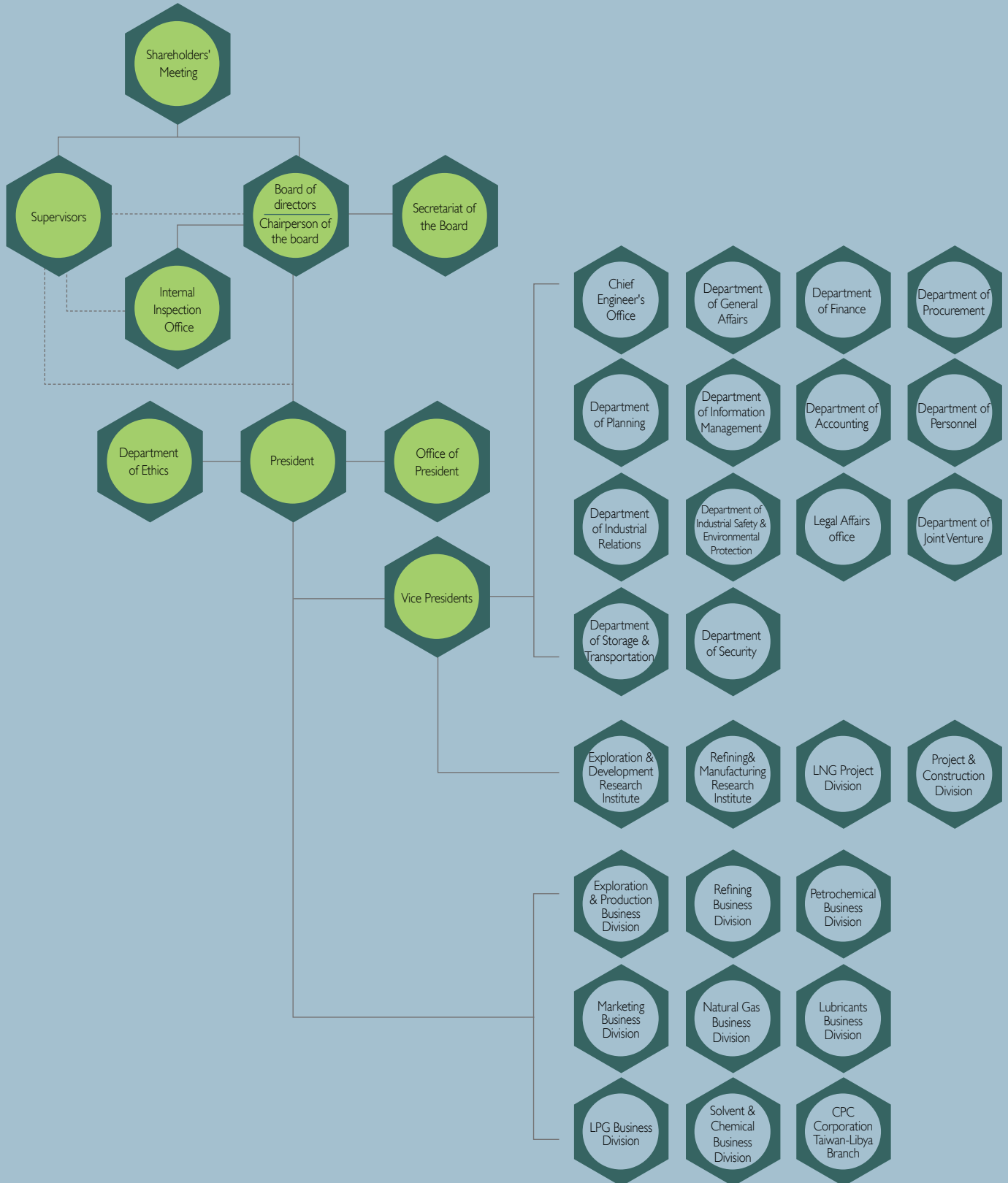
## Corporate Officers

President	S. H. Chu
Vice Presidents	Arthur H. Kung C. S. Lin Maw-Wen Lin J. S. Yang W. T. Wu Chung-Chen Chiang
CEO, Exploration & Production Business Division CEO, Refining Business Division CEO, Petrochemical Business Division CEO, Marketing Business Division  CEO, Natural Gas Business Division CEO, Lubricants Business Division CEO, LPG Business Division CEO, Solvent & Chemical Business Division Director, Refining & Manufacturing Research Institute Director, Exploration & Development Research Institute Director, LNG Project Division Director, Project & Construction Division	John, Yeong-Yaw Hsu (Acting) W. T. Wu (concurrently VP) Deng-Hsiang Hwang Chung-Chen Chiang (concurrently VP) C. S. Lin (concurrently VP) C. Yen J. Y. Chen Bor-Sung Hsu H. C. Shen K. A. Lin T. H. Fu (Acting) Hsu-Ching Wu





# Organization Chart









# Upstream Operations |

## Exploration and Production

For many years the CPC has engaged in cooperative exploration with governments, government-owned petroleum companies, and large international oil companies under the name of the Overseas Petroleum and Investment Corp. (OPIC), spreading its operations throughout the Americas, the Asia-Pacific region, and Africa. With the rising trend in international oil prices in recent years, the CPC has exerted strenuous efforts in the development of upstream exploration in order to secure its own oil sources and enhance its overall performance; and, in line with the government's policy of "deepening the energy supply safety mechanism and promoting international energy cooperation," has constantly engaged in international cooperation in exploration and development in the hope of discovering new reserves of oil and natural gas. In 2008, the CPC engaged in cooperative exploration in 13 fields in eight countries together with international oil companies, including Block 16 and 17, Ecuador; Sanga Sanga, and Bulungan, Indonesia; Gulf of Paria East and Gulf of Paria West, Venezuela; Block AC/P21, Australia; Caviar, Manahuilla, and West Avondale Blocks, the United States; the Kenya 9; the Murzuq 162 Block, Libya; and the BCO III/BCS I I/BLT I Blocks, Chad.

Operations in 2008 included 156 producing wells and 69 workover wells, completed and recompleted 2 wells in Block 16, 20 producing wells and two drilled wells in Block 17 in Ecuador, and 483 producing wells and 46 development and one workover well in Indonesia's Sanga Sanga field; together, these Ecuadorian and Indonesian wells produced 5.89 million barrels of crude oil and 467.8 million cubic meters of natural gas. Faced with the nationalization of oil by oil producers, such as Ecuador's revision of its oil law to increase its excessive profits tax and Venezuela's promulgation of a law allowing the government to take back oil fields, the CPC is negotiating actively with those governments to maintain its rights in cooperative fields there. The CPC also undertook exploratory-period work in the Caviar and Manahuilla fields in the U.S. in 2008, discovering 514.1Kboe of oil reserves. First exploration-period work was also undertaken in Chad and Libya, and second in Australia.

