

2013

CPC

CPC Corporation, Taiwan



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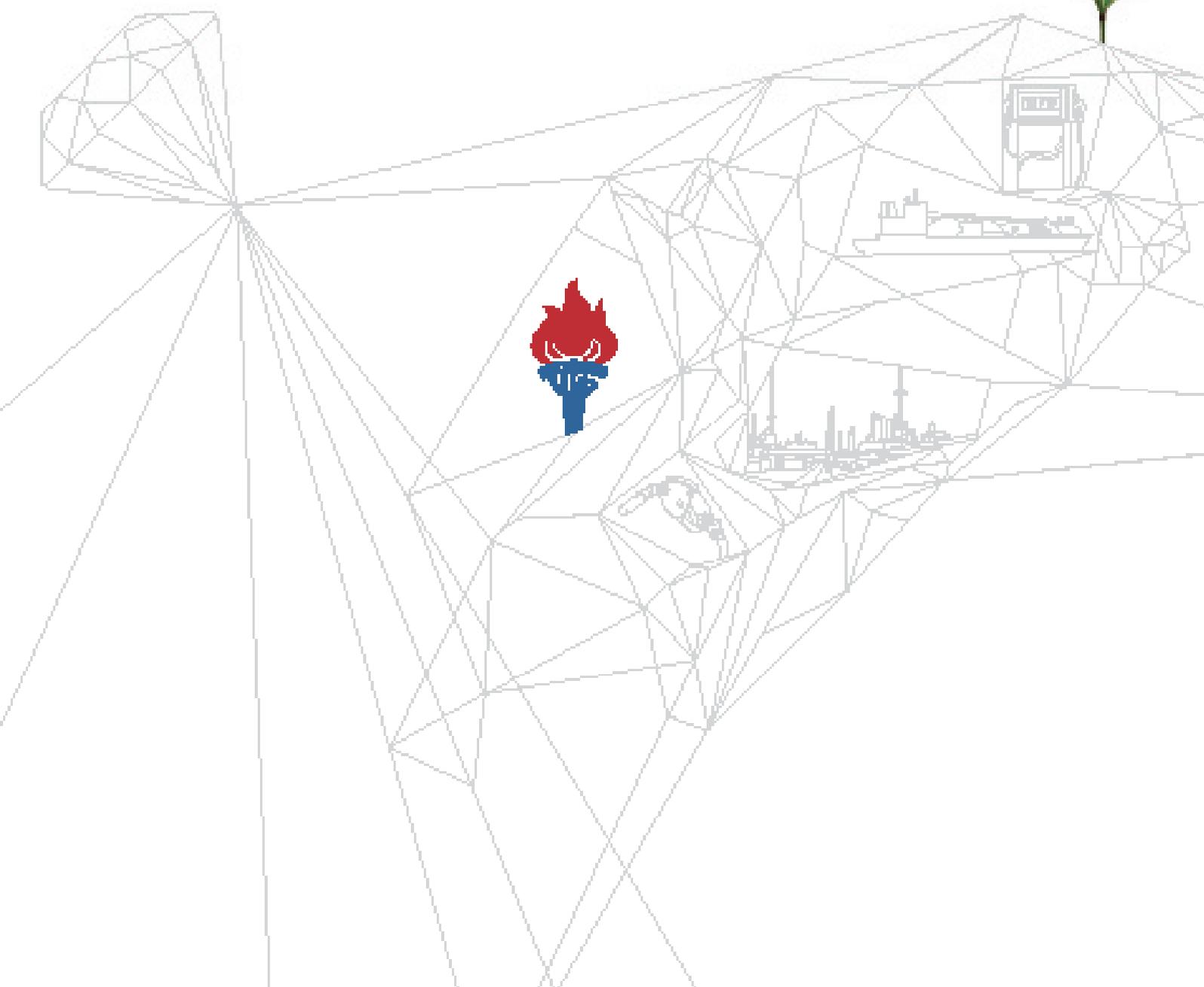
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★ **Fortune Magazine**

No. 337 on the list of the world's top 500 companies in 2012

★ **Reader's Digest Trusted Brand Platinum Award**

Won for the 12th consecutive year in 2012

★ **Next Magazine's Top Service Award**

Won for the 7th consecutive year in 2012

★ **Management Magazine's Consumers' Ideal Brand Award**

First Place in the filling station category in 2012



Message from the Chairperson

The year 2012 was a time of international politico-economic uncertainty, with the global economy experiencing weak growth because of debt problems in Europe and America and slumping financial and employment markets in many advanced economies. Taiwan was affected by this situation: economic growth slowed, unemployment and consumer prices rose simultaneously and private consumption weakened. Amid this wave of global economic recession, CPC worked in line with the government's policies of price stabilization and concern for social wellbeing by cutting price increases for petroleum products and gas by half, although this resulted in huge losses for the company. Fortunately, the government announced a petroleum price rationalization program on April 1, 2012 restoring the normal mechanism for petrol and diesel price adjustments and allowing CPC to avoid further losses. By the concerted efforts of all at CPC, the company's overall revenues reached a record high of about NT\$1.2 trillion for the year.

Industrial safety and environmental protection form the foundation of sustainable operations. In promoting industrial safety, we not only ask our staff to adhere strictly to standard operating procedures (SOPs) and proactively identify potential hazards but also to thoroughly implement checking mechanisms, increase the frequency of unscheduled safety checks and reinforce the emergency response function, accident prevention and rescue techniques - all in the spirit of "100% safety, zero accidents." Thanks to the efforts of all at CPC, we were honored with two awards in 2012: an "Outstanding Activity" award by the Council of Labor Affairs during the annual National Workplace Safety and Health Week; and annual "Model of Industrial Safety" excellent unit and personnel awards for enterprises under the Ministry of Economic Affairs. In the "Excellent Unit for Promotion of Industrial Safety and Health" section of the latter, CPC's First Place in Division A reflected the attainment of international standards in our various industrial safety measures. In the area of environmental protection, we have continued to promote both the reduction of greenhouse gas emissions and greater waste reduction and recycling. We have organized a variety of environmental "edutainment" activities to disseminate familiarity with the petroleum and petrochemical industries and environmental protection concepts. We also participated in national tree-planting and seedling-giveaway activities and we took the lead in providing battery-switching services for electric motor-scooters in support of the Penghu islands low-carbon program. In these and other ways we have demonstrated our practical support for energy conservation and carbon reduction.

In the field of social service, CPC has continued to show its concern for society and to care for disadvantaged groups in practical ways. We have continued "adopting" children from poor families, by organizing "adoption" meetings and participating in World Vision's "30 Hour Famine" activities. We have provided long-term support for the development of elite sportspersons such as tennis star Yung-Jan Chan and table-tennis ace Chih-Yuan Chuan, who both represented Taiwan in the 2012 London Olympics; we cooperate with the Eden Social Welfare Foundation in organizing painting exhibitions that aim to give more people insight into the commitment and competence of the physically-challenged; we pay periodic visits to halfway houses, orphanages and children's homes, donate to the construction of community activity centers and libraries; and join in the sponsorship of cultural performances and the donation of used computers to help impoverished families. It is by these constructive means that we whole-heartedly give back to society and fulfill our corporate social responsibility.

We intend to boost Taiwan's independence in oil and gas resources through our overseas exploration activities and so we are seeking cooperation with international energy companies in new overseas areas with potential for oil and gas exploitation. In order that CPC can take timely advantage of development trends in the new field of unconventional energy and get a firm grasp of its technology and impact on global markets in natural gas and petrochemicals, we are also negotiating cooperation in shale-gas developments. In 2012 we succeeded in acquiring five new exploration blocks: Theall, Bougere Central, Cutthroat A and East Skinner Lake in the U.S.; and Haute Mer A in the Republic of Congo. We also signed a contract with Husky Energy of Canada for cooperative exploration of the deep-sea Tainan Basin block in the Taiwan Straits and acquired oil and gas rights to the Agadem block in Niger and the Prelude gas field in Australia.

There has also been good news from onshore drilling in Taiwan. Guantian No. 4 well in Tainan came on stream with 86,000 cubic meters of natural gas, and has joined Guantian wells No. 1, 2, and 3 in providing gas to the Guantian Industrial Park. We will continue exploration and acquisition activities at home and abroad with the aim of oil and gas production taking up 10% of our refining capacity and contributing 30% of our after-tax profit by 2019.

In the output of oil products, the completion of an RFCC plant at the Dalin Refinery has delivered annual production of 450,000 metric tons of propylene, 2.0 million kiloliters of gasoline and 600,000 kiloliters of diesel fuel, boosting our production value by NT\$10 billion per year and bringing additional stability to domestic supplies of petrochemical products and materials. To further increase revenue, we will use propylene from the new RFCC plant to produce butyl alcohol and other high-value products such as the isononanol (INA) planned for a joint-venture project. We will also plan joint investments with foreign petrochemical companies and will work actively under the government's "quantity outside, quality inside" policy direction with the aim of making the refining business a developing profit center for the company.