On land in Taiwan, in 2008 the CPC completed 181.7 kilometers of seismic testing and 82 square kilometers of geological surveys, drilled two wells, and completed production recovery at two wells together with CT. There are currently 44 natural gas wells in the Tiezhanshan, Qingcaohu, Jinshui, Chuhuangkeng, and Xinying fields, producing a total of 423 million cubic meters of natural gas and 16,100 kiloliters of condensate. In offshore operations, an application was submitted to the Board of Directors to delay for the natural gas well development project in the F Structure off Kaohsiung for one more year because of the huge variation in investment cost resulting from the fluctuating international price of crude oil and offshore development equipment.

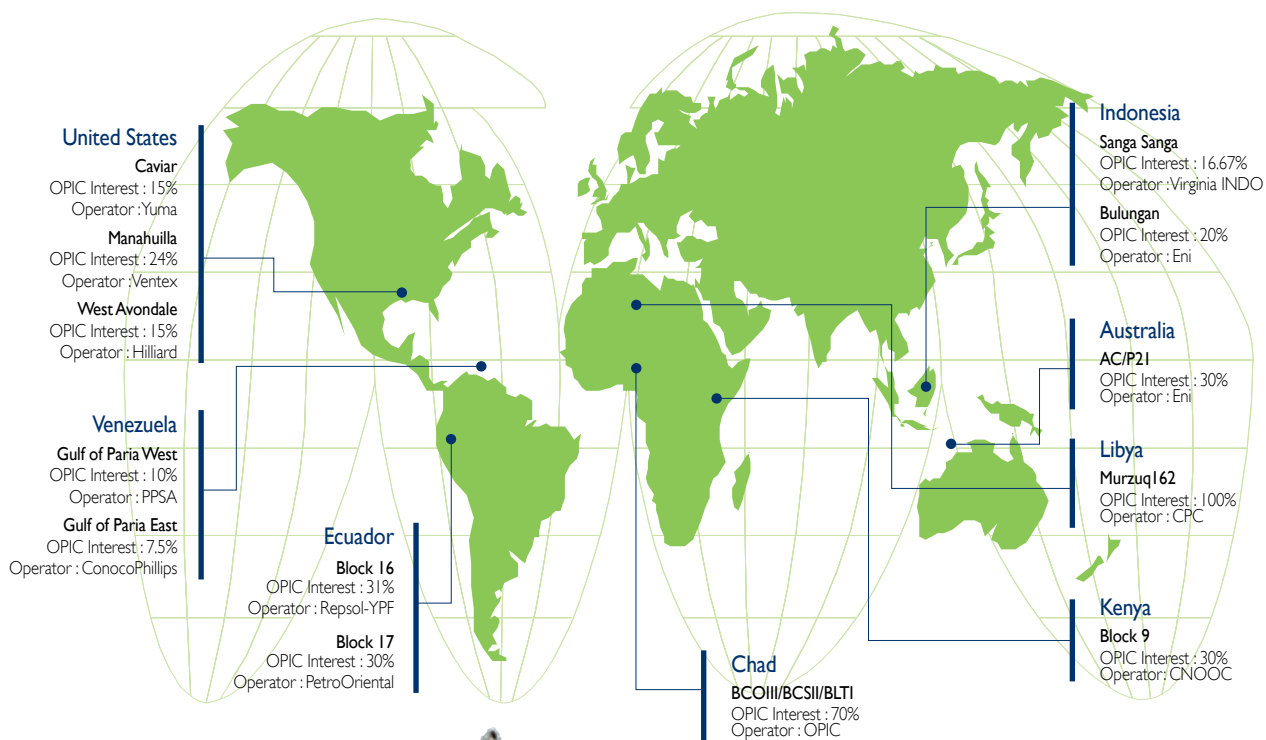
CPC signed exploration cooperation agreements with the CNOOC on Dec. 26 2008, including the renewal an agreement on joint exploration in the Tainan Basin of the Taiwan Straits, studying the feasibility of exploration in the Nanridao Basin off northern Taiwan, and transfer of a 30% stake of the CNOOC's onshore Block 9 in Kenya to the CPC.

In the future, in its strategic deployment the CPC will seek to create a more promising situation in overseas exploration and production by heightening the asset value of its existing overseas oil and gas fields and establishing core areas with high rates of growth, participating actively in bidding for open blocks, seeking opportunities to take over fields from large oil companies, and pursuing opportunities for M&As in new oil and gas fields so as to add more to the company's reserves.

# Upstream Operations



## CPC's Overseas Cooperative Exploration Fields







# Downstream Operations |

## Importation and Refining

As domestic production of crude oil is insufficient, almost all of the crude that is refined by the CPC has to be imported. To assure the stability of crude oil supplies, the company purchases oil through long-term contracts and also works vigorously to diversify its sources. Imports of crude oil in 2008 totaled 171.01 million barrels; 68% of which came from the Middle East and the rest from Southeast Asia, Africa, Australia, and Central Asia. In recent years, the volume of low-sulfur crude oil has been increasing steadily in line with the growing stringency of domestic environmental protection standards.

To handle the oil it imports, the CPC has built mooring buoys for large tankers in the sea off Shalun in Taoyuan County and Dalinpu in Kaohsiung County, and has constructed tanker docks at Kaohsiung, Taichung, and Shenao harbors. The company has also built up a considerable tanker fleet in order to control the tonnage of oil shipped and stabilize shipping costs; the fleet consists of one 260,000-ton tanker, four 150,000-ton tankers, two 100,000-ton tankers, and four 40,000-ton tankers. In total, oil shipments in 2008 amounted to 5.70 million tons.

The CPC's three existing refineries, one each in Kaohsiung, Taoyuan, and Dalin, have a combined daily capacity of 720,000 barrels. The Kaohsiung Refinery, which has the longest history of the three, is a large integrated oil refining and petrochemical production facility featuring a complex production process and a complete range of equipment. It has a capacity of 220,000 barrels of crude oil per day. The Dalin Refinery, which split off from its Kaohsiung parent to become independent in 1996, has four offshore mooring buoys as well as both large and small docks for the unloading of imported crude oil and the loading of export petroleum products. It has a topping capacity of 300,000 barrels per day. The Taoyuan Refinery was established in 1976 and, following some de-bottlenecking renovations and the addition of a second distillation plant, currently has a daily capacity of 200,000 barrels. The CPC's total output of petroleum products in 2008 amounted 8,685,522 kiloliters of gasoline, 6,653,209 kiloliters of diesel fuel, 8,414,076 kiloliters of fuel oil, and 495,775 metric tons of liquefied petroleum gas.

In response to increasingly stringent demands in regard to the environment and the quality of life by the people of Taiwan, and their continuously diversifying needs for petroleum products, the CPC has moved to improve the quality of its petroleum products and enhance its production value in recent years by building a large number of refining and production facilities such as units for reforming, isomerization, TAME, diesel fuel hydrodesulfurization, aviation fuel processing, N-paraffin facilities, alkylation, and heavy oil conversion. These facilities are designed to supply Taiwan's people with better petroleum products as well as to enhance production efficiency. Additional investment plans currently under implementation include the replacement of a water pipeline at the Taoyuan refinery and the building of a northern coastal pipeline.