In marketing our petroleum products we have continued to aim high: we have upgraded our gas stations and other hardware facilities, not only through design improvements that incorporate local characteristics but also through raising the level of quality in customer service, cleanliness of facilities and landscaping. Gas station channels are now operated more effectively, so as to maximize the sales achieved for each unit of floor space. CPC won numerous customer service awards in 2012, including First Place for gas stations in *Management* magazine's Consumer's Ideal Brand and the *Reader's Digest* Trusted Brand Platinum Award, for the 12th year in a row. After many years' stable supply of high-quality petroleum products and regard for consumer's rights in a clean, hygienic, and healthy service environment, we have established a superior brand image in the public mind.

In the supply of natural gas, we imported 206 shiploads in 2012 and our sales volume amounted to 16 billion cubic meters. This made Taiwan the world's 16th largest importer of LNG. On the supply side, we have signed long-term supply contracts with Qatar, Shell, and Australia's Inpex to ensure continuing stability. On the infrastructure side, the harbor serving the Yong An plant has been improved by dredging and adding to and improving docking facilities; our LNG-carrying fleet has been enlarged and brought up to world standard; and we have carried out second-stage expansion of the Taichung plant. All of this work was undertaken to ensure that Taiwan's supply of natural gas is worry-free.

In the context of strengthening its competitiveness, CPC is looking to develop various businesses in cooperation with external partners. By way of example, the Kuokuang Petrochemical Technology Co. is currently evaluating the feasibility of, firstly, investing in a joint-venture project for the production of high-value petrochemical products at Taichung Harbor; and, secondly, investing in another joint-venture refining center in Malaysia.

In the area of trade, CPC has established its first overseas-based petroleum products trading enterprise—CPC International Trading Pte. Ltd.—in Singapore. This will serve as the base for an Asia-Pacific trading network for petroleum products, expanding CPC's competitive participation in the international crude oil market and expanding its export business. We have also used diverse trading methods, such as multilateral trade and the carry trade, in pursuit of better performance in our commercial operations.

CPC's corporate governance system has been made more effective in its implementation with the aim of enhancing the company's competitiveness and risk-control capability, and thereby strengthening its operations: the professionalism of our directors and supervisors was deployed to reinforce the board of directors' collective competence; board supervisors' functions have been fully realized; the internal control and auditing systems were strengthened; and disclosure of important information has been brought up to international standards.

For many years CPC has shouldered the responsibility for carrying out national energy policy and in that respect fulfilling its mission of achieving energy conservation, heightening energy efficiency and assuring the energy supply. In the light of both our autonomy in corporate operations and our mission as a state-owned enterprise, we will espouse the principle of "boldly facing challenge and seeking renewal and change" in vigorous implementation of management reform, continuous improvement of our operating structure and expansion of our operating territory. We will also work actively to develop new businesses, invigorate our operating model and enhance our corporatized operating capabilities. Additionally, we will allow our various business units greater operational self-authorization and autonomy, reinforce their decision-making capabilities and participate competitively in the international energy market.

Now in its 66th year of operation, CPC is Taiwan's most important energy supplier. It is our hope that all at CPC will work in the spirit of "active participation, fulfillment of responsibilities, rediscovery of their enthusiasm and sense of involvement, creation of a system of incentives and clear delineation of responsibility" - all as they burnish our brand, reach new heights of achievement and mold CPC into an international energy company characterized by safety, cleanliness, respect and competitiveness in the achievement of sustainable development.

Economic conditions are often plagued by turbulence and turmoil, and we wish to express heartfelt thanks to our domestic and foreign customers and cooperating companies for their long-term support and enabling CPC to continue growing and developing in this difficult operating environment. In the future, we will steadily progress towards our vision of becoming an international energy conglomerate that encompasses petroleum products, petrochemicals and high technology. Our earnest hope is that you will all continue affording us the help and support we need to improve our business operations even more and create an even better record of performance. For all of that, we pledge our deep respect and appreciation.

Chairperson

Sheng C. Lin



CPC - providing Taiwan's people with energy for living

And promoting national economic prosperity.

CPC - committed to principled integrity in its operations

Becoming an international energy conglomerate.

- ◆ Sustainable Development
- ◆ Board & Corporate Officers
- ◆ Organizational Chart





Established in Shanghai on June 1st, 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 (MOEA). In 1949 CPC followed the government in relocating to Taiwan, setting up its headquarters in Taipei under the direction of the MOEA. With service facilities covering the whole nation, its operations today include the import, exploration, development, refining, transport, marketing, and sale of petroleum and natural gas, as well as the production and supply of petrochemicals.

At its 550th 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" abbreviation in English. The objectives of this change were to expand the firm's international business, reinforce the principle of keeping its roots in Taiwan and extend the valued reputation that the company had built up over decades. CPC's total capital stands at NT\$130.1 billion, and its total revenues in 2012 amounted to NT\$1,150.0 billion.

During the more than 60 years since its establishment, CPC has ably fulfilled its mission of providing a stable supply of oil products and stimulating the development of petrochemical industries - thus enabling Taiwan's economy to achieve soaring growth and the island's people to enjoy prosperity. For this accomplishment, our company has won the approbation of all sectors of society. Faced with the liberalization of Taiwan's market for petroleum products in recent years, CPC has moved to consolidate its operating advantages, and significantly enhance its competitive capabilities. Organizational re-engineering, personnel downsizing and production-cost reductions have all been carried out to maximise the benefits from corporatized operations. At the same time it has vigorously sought opportunities for cooperating with major international oil companies in the development of upstream exploration, petrochemicals and marketing channels with the aim of expanding its business scope and presence in the international market. CPC intends, in this way, to become a competitive international energy company developing safe, clean and sustainable operations and which continues to provide the people of Taiwan with highly-efficient, high-quality energy products.

As a state-owned company, even though it pursues profit 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, and striving for environmental protection over the years, our company has, without regard to cost, also provided the fuel needed by military units and the people in 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 people in the safe use of oil and gas, holding safety and health seminars, and guiding enterprises in strengthening the culture of safety. Our company also supports disadvantaged groups, participates in social-benefit activities, sponsors cultural activities, and provides incentives to encourage elite athletes and performers; in addition, it assists with construction around its 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 21st-century trend toward sustainable operations, and to the progress of corporate operations toward an emphasis not only on economic growth but also on environmental protection and social benefit. Even though CPC pursues commercial gains- as it must - it also works for social justice, the welfare of disadvantaged groups, safety and health, community development and environmental protection.

To coordinate with global trends and follow the international movement toward environmental protection, CPC initiated the following initiatives at the end of 2003 to promote the spirit of sustainable development in its energy industry operations:

- Conformity with government regulations and international agreements
- Clean production and environmental protection
- Efficient utilization of resources to conserve water and energy
- Emphasis on social responsibility and expansion of the scope of services
- Establishment of key environmental indicators and provision of information transparency
- Active commitment to research and development for the creation of new areas of operation

CPC joined the World Business Council for Sustainable Development (WBCSD) in 2006 and has set up a Committee for the Promotion of Sustainable Development. The Committee 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 goals of building a reputable corporate image and advancing toward sustainability. CPC also published "Sustainable Development Reports" in 2007, 2009, 2011, and 2012 to fulfill its corporate social responsibility in regard to the disclosure of information.

At a time when global petroleum resources are gradually being exhausted, CPC will conscientiously fulfill 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 social responsibility.