# Downstream Operations



The CPC is responding to the Environmental Protection Administration's announcement of medium- and long-term domestic environmental protection standards for petroleum products—a reduction of the sulfur content of gasoline and diesel fuel to under 10ppm and of the aromatics content to under 35vol%, and a lowering of the olefins content of gasoline to under 18vol% by 2011—by working to achieve the goal of supplying of gasoline and diesel fuel with a sulfur content below 10ppm in 2011. To this end, in 2005 the company began building a 30,000-barrel-per-day cracked gasoline hydrodesulfurization plant at the Taoyuan Refinery and a 40,000-barrel-per-day diesel hydrodesulfurization plant and 20,000-barrel-per-day gasoline hydrodesulfurization plant at the Dalin Refinery. In addition the company plans to enhance its heavy-oil conversion ratio by planning the construction of an 80,000-barrel-per-day heavy-oil conversion plant at the Dalin Refinery, on which construction began in 2006, and a 70,000-barrel-per-day heavy-oil desulfurization plant and related hydrogen/sulfur recovery unit at the Taoyuan Refinery, which was suspended, however, because of cost inflation.

To deal with an excessive production capacity for gasoline and diesel fuel and a continuing insufficiency of production capacity for low-sulfur fuel oil following the liberalization of the domestic market, the CPC has worked to readjust and improve its refining structure to conform to market needs and trends and to increase its ratio of heavy-oil conversion in order to optimize its oil production. The company is also working constantly to lower its refining costs. With the international prices of petroleum products soaring in 2008, especially for Jet A1 and Gasoil, the gap between product prices and the cost of crude oil widened. However, due to the Government's policy of freezing domestic oil prices, and to the CPC's being a state-owned company whose top priority is to fully supply domestic market, its export volume declined to 2.50 million MT or 3.17 million kiloliters in 2008. The exported oil products were shipped to Japan, Hong Kong, the Philippines, Malaysia, Singapore, New Zealand, Australia, South Korea, mainland China, the United States, and the Middle East. In the future, the CPC will continue to develop international markets with the aim of securing the highest success and the greatest profits.



# Petrochemical Production

## Petrochemical Production

The main bases for CPC's petrochemical production are the Kaohsiung Refinery and Linyuan Petrochemical Plant. The latter operates under the Petrochemical Business Division, which was established on Sept. 1, 2000, and operates a full set of facilities including catalytic reforming, hydrodesulfurization, naphtha cracking, butadiene and aromatics extraction, xylene separation, and transalkylation plants. The CPC's current annual production of ethylene has reached 1.08 million tons. Annual production capacities for other feedstocks are 725,000 tons of propylene, 173,000 tons of butadiene, 623,000 tons of benzene, 660,000 tons of p-xylene, and 170,000 tons of o-xylene.

In response to the opening of the market to competition, the CPC's Petrochemical Business Division is planning for the establishment of a petrochemical products logistics center with the aim of carrying out vertical integration with downstream petrochemical operators while using flexible competition strategies to develop trade in petroleum products and strengthen market competitiveness.

To narrow the gap in the supply of petrochemical raw materials and to enhance the quality of industrial safety and environmental protection as well as to expand the scale of production through the renewal of production processes, the CPC has initiated a "Third Naphtha Cracker Renovation and Expansion Project" at the Linyuan petrochemical complex. This project will cost an estimated NT\$47.0 billion and will give the naphtha cracker an annual capacity of 600,000 tons of ethylene, 360,000 tons of propylene, 100,000 tons of butadiene, and 90,000 tons of benzene. The project will also expand the existing Fourth Aromatics Plant and auxiliary facilities. When the project is completed in 2013 it will create an annual production value of NT\$46 billion, stimulate the willingness of other downstream companies to invest, and bring new prosperity to the petrochemical industry.

The CPC is currently planning a Petrochemical Technology Park with the aim of maintaining the scale of its domestic market for petroleum products, enhancing its competitiveness through vertical integration, and heightening its profitability through expanded exports of petrochemical products. The project will cost an estimated NT\$400.5 billion and will include a refinery with a daily capacity of 300,000 barrels as well as a naphtha cracker with an annual capacity of 1.2 million metric tons of ethylene, a xylene aromatics center with an annual production of 800,000 tons, 23 downstream petrochemical derivatives plants, 14 co-generation power plants, and an industrial harbor with 13 docks. The Kuokuang Petrochemical Technology Co., established as a joint investment by the CPC with the participation of petrochemical enterprises, began implementing related projects in 2006. The location of the KuoKuang Petrochemical Technology project has been switched to Changhua because of the difficulty of obtaining the agreement of landowners and local governments at the original site. The project is currently being promoted as a major national investment project, with full government will support. This will encourage the domestic petrochemical industry to keep its roots in Taiwan and stimulate the overall development of the economy.















# Marketing

## Marketing

The CPC's Marketing Business Division is responsible for domestic sales of oil products, mainly automotive gasoline, aviation fuel, diesel fuel, and fuel oil. Total sales of oil products in 2008 amounted to 22,662 kiloliters, down 1.4% from the year before, and total revenue from oil sales was approximately NT\$505.7 billion, an increase of 15.4%. Automotive gasoline accounted for the largest portion of total sales, with about 40.5%, followed by fuel oil sales with about 27.1%, diesel fuel sales with about 23.4%, and aviation fuel sales with 9.0%.

In the area of marketing channels, Taiwan's market for oil products is divided between the CPC and the Formosa Petroleum Co., and competition between the two is increasingly intense. The CPC has worked hard to express the advantage of its marketing network and assure its market share by consolidating its filling-station network; of the 2,596 filling stations operating in Taiwan at the end of 2008, 645 were operated by the CPC directly, 19 were operated cooperatively by the CPC with other parties, and 1,368 were privately operated franchise stations (for a total of 2,032 CPC stations). This network gave the CPC control of more than 70% of the market. The company's shares of the gasoline, aviation fuel, diesel fuel, and fuel oil markets were 81.0%, 67.8%, 88.8%, and 91.3%, respectively.

In the area of storage and transportation, in addition to its network of gasoline stations the CPC fills the need for fuel in different areas by operating aviation fueling stations at the Taoyuan, Taichung, Hualien, Taitung, Kaohsiung, and Kinmen airports and by maintaining 35 fishing-harbor filling stations around the island. At the end of 2008 the CPC had 15 petroleum supply centers, at Keelung, Shimen, Wugu, Hsinchu, Taichung, Taichung Harbor, Wangtian, MinXiong, Tainan, Fongde, Qiaotou, Suao, Hualien, Huxi, and Kinmen, to supply the oil products needed by filling stations in the different areas. A total of 22,176 kiloliters of oil was delivered from these centers in 2008. There are also three chemical analysis centers, in Keelung, Taichung, and Kaohsiung, along with seven laboratories, charged with the testing of oil products and the control of quality. Together, they tested 94,862 samples during the year.