Board & Corporate Officers

Board of Directors

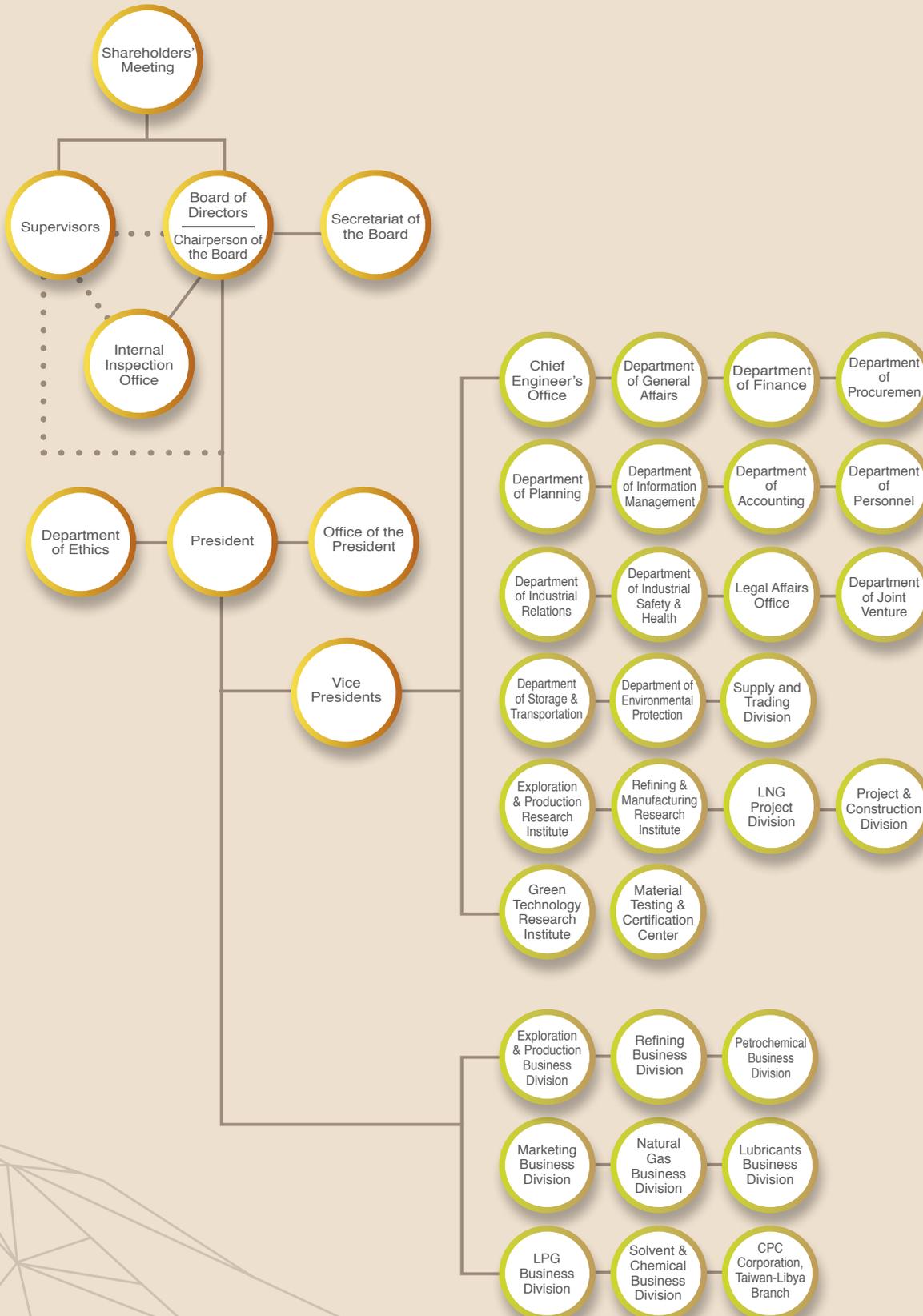
Chairperson of the Board	Sheng-Chung Lin
Standing Directors	L. W. Chen
	Chi-Yuan Liang
Independent Director	Chuh-Yung Chen
Directors	Wang-Hsiang Hwang
	Shin-Cheng Yeh
	Tung-Yi Lee
	Yi Chou
	Yaw-chung Liao
	Mei-Ying Huang
	Chin-Lai Huang
	Jyh. Wei. Sun
	Kwung-Shing WU
Supervisors	Ter-Shing Chen
	Chiao-Tao Hsu
	Chi-An Wu

Corporate Officers

President	L. W. Chen
Vice Presidents	J. S. Yang
	Ray-Chung Chang
	Shane S. I. Lin
	Ming-Huei Chen
CEO, Exploration & Production Business Division	Jong-Chang Wu
CEO, Refining Business Division	Ching-Yang Wu
CEO, Petrochemical Business Division	Paul S. P. Chen
CEO, Marketing Business Division	C.H. Liu
CEO, Natural Gas Business Division	J.Y. Chen
CEO, Lubricants Business Division	Ting-Pang Chi
CEO, LPG Business Division	Jung-Lieh Lin
CEO, Solvent & Chemical Business Division	Jimmy Chang
Director, Refining & Manufacturing Research Institute	Vincent Y.S.HO
Director, Exploration & Development Research Institute	Shin-Tai Hu
Director, LNG Project Division	Marc W. H. Lin (Acting)
Director, Project & Construction Division	Marc W. H. Lin
Director, Green Technology Research Institute	Jung-Chung Wu
Director, Material Testing & Certification Center	Ta-Tsung Yen



Organization Chart



**CPC - actively developing self-owned oil sources
And expanding international cooperation in exploration;
CPC - improving its refining structure,
With energy conservation, emissions reduction and clean
production as its goal;
CPC - quality services reaching to the four corners of the world,
Supplying Taiwan's people with the best-quality oil products.**

- ◆ Upstream Operations
- ◆ Downstream Operations
- ◆ Other Business





Upstream Operations

Exploration & Production

To obtain a controllable and stable oil supply, CPC has engaged in sole-risk operations with foreign governments and cooperative exploration with other state-owned petroleum companies or large international oil companies under the name of the Overseas Petroleum and Investment Corp. (OPIC). These exploratory operations have continued for many years, covering the Americas, the Asia-Pacific region and Africa.

CPC has put much effort into development of upstream exploration to both secure its own oil sources and reduce the impact of recent fluctuations in international oil prices, thereby also enhancing its overall performance. In line with the government's policy of "deepening the safety mechanism of energy supply and promoting international energy cooperation," CPC has been fully engaged in international cooperation in exploration and development in the hope of discovering new reserves of oil and natural gas. By the end of 2012, CPC - in cooperation with international oil companies - was engaged in exploratory activities in 22 concession areas distributed among eight countries: Block 16 and 17 in Ecuador; Sanga Sanga, Bulungan, Arafura Sea, and Sanga Sanga coal bed methane (CBM) in Indonesia; Gulf of Paria East and Gulf of Paria West in Venezuela (where negotiations regarding the confiscated prospects are in progress); Block AC/P21 and NT/P76 in Australia; Bougere Central, Cutthroat A, Big Horn, Shorts Creek, Danube, Yellowstone, S. Bancroft, NW Bearhead Creek, and East Skinner Lake Blocks in the United States; the Murzuq 162 Block in Libya; the BCO III/BCS 11/BLT I Blocks in Chad; and the Haute Mer A Block in Republic of Congo.



The budget for the Agadem block in Niger was approved by the Legislative Yuan in December 2012. Due diligence is currently being arranged and will soon be in process. In LNG procurement, CPC continues to seek opportunities for upstream acquisition of Australian natural gas fields and is negotiating with Inpex, Shell and others on purchase prices and contract content. The budget for the Prelude FLNG field has been approved by the Legislative Yuan, and the budget for Ichthys LNG is being submitted to the Executive Yuan for approval. The Haute-Mer A Deepwater Block in the Republic of Congo was approved by their Ministry of Petroleum on November 23, 2012 with drilling of the first exploratory well set to begin in March 2013.



Blocks 16 and 17 in Ecuador; Sanga Sanga in Indonesia; and Big Horn, Shorts Creek, Danube, Yellowstone, S. Bancroft, and NW Bearhead Creek in the U.S.A. are all fields in production. CPC operates in Libya, and - now that the turbulence there has subsided - is applying to the National Oil Corporation for an extension period of two years to complete its third obligation well. In Chad, the Karin-1 well was abandoned due to high (over 90%) water saturation; the Benoy-2 well was spudded-in on October 21, 2012 and formation testing was scheduled to be under way by the end of January 2013.



In Ecuador, there are 147 producing wells in Block 16 including 50 work-over wells and eight development wells; and 34 producing wells in Block 17, including 20 work-over wells and seven development wells. In Indonesia, there are 708 producing wells in the Sanga Sanga Block including 50 newly completed development wells. Overall, CPC was allocated 6.17 million barrels of crude oil and 375 million cubic meters of natural gas from its operations in Ecuador, Indonesia and the U.S.A. in 2012.

Onshore in Taiwan, in addition to 84 square kilometers of geological surveys CPC completed 92.07 square kilometers of 3D seismic data acquisition and 11.63 kilometers of 2D seismic lines. One exploratory well and two work-over wells were completed in 2012. Currently there are 45 producing wells in the Tiezhenshan, Qingcaohu, Jinshui, Chuhuangkeng, and Guantian fields, turning out a total annual production of 502 million cubic meters of natural gas and 11,400 kiloliters of condensate.

Offshore Taiwan, a project for investing in development of the F Structure near Kaohsiung was under way but the EPCI (engineering, procurement, construction, and installation) bid package for the platform was annulled in March 2012 due to budget deficiency. After detailed review, the investment project was reopened but with startup delayed for one year and was approved by the Executive Yuan on November 21, 2012.