In the operation of filling stations, the CPC seeks to upgrade customer satisfaction and lead the market through "differentiation of services" and "the service advantage." The Marketing Business Division asks the company's self-operated filling stations throughout Taiwan to provide high-quality services, create a clean-toilet culture, implement customer experience management, vigorously promote the CPC VIP card, and carry out customer relationship management. To reduce operating costs and resolve the problem of insufficient filling-station manpower, the company took the lead in introducing self-service credit-card gas-tank filling. At the same time, all filling stations under the CPC banner are asked to promote complex operations, offer diversified services, and strengthen cross-industry strategic alliances to create non-core income.



## Natural Gas

Based on the advantages offered by natural gas—high efficiency, lack of pollution, safety, and convenience—the CPC has moved in line with the policy goal of energy diversification and is following up on the completion in 1990 of Taiwan's first liquefied natural gas (LNG) receiving terminal, in Yongan Township, Kaohsiung County, which turned over a new leaf in the supply of clean energy in Taiwan. After that, along with the rapid growth of the domestic economy, the steady increase in energy demand, and the rise of environmental consciousness, the CPC carried out an expansion project at the receiving terminal, completed in December 1996, that boosted its annual handling capacity to 4.5 million metric tons. To meet the future need for natural gas by power stations and towns in northern Taiwan, in July 1996 the CPC initiated its third-stage expansion project; in addition to expansion work in the area of the terminal, the company established a Taiwan precedent by laying a 36-inch long-distance undersea pipeline from Yongan to Tongxiao. This pipeline was completed in December 2002, expanding the CPC's handling capacity for LNG to 7.44 million tons per year.

To accommodate the Taiwan Power Co.'s natural-gas-fired Datan Power Station project, the CPC used its years of experience in natural gas operations to achieve the signing of a natural gas supply agreement with Qatar, which offers the most competitive prices. Correctly projecting the possible performance and investment strategies of rival companies, and flexibly making use of the advantages provided by its existing distribution system and other factors, the CPC won the procurement bid for Datan's natural gas supply in July 2003. Under this deal, the CPC will supply 1.68 million tons of LNG to Datan annually for 25 years, consolidating the company's position as the sole medium- and long-term supplier of natural gas in the domestic market. On Sep. 13, 2005 the CPC signed an LNG supply agreement with RasGas II of Qatar; the agreement runs for 25 years, from 2008 to 2032, and calls for the delivery of 3 million tons annually, mainly to supply the Datan Power Station and the growing domestic demand for gas use. The CPC has worked to secure a stable supply of gas for Taiwan by diversifying sources and through its own deployment. On Feb. 29, 2008 the CPC signed a key term agreement with the Woodside company of Australia for the procurement of LNG, under which the Australian firm will supply 2-3 million tons annually for a period of 15-20 years.



# Natural Gas





# Natural Gas







To meet the first-stage goal of supplying gas for use by Taipower's Datan Power Station beginning from 2008, and the second-stage goal of completing storage tanks and related gasification and gas supply facilities by the end of 2009 in order to supply the gas needed by power stations, industrial customers, and general users in central and northern Taiwan, the CPC will carry out the construction of an LNG receiving terminal with a 3-million-ton capacity in Taichung. This project will cost a projected NT\$31.5 billion and will be carried out at west docks No. 13, 14, and 15 in Taichung Harbor, as well as inland; it will include three 160,000-kiloliter LNG tanks, gasification and gas supply facilities, and the laying of a 135-kilometer, 36-inch sea/land long-distance transportation pipeline from Taichung Harbor through the Tongxiao distribution station to the Datan measuring station, along with related facilities.

To make flexible use of its facilities to achieve stability of gas supply and demand in the market, the CPC has constructed a transmission and distribution system in western Taiwan that includes 1,757 kilometers of trunk pipelines, 36 distribution stations, and 1,471 kilometers of regional loop transmission networks belonging to eight supply centers. The company's planning of gas pipelines is oriented toward the construction of loop networks. It has already completed the laying of approximately 500 kilometers of trunk pipeline on land as well as approximately 238 kilometers of undersea pipeline from Yongan to Tongxiao, forming a comprehensive loop pipeline network for central and southern Taiwan. In addition, after the 36-inch undersea pipeline from Taichung Harbor through Tongxiao to Datan in Taoyuan County enters service it will form a loop transmission network together with on-land pipelines in central and northern Taiwan, completing a "figure 8" gas transmission network.

The CPC's sales of natural gas totaled 11.449 billion cubic meters in 2008, an increase of 6.73% over the year before. Most of this gas went to supply domestic power generation (80.67% of the total), co-generation (0.22%), industry (6.97%), and household use (12.14%). The company's imports of LNG in 2008 amounted to 9.1 million tons, of which 3.07 million tons were supplied by Indonesia, 2.69 million tons by Malaysia, 0.36 million tons by Qatar, and the remaining 2.98 million tons by other suppliers under master agreements.





## Other Business



In the field of lubricants, Taiwan has long been open to free competition and international oil companies have been busily carrying out mergers and acquisitions, integrating marketing channels, and reducing costs in a vigorous assault on the domestic market, resulting in increasingly intense competition. The rapid growth of Asia-Pacific economies in recent years has stimulated the demand for lubricants there; and mainland China and Southeast Asia, especially, have become targets of development by competing oil companies. The CPC's KuoKuang brand lubricating oil occupies about a 30% share of the domestic market, putting it in the leading position. The Lubricants Business Division pursues a strategy of "consolidating the domestic market and developing overseas markets" in carrying out a twin-brand (KuoKuang and Mirage) strategy in Taiwan, providing high-quality services, reinforcing domestic marketing channels, and developing auto and motor scooter maintenance station channels while using differentiated products and timely services to satisfy the needs of marketing outlets and consumers. In overseas markets the main marketing strategy is to use the long-term operation of brands and marketing channels along with the development of overseas contract blending and the multi-angle trading business, along with direct management of the overseas markets. The company also makes use of the business networks that Taiwanese enterprises have successfully established in the Asia-Pacific region to set up self-owned marketing channels and reinforce its brand image; already, the Mirage brand has been successfully introduced into the Chinese market. At the same time, the CPC is vigorously promoting the Southeast Asian market for vehicular repair and maintenance oils, and is pursuing the market for industrial oils used by Taiwanese and foreign enterprises. A quality product image, reasonable pricing, and stable supplies are being used to develop overseas markets and establish a foothold in the Asia-Pacific market for lubricating oils.

In the field of liquefied petroleum gas, after the government opened the free import of LPG in 1999 the Formosa Petrochemical Corp. entered the ranks of production and independent traders and began importing supplies, breaking the CPC's monopoly and exposing the market to free competition. As a government enterprise and the main supplier, the CPC is charged with the mission of enhancing operating performance while providing sufficient supplies of LPG to the domestic market. In the field of household gas, the CPC's LPG Business Division makes full use of its quality advantage and fully utilizes its north-south transport and storage system as well as its comprehensive marketing network to consolidate the market. In the area of industrial gas, the company works to strengthen customer service so as to retain existing customers and develop new ones. Furthermore, the LPG Business Division is planning to develop and expand international trading so as to create more overseas sales channels in response to increasing market competition in Taiwan. It also strives to keep a full understanding of price movements in the international LPG market and to choose the best times to import and export so as to lower the cost of procurement and expand exports, thereby creating maximum profit, coordinating with the government's safety reserve policy, and heightening the rate of turnover in storage tanks. The company assists operators in promoting the conversion of automobiles to the use of LPG and in installing more LPG filling stations so as to reduce CO<sub>2</sub> emissions and improve air quality in urban areas.

Other Business



The CPC also strives to strengthen occupational safety and environmental protection and engages constantly in good-neighbor work so as to fulfill, under the precondition of safe operation, its mission of providing abundant supplies of LPG to the domestic market while creating a good operating performance.

In the field of solvents and chemicals, the CPC holds 70%-75% of the market for self-produced solvents, 29%-45% of the market for toluene, 35%-42% of the market for xylene, and 45%-50% of the market for methanol. Of the total annual domestic production of 600,000 tons of asphalt, the CPC accounts for 400,000 tons; of total sulfur production of 680,000 tons, the CPC turns out 220,000 tons; and of total petroleum coke production of 910,000 tons, the CPC makes up 250,000 tons (producing mostly for export, since domestic demand is very small). To reach its operating goals, the CPC's Solvents and Chemical Business Division is actively promoting quality services and nurturing sales channels; expanding planned exports and developing markets in Vietnam, mainland China, and other areas; enhancing product quality and image; continuing the improvement of processes and the reduction of costs; and striving for the development of new products and new businesses. Furthermore, the CPC's Solvents and Chemical Business Division is responsible for the marketing of bio-products developed by CP-Bio. CP-Bio has built on its experience in microbial fermentation technology by combining the use of modern biotechnology in expanding into biological materials, functional health foods, and green biotechnology, producing high-quality bio-products at reasonable prices.







## Industrial Safety & Health |

Since both petroleum and natural gas are easily combustible, the CPC has always placed extreme emphasis on industrial safety, health, and fire control in order to ensure the smooth execution of production operations as well as to assure the safety of the lives and property of employees and of residents of communities around plants and wells. In addition to operating in accordance with domestic laws and regulations, the CPC also establishes safety and fire rules, in reference to regulations in the advanced countries of Europe, America, and Japan, that conform to conditions in the Taiwan area and the characteristics of the CPC's own business.

Industrial safety is the foundation of company development. To achieve the goal of "100% industrial safety and zero accidents," the CPC holds to a policy of "safety discipline and thorough inspection, health promotion and responsible care, risk management in system operation, and continuous improvement and sustainable operation" in the constant upgrading of its safety culture. The company's industrial safety performance is recognized not only at home but internationally as well, as manifested in its receiving a citation from the World Safety Organization in 2005.

The key points of the CPC's industrial safety and health operations at the present time are as follows:

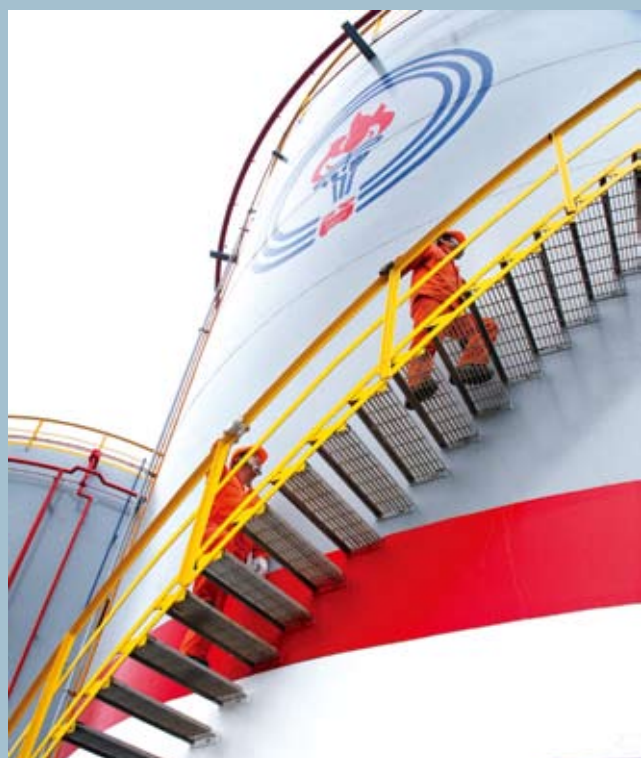
- Establishment and verification of Taiwan Occupational Safety and Health Management Systems (TOSHMS), and enhancement of the performance of environmental improvement. Eight units had passed verification by 2008, and all units of the company will achieve that goal by the end of 2009.
- Strengthening of the safety management of contractors and establishment of contractor autonomy so as to reduce contractors' occupational hazards.
- Scheduled review of industrial safety and health regulations, and continuous review and revision of standard operating procedures.
- Strengthening of industrial safety management, holding of scheduled employee health examinations, analysis and follow-up of physical examination information, promotion of health improvement, and emphasis on the mental health of employees.
- Implementation of risk management and equipment integrity operations, establishment of equipment safety management



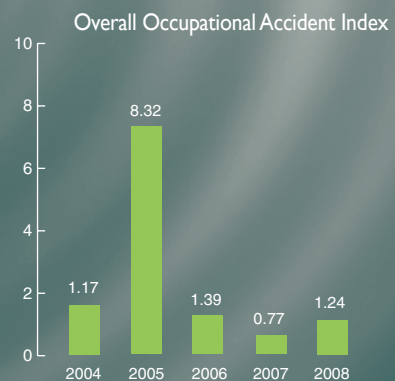
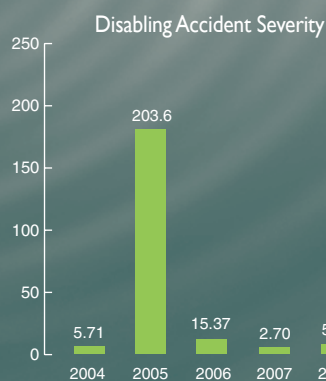
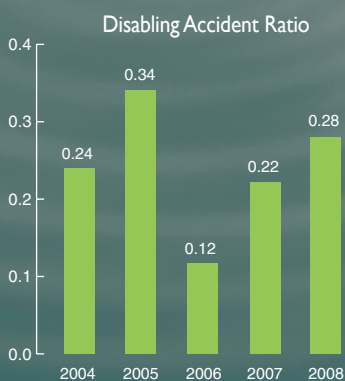
# Industrial Safety

processes, through implementation of the oil tank and pipeline inspection function, and establishment of a long-distance petroleum gas pipeline monitoring and leak detection system.

- Strengthening of fire-fighting management, organization of a professional team, and guidance for the different units in carrying out fire-pump function testing. Four manuals on fire safety have been published.
- Implementation of graded on-site safety inspections and continuous improvement, through safety observation, on the systemic, management, and execution levels.
- Strengthening of industrial safety inspections, to include "management by walking around" by ranking officials, professional industrial safety inspections, and pre-startup inspections of new and renovated factories. All deficiencies that are discovered are followed up through the information system and improved.
- Planning and implementation of various kinds of safe-environment training and education, production and provision of online study courses and an industrial safety test-question databank, and compilation and publication of accident case studies.
- Outsourcing of oil tank inspections and supervision of execution.
- Reinforcement of the functions of the Safety Information Center, and provision of lending and Internet data recovery service systems for related information.