In the field of cross-straits cooperation, on December 18, 2012 CPC signed an agreement with Husky Oil of Canada to explore the deep-sea blocks in the Tainan Basin - a move undertaken to diversify exploration risk and introduce advanced deep-sea exploration technology. In fulfillment of the Tainan-Chaoshan Petroleum Contract, 3,300 kilometers of 2D seismic data processing as well as 800 kilometers of old 2D seismic data re-processing and their integrated interpretation have been completed.

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

USA

Cutthroat A

OPIC Interest: 100%
Operator: OAL

Bougere

OPIC Interest: 30%
Operator: Zeit Concordia

Big Horn

OPIC Interest: 11.2%
Operator: El Paso

Shoats Creek

OPIC Interest: 5%
Operator: El Paso

S. Bancroft

OPIC Interest: 10%
Operator: El Paso

Danube

OPIC Interest: 10%
Operator: El Paso

Yellowstone

OPIC Interest: 10%
Operator: El Paso

NW Bearhead Creek

OPIC Interest: 10%
Operator: El Paso

East Skinner Lake

OPIC Interest: 10%
Operator: El Paso



CPC's Overseas Cooperative Exploration Fields

Venezuela

Gulf of Paria West

OPIC Interest: 10%
Operator: PPSA
(Corocoro, OPIC Interest: 6.5%)

Gulf of Paria East

OPIC Interest: 7.5%
Operator: PPSA

Libya

Murzuq162

OPIC Interest: 100%
Operator: CPC

Indonesia

Bulungan

OPIC Interest: 20%
Operator: ENI

Saga Sanga (CBM)

OPIC Interest: 20%
Operator: VICO

Saga Sanga

OPIC Interest: 16.67%
Operator: VICO

Arafura Sea

OPIC Interest: 24.5%
Operator: COP

Chad

**BCOIII/BCSII/
BLTI**

OPIC Interest: 70%
Operator: OPIC

Ecuador

Block 16

OPIC Interest: 31%
Operator: Repsol-YPF

Block 17

Operator: PetroOriental

Congo

Haute Mer A

OPIC Interest: 20%
Operator: CNOOC

Australia

AC/P21

OPIC Interest: 30%
Operator: ENI

NT/P76

OPIC Interest: 40%
Operator: SIPC



Downstream Operations

Importation & Refining

As only an extremely small amount of crude oil is produced in Taiwan, almost all of the crude that is refined by CPC Corp. has to be imported. To ensure stability in crude oil supplies, the company purchases oil through long-term contracts and is vigorously working to diversify its sources. Imports of crude oil reached 168.4 million barrels in 2012: 63.53% coming from the Middle East, 25.60% from Africa, 6.75% from Australia and 4.12% from Central Asia. In line with increasingly stringent domestic environmental protection standards, a set amount of imports consists of low-sulfur crude.

To facilitate oil imports, CPC maintains offshore mooring buoys for large tankers at the Shalun terminal in Taoyuan County and at the Dalinpu terminal in Kaohsiung; there are also oil tanker berths in Kaohsiung, Taichung and Shen'ao harbors.

CPC's three existing refineries - 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 was split off from the Kaohsiung operation to become independent in 1996, has four offshore mooring buoys as well as both large and small docks for the unloading and loading of crude oil and petroleum products. It has a topping capacity of 300,000 barrels per day. The Taoyuan Refinery was established in 1976; following de-bottlenecking renovations and the addition of a second distillation plant, it currently has a daily capacity of 200,000 barrels of crude oil. CPC's total output of petroleum products in 2012 was 8,904,038 kiloliters of gasoline, 2,306,100 kiloliters of aviation fuel, 7,104,020 kiloliters of diesel fuel, 7,413,199 kiloliters of fuel oil and 461,690 metric tons of liquefied petroleum gas.

Respecting both increasingly stringent demands in regard to the environment and quality of life by the people of Taiwan, and their continuously changing needs for petroleum products, CPC has in recent years taken steps to enhance both the quality of its petroleum products and their production value by building several refining and production facilities - such as units for reforming, isomerization, TAME, gasoline, diesel fuel hydrodesulfurization, aviation fuel processing, N-paraffin processing, alkylation and heavy oil conversion. These facilities are designed to supply Taiwan's people with better petroleum products as well as to raise production efficiency.



In response to the medium- and long-term environmental protection standards announced by the Environmental Protection Administration (EPA)—a reduction of the sulfur content of gasoline and diesel fuel to no more than 10ppmw and the aromatics content to no more than 35vol%; and a lowering of the olefins content of gasoline to no more than 18vol% in 2011—CPC has run



a 30,000-barrel-per-day cracked gasoline hydrodesulfurization plant at the Taoyuan Refinery since 2008, a 20,000-barrel-per-day cracked gasoline hydrodesulfurization plant at the Dalin Refinery since 2009 and a 40,000-barrel-per-day diesel hydrodesulfurization plant at the Dalin Refinery since 2010. It also relocated the 18,000-barrel-per-day cracked gasoline upgraded-quality plant from the Kaohsiung Refinery to the Dalin Refinery in 2011, with the facility scheduled to come on stream in early 2103 after completion of performance testing.

In 2006 CPC began implementing a plan to construct an 80,000-barrel-per-day residual fluid catalytic cracking (RFCC) plant at the Dalin Refinery and a 70,000-barrel-per-day residue desulfurization (RDS) plant and related hydrogen/sulfur recovery unit at the Taoyuan Refinery. The RFCC plant was commissioned smoothly in November 2012 and was scheduled to come on stream in early 2013 after completion of performance testing. However, because of fierce opposition from neighboring residents, the Executive Yuan approved a further two-year suspension of the RDS plant from November 2012. To make use of the supply of crude butane produced by the RFCC plant and further improve the quality of gasoline, in 2008 the company began building a 14,000-barrel-per-day alkylation plant at the Dalin Refinery with commissioning expected in mid-2013. To upgrade the mixed C4 hydrocarbon output of the RFCC plant to high-value petrochemical products, CPC has planned the construction of an 180,000-ton-per-year isononanol (INA) plant and a 144,000-ton-per-year methyl tert-butyl ether (MTBE) plant via a joint venture, with implementation expected to begin in 2013 and the plants expected to come on-stream in 2016.

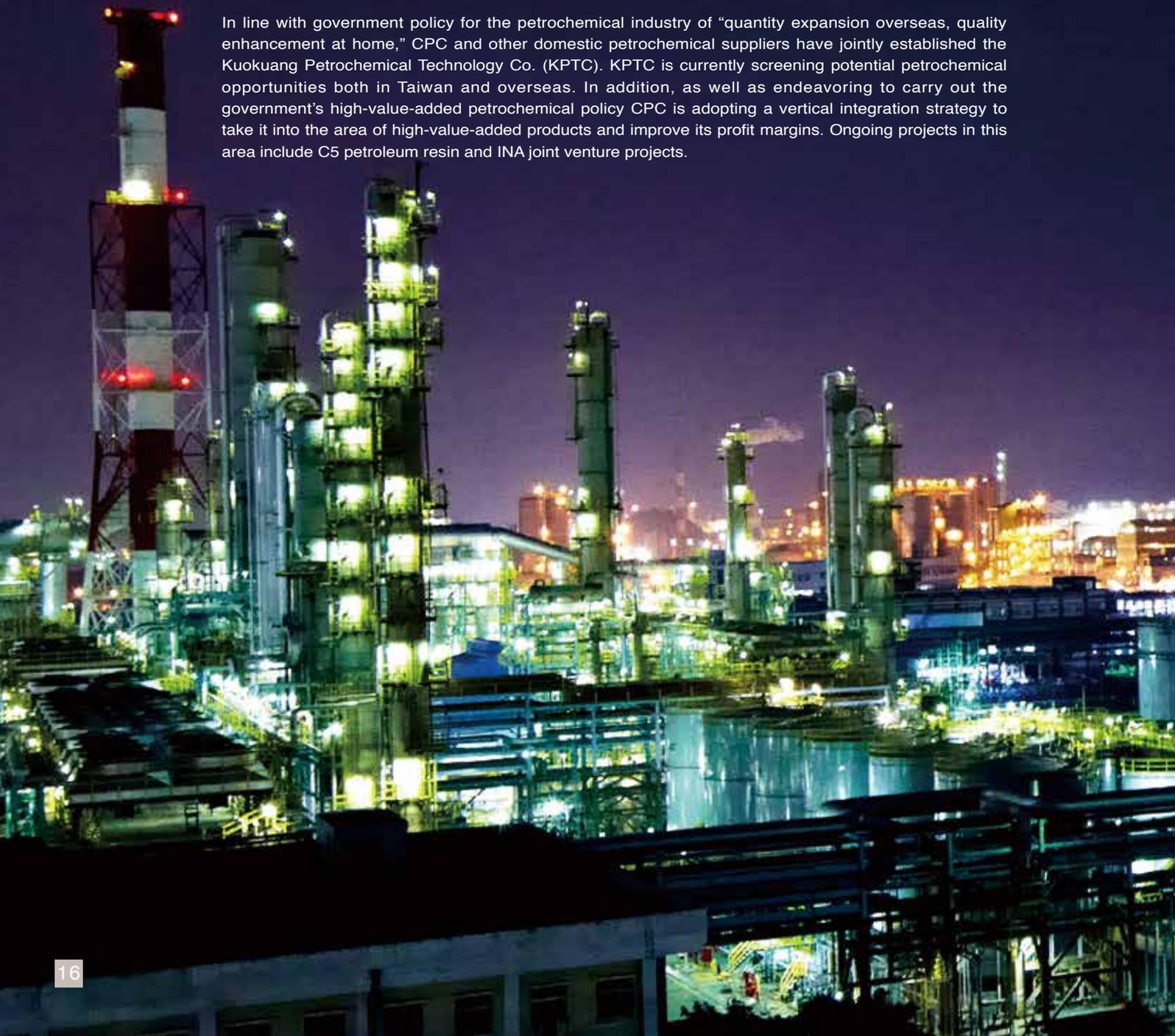
To deal with an excess of production capacity for gasoline and diesel fuel following liberalization of the domestic market, CPC has acted to readjust and improve its refining structure to conform to market needs and trends and to increase its ratio of heavy-oil conversion in order to optimize its oil production. The company is also constantly working to lower its refining costs. CPC's total exports of major petroleum products in 2012 were approximately 4.42million kiloliters, with shipments going to Vietnam, Singapore, New Zealand, Australia and mainland China. CPC will continue developing its export markets in order to achieve maximum advantage.

Petrochemical Production

CPC's petrochemical production is based mainly at the Kaohsiung Refinery and Linyuan Petrochemical Plant. The latter operates under the Petrochemical Business Division, which was established on September 1, 2000. Its full range of facilities includes naphtha cracking, butadiene and aromatics extraction, xylene separation, transalkylation, and isomerization units. Annual petrochemical capacity includes 850,000 tons of ethylene, 1,021,000 tons of propylene, 138,000 tons of butadiene, 381,000 tons of benzene, 660,000 tons of para-xylene and 130,000 tons of ortho-xylene.

In response to the opening of the domestic market to competition, the Petrochemical Business Division is promoting the establishment of a petrochemical product logistics center: the aim is to carry out vertical integration with mid- and 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 enhance the quality of industrial safety and environmental protection, as well as to expand the scale of production through the renewal of production processes, CPC has initiated a Third Naphtha Cracker Renovation and Expansion Project at the Linyuan petrochemical complex. This project will cost an estimated NT\$46.9 billion and will give the naphtha cracker and auxiliary facilities an annual capacity of 720,000 tons of ethylene, 430,000 tons of propylene, 100,000 tons of butadiene and 220,000 tons of benzene. When the project is completed in 2013, it will generate an annual production value of NT\$60 billion, stimulate investment by other downstream companies and bring new prosperity to Taiwan's petrochemical industry.

In line with government policy for the petrochemical industry of "quantity expansion overseas, quality enhancement at home," CPC and other domestic petrochemical suppliers have jointly established the Kuokuang Petrochemical Technology Co. (KPTC). KPTC is currently screening potential petrochemical opportunities both in Taiwan and overseas. In addition, as well as endeavoring to carry out the government's high-value-added petrochemical policy CPC is adopting a vertical integration strategy to take it into the area of high-value-added products and improve its profit margins. Ongoing projects in this area include C5 petroleum resin and INA joint venture projects.





Marketing

CPC's Marketing Business Division is responsible for the domestic sale of oil products, which consist mainly of automotive gasoline, aviation fuel, diesel fuel and fuel oil. Total sales in 2012 were 19,621KKL, producing overall sales revenue of NT\$518.5 billion - up 2.7% from the year before. Automotive gasoline accounted for the largest part of the sales (approximately 44.1%), followed by diesel fuel (about 25.5%), fuel oil (about 21.9%), and aviation fuel (about 8.5%).

Taiwan's marketing channels for oil products are divided between CPC and Formosa Petroleum Co. and competition between the two is increasingly intense. CPC has worked hard to both realize the advantage of its marketing network and protect its market share by consolidating its 2,028-strong





filling-station network: of the 2,557 filling stations operating in Taiwan at the end of 2012, 633 were operated by CPC directly, 14 were operated cooperatively by CPC with other parties and 1,381 were franchised to private operators. This network gave CPC control of more than 70% of the market; its shares of the gasoline, aviation fuel, diesel fuel, and fuel oil markets in 2012 were 77.6%, 63.9%, 85.4% and 93.4%, respectively.

In addition to its network of gasoline stations, CPC's storage and transportation operation supplies other fuel needs by operating aviation fueling stations at the Taoyuan, Taichung, Hualien, Taitung, Kaohsiung, Kinmen, and Magong airports and by maintaining 35 fishing-harbor filling stations around the island. At the end of 2012 CPC operated 14 petroleum supply centers - at Keelung, Shimen, Hsinchu, Taichung, Taichung Harbor, Wangtian, Minxiong, Tainan, Fengde, Qiaotou, Su'ao, Hualien, Huxi and Kinmen & Matsu (part of the oil supply center there) - to supply the oil products needed by filling stations in their areas. A total of 19,621 KKL of oil products was delivered from these centers in 2012. There are also three chemical analysis centers - in Keelung, Taichung, and Kaohsiung - which, along with seven laboratories, are charged with the testing and quality control of oil products; altogether, they tested 57,524 samples during the year.

In the operation of its filling stations, CPC seeks to upgrade customer satisfaction and lead the market through "differentiation of services" and "the service advantage." The Marketing Business Division asks directly-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, our 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 generate non-core income by increasing their operational depth, offering diversified services and strengthening cross-industry strategic alliances.







Natural Gas

Taiwan's first liquefied natural gas (LNG) receiving terminal, in Yongan District of Kaohsiung City, was completed in 1990 and inaugurated a new era in the supply of clean energy on the island. Based on the advantages of natural gas—high efficiency, lack of pollution, safety and convenience—CPC has since moved in line with the policy goal of energy diversification. Following rapid growth of the domestic economy, the steady increase in energy demand and the rise of environmental consciousness, CPC carried out an expansion project at the Yongan receiving terminal; this was completed in December 1996, boosting its annual handling capacity to 4.5 million metric tons. To satisfy the future demand for natural gas by independent power plants and towns in northern Taiwan, CPC initiated a third-stage expansion project in July 1996; in addition to expansion work in the terminal area, the company established a precedent in Taiwan by laying a 36-inch diameter, 238km long-distance undersea pipeline from Yongan to Tongxiao. Completion of the pipeline in December 2002 expanded CPC's LNG handling capacity to 7.44 million tons per year.

To meet the first-stage goal of supplying gas for use by Taipower's Datan Power Station 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 needs of independent power plants, industrial customers, and city gas users in central and northern Taiwan, CPC constructed an LNG receiving terminal with a yearly capacity of 3 million tons in Taichung. This project, costing an estimated NT\$31.5 billion, was developed at West Dock No. 13 in Taichung Harbor as well as inland; it includes three 160,000-kiloliter LNG tanks, gasification and gas supply facilities, and 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. The pipeline began operating on July 13, 2009. At present, CPC is carrying out its Taichung LNG Receiving Terminal Phase II Expansion Project: begun in 2012, it is expected to be completed in 2018; it includes three 160,000-kiloliter above-ground tanks and a 21.8-kilometer 26-inch onshore gas pipeline from Taichung Harbor to the Wuxi gas-isolation station. The project will increase the handling capacity of the Taichung terminal from 3mtpa to 5mtpa and, by providing more LNG storage capacity, enhance the stability and security of gas output during the winter monsoon.

To make flexible use of its facilities so as to achieve stability of supply and demand in the gas market, CPC has constructed a transmission and distribution system in western Taiwan that includes 1,757 kilometers of trunk pipeline, 36 distribution stations and 1,471 kilometers of regional loop transmission networks fed by eight supply centers. CPC'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, together 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, thus completing a "figure 8" gas transmission network.