## CPC Occupational Accidents over the Past Five Years





# Pollution Prevention & Environmental Protection

To fulfill its corporate social responsibility and uphold the spirit of sustainable development, the CPC is engaged in a long-term effort to improve wastewater, air, noise, solid waste, and groundwater pollution issues. In recent years the company has also carried out carbon dioxide emission inventory and reduction work, and has adopted best available control technology (BACT) and equipment for all new investment projects so as to lessen the pollution caused in production, transportation, and storage processes. The CPC also works actively to enhance the quality of petroleum products and achieve the goal of protecting the overall environment.

The CPC thoroughly carries out an environmental policy of "pollution prevention, employee participation, and persistent improvement," and has invested more than NT\$50 billion in environmental protection since 1989. Since 1995 the company has promoted the establishment of ISO 14001 environmental management systems in all units, and 20 units had passed certification by the end of 2007. A company-wide environmental accounting system was set up in 2004 to constantly enhance the company's performance in environmental improvement.

Although Taiwan is not a signatory of the agreement on greenhouse gas reductions signed in 1997 (the Kyoto Protocol), in line with future international environmental trends the CPC strives to reduce greenhouse gas emissions throughout the company. It has set carbon dioxide reduction targets and timetables for existing plants and carries out emissions-reduction measures by using low-carbon fuel, conserving energy, improving equipment efficiency, and reducing waste. To cope with global climate change and fulfill its corporate social



## Comparison of CPC Refinery Environmental Quality with National Standards

### 1. Effluents

Item	Year	Performance in 2008	National Standards
COD (ppm)		62*-100	100
Oil (ppm)		< 5	10
SS (ppm)		< 30	30

\* Monthly average

### 2. Emissions

Item	Year	Performance in 2008	National Standards
SOx (ppm)	Gas fuel	< 20	100
	Liquid fuel	< 250	300
NOx (ppm)	Gas fuel	< 100	150
	Liquid fuel	< 200	250
TSP (mg/Nm <sup>3</sup> )	By emission rate	20-100	< 25-500

### 3. Noise

Item	Year	Performance in 2008	National Standards
Night limit (decibels)		< 55	55







## CPC Utilization of Resources, Production of Pollutants, and Production Value

Input (crude oil)	171.01 million bbl/yr
Fuel Oil	879,990 T/Y
Fuel Gas	1,050,809 T/Y
Natural Gas	11,449 million M <sup>3</sup> /yr
Purchased Water	24,858,792 T/Y
Purchased Electricity	1,688,331,240 KWH/Y
Recovered External Waste	120 T/Y

Employees : 14,843  
 Land : 2,886 hectares  
 Capital : NT\$130.1 billion

Income	NT\$ 957.6 billion/yr
Gasoline	8,686,000 kiloliters/yr
Diesel Fuel	6,653,000 kiloliters/yr
Fuel Oil	8,414,000 kiloliters/yr
Ethylene	1.08million tons/yr
CO <sub>2</sub>	9,888,072 T/Y
NO <sub>x</sub>	8,089 T/Y
SO <sub>x</sub>	8,069 T/Y
TSP	645 T/Y
COD	766 T/Y
Waste Gases	131,957 T/Y
Waste Water	15,926,850 T/Y
Garbage	53,832 T/Y
Paybacks	NT\$ 275.95 million/yr
Safety Incidents	4 /yr

0.5154 tons CO<sub>2</sub>/tons product

442.31 tons CO<sub>2</sub>/US\$ million revenue

■ Equivalent energy consumption per unit for refineries :

221.37 kkal/kl crude

■ Average equivalent energy consumption

per unit for petrochemical plants :

8,287 kkal/MT ethylene

Pollution Prevention & Environmental Protection



responsibility, the CPC completed a company-wide inventory of greenhouse gases in 2005 and carries out an ongoing CO<sub>2</sub> reduction plan. The original target for CO<sub>2</sub> emissions reduction was 1 million tons by 2009; the actual amount of reduction reached 160,000 tons in 2005, 400,000 tons in 2006, 260,000 tons in 2007, and 220,000 tons in 2008, so the target was reached ahead of schedule.

As part of its environmental education activities, the CPC held a campaign known as Eco-Day Walk in the Kaoping River Mangrove Reserve in 2008. The purposes of this activity were to promote the principles of protecting the environmental and treasuring native resources through ecological experience and learning, and to appeal to the public to care for the local ecology. In the future the CPC will continue to show its concern for local development by adopting parks, mangrove forests, streams, and endangered species of plants and animals. The company will also help with cleaning up the environment of both land and sea so as to leave a clean living environment for future generations.

Since January 2000 the CPC has coordinated with the government's environmental protection policy by ending the supply of leaded gasoline and making all gasoline lead free. At the present time, all gasoline produced by the CPC conforms to the environmental quality standards of the advanced countries. The CPC started selling low-sulfur diesel fuel (<50ppm) in June 2004. Low-sulfur gasoline (<50ppm) has been available island-wide since January 1, 2007. The CPC introduced bio-diesel on July 27 and gasohol on Sept. 29, 2007 and has supplied B1 bio-fuel island-wide since Sept. 15, 2008. In addition, all filling stations belonging to the CPC have installed vacuum assist vapor recovery hoses and storage tanks have also been given vapor-recovery systems. These facilities help to improve air quality by recovering more than 3,200 kiloliters of gasoline vapor per year; thus reducing volatile organic hydrocarbons released into the atmosphere by that amount.

Through years of constant effort the quality of Taiwan's petroleum products has been upgraded until today it compares with that of Japan, the United States, and other advanced countries. However, the CPC is not satisfied with all these achievements and, in the future, will use the "new environmental standards for petroleum products" of the advanced countries for its benchmark in the ongoing pursuit of ever-better quality. With a love for home and environment in mind, the CPC will continue to employ the newest pollution prevention technology, constantly enhance environmental protection performance, pursue sustainable development, and share in the health and prosperity of the people of Taiwan.

## CPC Greenhouse Gas Ecology Indexes

Index	2004	2005	2006	2007	2008
1 Annual Income/whole-year FOE (NT\$/ton)	147,355	180,598	183,196	219,708	380,162
2 Annual Income/whole-year CO <sub>2</sub> emissions (NT\$/ton)	44,809	56,819	62,648	72,920	83,585
3 Income/(whole-year COD) (NT\$/ton)	619,659,466	751,667,823	1,261,839,820	1,261,936,837	1,552,743,754
4 Income/(SO <sub>x</sub> +NO <sub>x</sub> +TSP) (NT\$/ton)	25,207,277	29,586,780	31,188,266	38,520,029	51,046,897
5 Income/(emissions + waste water + solid waste) (NT\$/ton)	33,588	42,819	46,363	52,023	69,869
6 Income/(purchased electricity) (NT\$/KWH)	786	849	882	958	724





# R&D and Information Management

Research and development has always been the driving force behind the CPC's technological innovation, business development, and sustainable growth. In general, the Planning Division is responsible for the overall planning and implementation of R&D work, while the Exploration and Development Research Institute in Miaoli and the Refining and Manufacturing Research Institute in Chiayi are responsible for research in their respective fields. In addition, other production and business divisions have technology units that carry out on-site improvements and resolve production bottlenecks. The CPC has devoted strenuous efforts to R&D over the years, and as a result has effectively reduced operating costs and increased revenues.