CPC has worked to ensure a stable supply of gas by diversifying its sources and its own deployment. Apart from the original long-term LNG sale and purchase agreements (SPAs) with Indonesia, Malaysia and Qatar, from 2010 through 2012 CPC signed four new SPAs for the import of LNG from countries including Papua New Guinea, Qatar, and Australia in order to meet demand for gas in Taiwan. To achieve the objective of stabilizing supplies and diversifying sources, the company secures LNG mainly from Indonesia, Malaysia, and Qatar through long-term agreements, with the remainder being supplied through mid-term and short-term master agreements with the Republic of Trinidad and Tobago, Egypt, and Nigeria. In 2012 CPC sold a total of 16.01 billion cubic meters of natural gas - mainly for domestic power generation, co-generation, and industrial users and household consumers.





Other Business

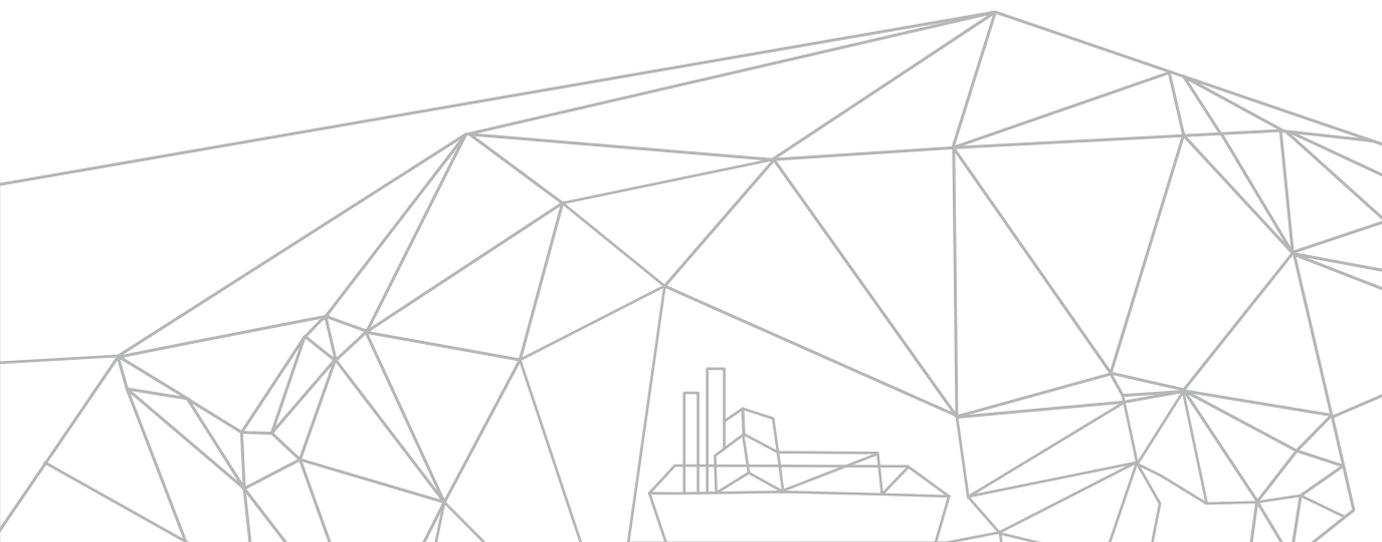
Taiwan's domestic market has long been open to free competition in the field of lubricants, and in recent years major international petroleum companies have rushed in to compete by using M&A, integrated marketing channels and cost reductions. As a result, competition has become ever more intense. Furthermore, rapid economic growth in the Asia-Pacific region has stimulated demand in the lubricants market; China and Southeast Asia, particularly, have become favored bases for deployment by international petroleum companies.

CPC's Kuo-Kuang brand of lubricant oil leads in the domestic market, with a share of more than 30%. Our company's Lubricants Business Division espouses an operating strategy of "consolidating domestically, expanding overseas," adopting a twin-brand (Kuo-Kuang and Mirage) marketing strategy in the domestic market while vigorously promoting quality services, reinforcing marketing channels, expanding auto, motorcycle repair and garage channels and using differentiated products and timely services to satisfy customers' needs. The main strategies for targeting overseas markets are to operate brands and distribution channels; carry out direct exports and multifaceted trade businesses; promote the lubricating oil and base oil businesses; serve successful overseas Taiwanese enterprises in the Asia-Pacific region; and deploy Kuo-Kuang brand marketing channels. Using these methods, the company has successfully entered the market in mainland China, Vietnam, Indonesia, the Philippines and other Southeast Asian countries; and has used a quality product image, reasonable pricing and stable supplies to establish a beachhead in Asia-Pacific markets for vehicle maintenance and industrial oils.

In the field of liquefied petroleum gas, CPC's monopoly was broken and it was exposed to free competition after the government opened the LPG market in 1999. Formosa Petrochemical Corp. entered the ranks of producers and independent traders began importing supplies.

As a state-owned enterprise and a major supplier of LPG, CPC is charged with the mission of enhancing its operating performance while providing sufficient supplies of LPG to the domestic market. In the field of household gas, CPC's LPG Business Division makes full use of its quality advantage and fully utilizes both its north-south transport and storage system and its comprehensive marketing network to consolidate the market. With industrial gas, the company works at strengthening customer service so as to both retain existing customers and develop new ones. Furthermore, in response to increasing market competition in Taiwan the LPG Business Division is planning to develop and expand international trading through the creation of more overseas sales channels.





CPC also endeavors to fully understand price movements in the international LPG market so that it can choose the optimal timing for import and export, thereby both lowering the cost of procurement and expanding exports. That will in turn maximize profit, coordinate with the government's safety reserve policy and accelerate turnover in storage tanks. While fulfilling its mission to provide adequate supplies of LPG to the domestic market while creating good operating performance, CPC also strives to strengthen both occupational safety and environmental protection and engages constantly in good-neighbor practice.

In the field of solvents and chemicals, CPC holds 70%-80% of Taiwan's market for locally-produced solvents, 35%-45% of the market for toluene, 40%-50% of the market for xylene and 40%-50% of the market for methanol. Of the total annual domestic production of 425,000 tons of asphalt, CPC accounts for 335,000 tons; of the total sulfur production of 400,000 tons, the CPC turns out 220,000 tons.

To reach its operating goals, CPC's Solvent and Chemical Business Division actively promotes quality products and services and cultivates sales channels; develops markets in Vietnam, mainland China and other areas to expand exports; enhances product quality and image; continues the improvement of processes and the reduction of costs; and works at developing new products and new businesses. The Solvent and Chemical Business Division is also responsible for the marketing of biotechnology products developed by CPC Bio, which has built on its experience in microbial fermentation technology - combined with modern biotechnology - to expand into biological materials, functional health foods, and green biotechnology, thereby producing high-quality bio-products at reasonable prices.



CPC - providing employees with opportunities for growth and development,
Strengthening their competence, using talent in its proper place.
CPC - employing all-dimensional risk management,
Ensuring a clean and safe work environment;
CPC - people-oriented, caring for the land and its ecology,
Establishing a good living environment through sustainable development.

- ◆ Industrial Safety & Health
- ◆ Pollution Prevention & Environmental Protection
- ◆ R&D and Information Management
- ◆ Human Resources





Industrial Safety & Health

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

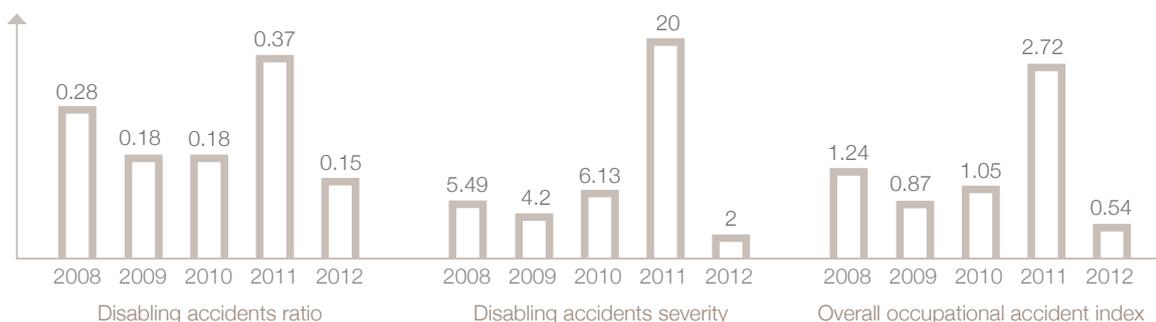
Industrial safety lies at the basis of CPC's operations. To achieve the goal of "100% industrial safety and zero accidents," CPC embraces a policy of "safety discipline and thorough inspection, health promotion and responsible care, risk management in system operations, and continuous improvement and sustainable operations" in constant upgrading of safety culture. Our industrial safety performance is recognized not only at home but internationally as well, as manifested by receiving a plaque from the World Safety Organization in 2005.

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

- Implementation of the Taiwan Occupational Safety and Health Management System (TOSHMS), and continuous improvement of the operating environment.
- Strengthening 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 amendment of standard operating procedures.
- Strengthening industrial safety management, holding 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 processes, thorough implementation of the oil tank and pipeline inspection function and establishment of a long-distance oil and gas pipeline monitoring and leak detection system.
- Strengthening fire-fighting management, organization of a professional fire-fighting team and guidance for the various units involved in carrying out fire-pump function testing. Five fire/safety technical manuals have been published.
- Implementation of graded on-site safety inspections and continuous improvement of the safety record through compliance at the functional, management and executive levels.
- Strengthening industrial safety inspections, including "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 to be followed up through the information system and resolved.
- Planning and implementation of safety/environment training and education for different applications; establishment and provision of online study courses and an industrial safety test-question databank; and compilation and publication of accident case studies.
- Reinforcement of the functions of the Safety Information Center, lending of materials for reading and provision of an Internet data inquiry service system.



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

CPC is fully committed to an environmental policy of "strict regulation, international standards, pollution prevention, energy conservation and waste reduction, continuous improvement, employee participation, social responsibility and sustainable development," and has invested more than NT\$50 billion in environmental protection since 1989. From 1995 we have promoted the establishment of ISO 14001 environmental management systems in all units, and 22 units had passed certification by the end of 2011. A company-wide environmental accounting system was set up in 2004 to constantly enhance our performance in environmental improvement.

Although Taiwan is not a signatory of the global agreement on greenhouse gas reduction signed in 1997 (the Kyoto Protocol), CPC works at reducing greenhouse gas emissions throughout the company in line with current and likely future international environmental trends. Carbon dioxide reduction targets and timetables for existing plants have been established and emissions-reduction measures are carried out by using low-carbon fuel, conserving energy, improving equipment efficiency and reducing waste. To cope with global climate change and fulfill its corporate social responsibility, CPC completed a company-wide inventory of greenhouse gases in 2005 and is carrying out an ongoing CO₂ reduction plan. The target for CO₂ emissions reduction by 2009 was 1 million tons, and the actual amount of reduction that year reached 1,220,000 tons. The goal of for CO₂ reduction in the period 2010 to 2015 is 650,000 tons.

As part of its environmental education activities, the company has organized campaigns promoting the principles of protecting the environment and treasuring native resources through ecological experience and learning, and to appeal to the public to care for the local ecology. In the future we will continue to show our corporate concern for local development by adopting parks and forests. Our company will also help with cleaning up the environment on both land and sea so as to leave a clean living environment for future generations.





Comparison of CPC Refinery Environmental Quality with National Standard

Effluents

Item	Year	Performance in 2012	National Standard
COD (ppm)		< 60	100
Oil (ppm)		< 5	10
SS (ppm)		< 15	30

*monthly average

Emissions

Item	Year	Performance in 2012	National Standard
SOx (ppm)	Gas fuel	< 50	100
	Liquid fuel	< 250	300
NOx (ppm)	Gas fuel	< 100	150
	Liquid fuel	< 200	250
TSP (mg/Nm ³)	By emission rate	5-100	< 25-500

Noise

Item	Year	Performance in 2012	National Standard
Night limit (decibels)		< 50	55

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

Input (crude oil)	26,741,120 bbl/yr	Employees: 14,977 Land: 2,876 hectares Capital: 1,301billion	Gasoline	8,905,038 Kiloliters/yr
Fuel Oil	814,897 KL/Y		Diesel Fuel	7,015,778 Kiloliters/yr
Fuel Gas	722,574 KS/Y		Fuel Oil	7,221,790 Kiloliters/yr
Natural Gas	1,131,076 M ³ /Y		Ethylene	842,314 T/Y
Purchased Water	1,499,337 T/Y		Propylene	670,259 T/Y
Purchased Electricity	1,882,596,397 KWH/Y		CO ₂	9,500,000 T/Y
			NOx	6,088 T/Y
			SOx	4,479 T/Y
			TSP	558 T/Y
			Waste Gases	3,754 T/Y
			COD	805 T/Y
			Waste Water	17,773,977 T/Y
			Garbage	45,339 T/Y





Since January 2000 CPC has worked in coordination with the government's environmental protection policy by ending the production and supply of leaded gasoline. At the present time, all CPC-produced gasoline conforms to the environmental quality standards of advanced countries. CPC lowered the sulfur content of its diesel fuel from 375ppmw to 50ppmw in June of 2004 and to 10 ppmw on July 1, 2011; it began supplying 50ppmw high-grade gasoline on January 1, 2007 and 10 ppmw on January 1, 2012. The company introduced bio-diesel on July 27 and gasohol on September 29, 2007 and has supplied B2 biofuel island-wide since June 15, 2010. In addition, all filling stations belonging to CPC have installed vacuum assist vapor recovery hoses, and storage tanks have also been equipped with vapor-recovery systems. These facilities help to improve air quality by recovering more than 3,200 kiloliters of vaporized gasoline annually, thus reducing the release of volatile organic hydrocarbons 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. We are not, however, satisfied with these achievements. In the future our company will use the "new environmental standards for petroleum products" of advanced countries as its benchmark in the ongoing pursuit of ever-better quality. With caring home and environment in mind, CPC will continue to employ the newest pollution prevention technology, constantly enhance its environmental protection performance, pursue sustainable development and share in the health and prosperity of the people of Taiwan.





R&D and Information Management

Involvement in R&D is a vital element in CPC's sustainable development. The headquarters-based Planning Division is responsible for overall R&D planning, implementation and auditing. The Exploration and Production Research Institute in Miaoli is in charge of domestic and overseas geological and stratigraphic assessment and drilling technology research, while the Refining and Manufacturing Research Institute in Chiayi handles the development of petrochemical products and lubricants, and the resolution of on-site production bottlenecks.

In line with global trends in thinking about carbon reduction, CPC set up a Green Technology Research Institute in Kaohsiung in 2012 for the purpose of developing biofuel and renewable energy technologies. In addition, a pilot testing and certification center for new materials was established in response to the Ministry of Economic Affairs' policy of developing high-value petrochemicals, and companies with R&D technology were assisted in carrying out pilot testing.

CPC spent approximately NT41.76 billion on R&D in 2012, yielding the following results:

Exploration and Production

- Multiple seismic attribute analysis was used to interpret three-dimensional seismic data and seek out closed structures with oil and gas potential in the top section of the lower area of the cretaceous strata in the Chad BCO III Block.
- A comprehensive assessment of the shale gas potential of the Western Canada sedimentary basin and resource assessment for first-phase data collation and analysis for the first exploration period of the CBM Block of the Sanga Sanga Field in Indonesia were completed.
- A pilot experiment increasing production from old natural gas fields by CO₂ gas injection, and the subsequent geological storage of the CO₂, was planned and carried out.
- Geophysical, stratigraphic, and geochemical evaluations of the Hanjiang Depression and the western Tainan Basin were carried out for a comprehensive assessment of their hydrocarbon potential, and suggestions were offered about the future direction of exploration there.
- A study of the economic and technical feasibility of hydraulic fracturing in the Jinshui Gas Field was carried out and a fracking model for other domestic gas fields was established for future reference.
- A subsidy of NT\$42.59 million was received from the MOEA's Petroleum Fund in 2012 for the Petroleum Development Technology Research Plan.

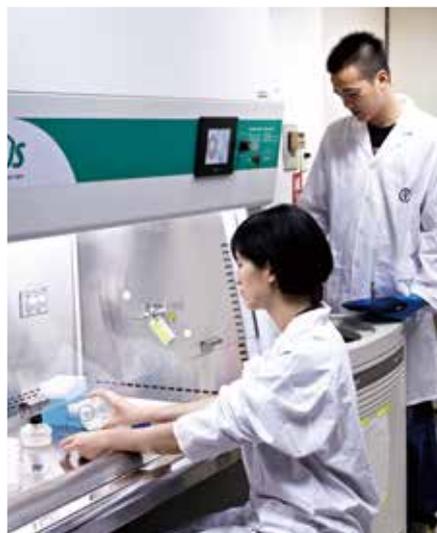


Refining and Petrochemical Production

- Six Taiwanese and foreign patents were obtained in 2012.
- Patented technology for the use of *Chitinibacter tainanensis* S1 to produce natural N-Acetylglucosamine (NAG) was transferred to the Yung Shin Pharmaceutical Ind. Co. for joint development.
- The magnetic filter has been commercialized and is being used in the CPC's aromatic hydrocarbons and isomerization plants, and also in the China Steel Chemical Corporation's coal tar hydrogenation plant.
- Energy-saving aromatic extraction technology was adopted by LG Chemical of Korea in 2012.
- Test verification was completed in the joint development with China Steel of wire drawing mill oil NTM 100.
- CPC's Dalin Refinery was assisted in completion of a cracking catalyst benefit evaluation including review practice, revision, and drafting.