Faced with the intense competition of the completely open market for petroleum products, the CPC will continue using R&D to break through technological bottlenecks in refining and exploration and will coordinate actively with the company's operational plans in carrying out forward-looking research, developing new products, and opening up new businesses with the aim of strengthening its overall competitiveness.

The company's R&D spending in 2008 amounted to approximately NT\$1.23 billion and yielded the following major results:

## I. Exploration and Production

- Appraisal of open explorations areas in Australia.
- Assessment of the BCO III Field in Chad.
- Analysis of sealing, review of hydrocarbon migration, and study of the petroleum system of the Murzuq basin. Reservoir characterization and sealing in the Ghadames basin were also studied.
- Evaluation of the Yizhu Fault in the Northern Depression of the marine Tainan Basin.
- Assistance to the Exploration and Production Business Division in improving the production flow at the Qingcaohu gas field.
- Assistance to the Exploration and Production Business Division in resuming production at the Yongheshan No. 6 well, which had been idle for more than two years.
- Reconstruction of paleo-temperatures by measuring vitrinite reflectance in organic matter; for use in the modeling of hydrocarbon generation.
- Completion of 20 Resistivity Image Profile (RIP) lines in the southwestern storage tanks at the Kaohsiung Refinery.
- Receipt of an NT\$51.7 million grant from the Petroleum Fund of the Ministry of Economic Affairs for petroleum development technology research projects.



# R&D and Information



## 2. Refining and Petrochemical Production

- Development of a new gasohol production process.
- Development of a new dimethyl ether (DME) production process.
- Second-stage modification and application of BTX ED aromatics recovery technology.
- Research in emulsified fuel oil development to promote combustion efficiency, enhance the heat transfer ratio, and reduce the emission of pollutants.
- Development and production of a series of process additives and microbiological agents for use in refineries and petrochemical plants, including popcorn inhibitors, desalting agents, corrosion inhibitors, and cooling water additives.
- Research to heighten the quality of fuels and the control of environmental pollution sources.
- Bio-energy research in ethanol fermentation, cellulose production, molasses ethanol feasibility evaluation, and bio-process evaluation for the development of bio-diesel.
- Study of the stability of biodiesel and biodiesel blends under different storage conditions.
- Development of N-acetyl glucosamine (NAG), liver protection, and vision support (dunaliella slina multiformated softgel), and the functional foods soybean germ, Osteal Expert (Peptide Calcium), and Chiu-Chien.
- Planning for the establishment of a risk-based inspection (RBI) system for different plants.
- Planning and design of a corrosion monitoring and cathode anti-corrosion system for pipelines and storage tanks.

## 3. Management and Energy Economics

- Completion of an analytical study of the Asia Pacific petrochemical industry.
- Development of selection and silviculture techniques for woody bioenergy plants in Taiwan.
- Health-risk assessment for the Dalinpu area.
- Study of the feasibility of building an external wharf and second gas pipeline at the Taichung Harbor LNG receiving terminal, and assessment of environmental impact.
- Study of the feasibility of the fifth-stage expansion of the Yongan LNG receiving terminal, and assessment of environmental impact.



# Management

In the area of information management, the CPC's current strategy is to use the latest information technology, carry out process re-engineering, implement integrated corporate resource planning, and establish an e-enterprise with the aim of grasping core technology, establishing a digital knowledge bank, reducing information and telecommunication costs, and developing innovative information services. The aim is to use front-rank international energy companies as a benchmark and to gain a greater competitive advantage through the utilization of information technology.

In coordination with the development of core businesses, following the installation of mainframe and peripheral equipment, establishment of a remote back-up communications channel, and setting up of open-system server facilities in 2005, the next year the CPC carried out an unannounced switch of the headquarters operating environment to the Kaohsiung Refining Unit's mainframe in order to verify the feasibility and effectiveness of these new facilities. Only 20 minutes were needed to effect recovery and it was not necessary for users to change any equipment. And in April, 2007 the two mainframes were formally integrated, making them able to back up each other remotely. Half a year later, in November, the operating environment was again successfully switched back to the headquarters mainframe. This was the first such operation in Taiwan, and the results were exemplary. In addition to the remote server back-up system which was completed in 2006, a renovation project to update the mainframe printers at both headquarters and the Refining Business Unit was carried out in December 2008 to assure an effective operating environment and the continuation of normal operations.

Furthermore, to improve its network quality and dependability, in 2006 the CPC began to install the Next Generation Synchronous Digital Hierarchy (NG-SDH) system. Completed in early 2007, this system serves as the transmission back-up for the Neihu-Nanzi second-route backbone network and provides an effective Multi-service Transport Platform (MSTP). At the same time, key mission information systems were developed and maintained, including the improvement of key information operating procedures, the closing of accounts on the first day of each month, the development and promotion of an integrated e-business system for oil products, and the strengthening of the POS system at filling stations and the diversified marketing network. A Refining and Petrochemical Information System was set up, production planning and oil accounting were integrated, an Exploration Information System was established, and an Exploration Management and Geographic Information System was integrated.

With the rapid development of information, digitalization, and globalization in the new century, the construction of the CPC's information systems will be based on ERP, CRM, corporate intelligence, knowledge management, e-commerce, corporate application integration, management reform, and the information and communications infrastructure. In respect to systems, integrated operating processes will shorten the time needed for invoice settlement, specialized information technology will be used to enhance production performance, and the 2011 information system response plan will be carried out. In the area of service, for external customers the company will deepen customer relationship management and provide quality services, and will integrate virtual and real channels to expand the industrial value chain; for internal customers the company will provide real-time and transparent service management through information service management systems. In the field of corporate intelligence, knowledge management will be used to deeply implant corporate intellectual capital and decision-making systems will be promoted to stimulate the popularization of information applications. In information and communications, network services will be integrated to strengthen construction of the basic environment and integrated mobile commerce information services. In the area of management, the information organization will be reinforced to enhance management performance, with the operation of all processes built on an integrated IT resource operating platform having an open environment together with the synchronous integration of internal IT resources, processes, and basic structures aimed at fulfilling the objective of providing full support for market competition.

In response to the development of the Internet and the advent of the knowledge economy, the CPC will build up its e-commerce operations in order to improve profitability, consolidate its market, and continue growing. It will establish a sales, storage, and shipping platform, promote ePOS at mixed-use filling stations, develop high-level control and application software systems, and build up complete service and management systems with the ability to provide the best in service.





## Human Resources |

The CPC currently has a total of 14,843 employees. The company strives to develop the potential of its employees fully through long-term efforts at training and assistance, while at the same time strengthening incentive and welfare measures and pinpointing managerial talent with the aim of having its corporate development led by outstanding human resources.

In its use of manpower, the company has carried out continuous organizational and process re-engineering in recent years and has established personnel rotation rules in order to use its manpower effectively. It has also constantly recruited young professionals to inject new blood and bring about an overall upgrading of manpower competitiveness. To achieve its corporate growth targets, in addition to the consideration of necessary professional qualifications and character in the selection of executives, the company uses management and leadership development training to help the executives achieve their full potential. At the same time the company is strengthening on-the-job training at all levels, integrating existing training systems in the establishment of a Petroleum University, enhancing professional skills, and developing multi-skilled employees so as to facilitate manpower utilization. The company encourages its employees to participate in national skills qualification

examinations and helps them to obtain needed industrial safety, environmental protection, and other certifications; and, in line with the needs of the company's transformation, it strengthens second-skill training. In addition, employees are chosen on a regular basis to go abroad for advanced education, research, or internship, or to participate in seminars of various types in line with business needs.

In the area of work incentives and welfare, the CPC awards bonuses of various kinds based on the company's overall performance as well as on the contributions and job performance of individual employees. In addition, welfare committees organize all sorts of welfare and entertainment activities. All employees participate in national health insurance, civil service insurance, labor insurance, group life insurance, and accident insurance; in addition, consolation payments are made in cases of job-related injury,

disability, or death. The different business units also run clinics, company restaurants, libraries, company stores, and other welfare facilities, along with swimming pools, ball fields, gymnasiums, and the like at their place of operation. In addition, there are scholarships for employees' children; educational loans for children in college and university; medical subsidies for employees and their dependents; wedding, funeral, and retirement subsidies; and interest-free emergency loans. Contributions are made to support the activities of civic groups, such as ball games, bridge tournaments, mountain climbing, swimming, painting, and film appreciation, in order to provide physical and mental relaxation for employees and to boost their working morale.







## Affiliates |



The CPC holds equity in numerous companies, both at home and overseas. The most representative of these are introduced below:

### ■ KuoKuang Power Co. Ltd. (KKPC)

In line with the government policy of opening power plants to private operation in order to alleviate northern Taiwan's insufficiency of power supply, the CPC and private investors have jointly established the KuoKuang Power Co. (with the CPC holding 45% of the equity) and constructed a gas-fired power plant with an installed capacity of 480MW at Guishan Township in Taoyuan County. The plant began commercial operation on Nov. 3, 2003.

### ■ China American Petrochemical Co. Ltd. (CAPCO)

Established in 1976, the China American Petrochemical Co. is the major supplier of purified terephthalic acid (PTA) to the polyester industry in Taiwan. The company is capitalized at NT\$6.88 billion, and its plants in Taichung and the Linyuan Petrochemical Complex in Kaohsiung have a combined annual capacity of 1.9 million tons. The CPC owns 38.57% of the company's equity, including preferred stock.

### ■ CPC-Shell Lubricant Co. Ltd. (CSLC)

The CPC-Shell Lubricant Co., established in 1965, is located at the CPC's Kaohsiung Refinery and produces mainly base oils, lubricants, and byproducts. The CPC holds 49% of the company's equity.

### ■ Dai Hai Petrol Corp. (DHP)

Established in 1994, the Dai Hai Petrol Corp. is headquartered in Haiphong, Vietnam and owns docks, receiving equipment, and liquefied petroleum gas (LPG) storage and distribution facilities with a capacity of 1,050 tons. It also operates two LPG filling stations, in Hanoi and Ha Tay. The company engages primarily in the storage, transport, and supply of LPG, asphalt, and other petroleum products in northern Vietnam. The CPC owns 35% of its equity.

# Affiliates

## ■ Qatar Fuel Additives Company Limited (QAFAC)

The Qatar Fuel Additives Company Limited (QAFAC) was established in 1996 as a joint venture between the CPC, Industries Qatar, LCY Middle East Corp. and International Octane Ltd. of Canada. QAFAC's plant is located in the Mesaieed Industrial Zone; it went on line on June 20, 2000, producing mainly methanol and methyl tert-butyl ether (MTBE). The CPC holds 20% of the company's equity.

## ■ Faraway Maritimes Shipping Co. (FMSC)

The Faraway Maritimes Shipping Co. was jointly established in 1997 by the CPC and foreign partner Osprey; it built the LNG carrier Golar Mazo, which was delivered on Jan. 7, 2000 and went into service on the 15th of that month. The ship carries LNG purchased from Badak VI in Indonesia, completing 27 voyages in 2008. The CPC owns 40% of the equity in the company.



## ■ Chun Pin Enterprise Co., Ltd. (CPEC)

The Chun Pin Enterprise Co. was established by the CPC (with 49% of the equity) and private investors to carry out construction of East Wharfs 4, 5, and 6, as well as E2-2-area storage tanks at the Port of Taipei, and to engage in the storage and transshipment of petroleum and petrochemical products. Formal operation started in May 2006.

## ■ Kuokuang Petrochemical Technology Co. (KPTC)

To facilitate the vertical upstream, midstream, and downstream integration of oil refining and petrochemical production, the CPC and other domestic companies established the KPTC as a joint venture in 2006 as part of a Petrochemical Technology Zone Joint Investment Plan. The plan includes the construction of an oil refinery, olefin center, aromatic hydrocarbons center, mid- and downstream petrochemical derivatives plants, co-generation facilities, and industrial harbor. The CPC's share of the investment is 43%.

## ■ NiMiC Ship Holding Co., Ltd. (NSHC)

The NiMiC Ship Holding Company was jointly established by the CPC, NYK, and Mitsui, and has four ship-owning companies under its umbrella. The four companies are building four LNG tankers, to be delivered 2009 and 2010, for the transport of LNG purchased from RasGas II in Qatar. The CPC completed its share capital investment in the holding company on Oct. 31, 2008, giving it 45% of the company's equity.

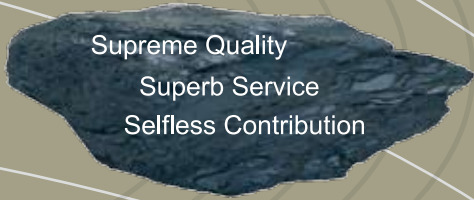
## ■ NiMiC Ship Management Co., Ltd. (NSMC)

The NiMiC Ship Management Company was jointly established by the CPC and foreign partner NYK to handle the operation and management of four LNG tankers. The CPC completed its share capital investment on Oct. 31, 2008, giving it 45% of the equity in the company.

## ■ Ras Laffan Liquefied Natural Gas Company Limited II ( RasGas II )

RasGas II was jointly established in 2001 by Qatar Petroleum and ExxonMobil RasGas Inc. The company's operations include natural gas production, liquefaction, and marketing. The CPC completed an investment project on Sept. 18, giving it a 5% interest in RasGas II's Series B profit center.





Supreme Quality  
Superb Service  
Selfless Contribution



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