- Technologies were developed for the preparation, development or application of: high purity dicyclopentadiene (DCPD) - a process for producing biodiesel from fatty acid residue; non-crystalline carbonaceous materials; and polymethylmethacrylate (PMMA) particles.
- The extractive distillation process has won five U.S. Patents and five more patents are under screening by the U.S., the Republic of China, and the World Patent Cooperation and Agreement Organization.
- Sixty-five items of refining technology introduction and innovation were carried out, and 121 reports were published in domestic and foreign periodicals or presented at conferences.
- A total of 254 commissions for provision of technical services were accepted from units within the company and 19 from outside the company, the latter yielding income of approximately NT\$13.9 million.
- Thirteen new biotechnology and lubricant products were developed.
- Development of the extractive distilling technology and process was completed.
- The development of an environmentally friendly process for the production of rubber process oil, and related new products, was completed.
- The quality of quenching oil at the Fourth Naphtha Cracker was improved and total heat source energy was heightened - thus reducing the external supply of medium-pressure steam by 67,320 tons, cutting CO2 emissions by 12,100 tons, and lowering operating costs by NT\$100 million.
- The development of various motor oil products, including Kuo-Kuang 9000 SN/SM/SL Motor Oil, 9000 MB Motor Oil 5W/40, Kuo-Kuang Superfleet CJ4 Plus Motor Oil, and Kuo-Kuang Outboard Engine Oil, was completed.
- The development of a variety of industrial oils, including High Performance Oil Cleaner HOC-1, Hydraulic Oil WG, Automatic Transmission Fluid HS, and Hydraulic Oil Super AWS was completed.
- In 2012 the company completed 25 ultrasonic flow meter calibrations, adjusting average deviation by about 0.3% and improving transaction fairness by approximately NT\$600 million.
- Assistance was provided to the Natural Gas Business Division in carrying out basic design for the “Blending of Nitrogen with NG6 to Produce NG1 at the Taichung Plant for Supply to Central Taiwan” emergency program.



Management and Energy Economics

- The 2012 research project on “The Carbon Emissions Issue: Opportunities and Challenges” was completed. The project involved the collection of information on the trends in development and the status of implementation of emissions-reduction policies at home and overseas; and an assessment, using the computable general equilibrium model GTAP-E, of the impact of carbon taxes on the overall economy and on industry.



CPC's vision for information development is to provide a smooth and secure network, accurate settlement of accounts and universal access so that customers will feel and appreciate our services; and to employ a user orientation and an appeal to convenience so as to truly achieve "getting close to the market and embracing our customers." To realize this vision and work toward the company's strategic operational targets, the overall development of our information business emphasizes the continued integration of corporate information systems, the provision of timely management and decision-making information, the integration of virtual and physical channels to expand the industrial value chain, the establishment of customer relations management and expansion of the scope of refined services and the promotion of knowledge management in order to give full support for competitiveness in the market.

The company will continue to master key-mission information systems, including the use of information technology to help improve data operating procedures and complete the closing of accounts on the first day of each month; developing and promoting an integrated e-business system for oil products so as to strengthen POS systems at filling stations and the diversified marketing network; establishing a refining and petrochemical information system and integrating the production and scheduling system with oil accounting; installing an exploration information system and integrating the exploration management and geographic information system.

Faced with the rapid development of information, digitization and globalization in this century, CPC will base its overall information systems development on the foundation of a comprehensive ERP system, customer relationship management, enterprise intelligence, knowledge management and information infrastructure. In the area of systems development, we will integrate operating processes so as to shorten the time needed to close accounts and will use professional information technology to enhance production performance. In the field of services, we will deepen external customer relationship management and provide quality services; and we will use information service management systems to provide timely and transparent service management for internal customers. In the field of enterprise intelligence, we will apply knowledge management, carefully cultivate knowledge capital and promote decision-making systems to stimulate the popularization of information applications. In information and communications, we will integrate network services, strengthen the infrastructure environment and integrated mobile e-business communications services and implement ongoing information and communications security management. On the management side, we will reinforce our information organization to upgrade management performance, build all process operations on an open-system integrated IT resource operating platform and synchronize all of CPC's internal IT resources, processes and infrastructure framework in order to upgrade the company's overall performance.



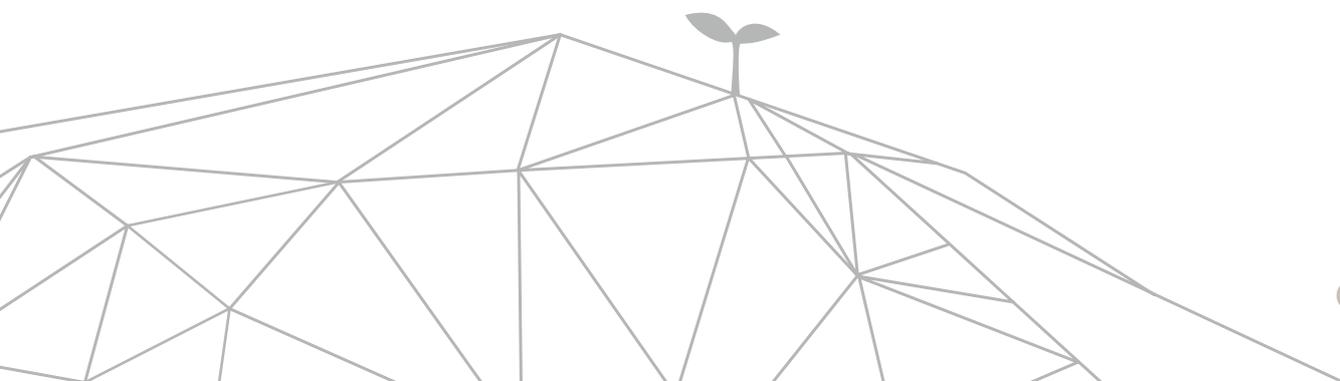
Human Resources

CPC currently has a total of 14,977 employees. Our company makes a great effort to fully develop its employees' potential through long-term commitment to training and assistance, while at the same time strengthening incentive and welfare measures and pinpointing managerial talent—all with the aim of having its corporate development led by outstanding people.

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 achieve the effective use of manpower. It has also constantly recruited young professionals to inject new blood and bring about an overall upgrading of manpower competitiveness. To achieve corporate growth targets, in addition to consideration of the necessary professional qualifications and personal character in the selection of executives, CPC deploys management and leadership development training to help executives achieve their full potential. At the same time, we are strengthening on-the-job training at all levels, integrating existing training systems into the establishment of a College of Petroleum, upgrading professional skills and developing multi-skilled employees so as to facilitate optimal manpower utilization. We encourage employees to participate in national skills qualification examinations and we help them obtain certification in industrial safety, environmental protection, and other fields. Moreover, in line with the needs of our corporate transformation, we have also introduced a second-skill training program. In addition, employees are chosen on a regular basis to go abroad for advanced study, research, internship or to participate in a range of business-related seminars.

In the area of work incentives and welfare, 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 a variety 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, compensation payments are made in cases of job-related injury, disability, or death. The company's various 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 places 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—all in order to provide physical and mental relaxation for employees and boost their workplace morale.





**Rooted in Taiwan, operating in the Asia-Pacific region,
eyeing the world.**

**CPC uses broad horizons and a discerning vision.....
to bestride many fields and expand its corporate
territory**





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

● **CPC-Shell Lubricant Co. Ltd. (CSLC)**

Established in 1963, the CPC-Shell Lubricant Co. is located at CPC's Kaohsiung Refinery and produces mainly base oils and lubricants. CPC holds 49% of the company's equity.

● **China American Petrochemical Co. Ltd. (CAPCO)**

Established in 1976, China American Petrochemical Co. is the major supplier of purified terephthalic acid (PTA) to the polyester industry in Taiwan. Its plants are located in Taichung and the Linyuan Petrochemical Complex in Kaohsiung. CPC owns 38.57% of the company's equity, including preferred stock.

● **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 an LPG filling station in Ha Tay. The company engages primarily in the storage, transport, and supply of LPG and other petroleum products in northern Vietnam. CPC owns 35% of its equity.

● **Qatar Fuel Additives Company Ltd. (QAFAC)**

Established in 1996, QAFAC operates a plant in the Mesaieed Industrial Zone. Its major products include methanol and methyl tert-butyl ether (MTBE). CPC holds 20% of the company's equity.

● **Faraway Maritimes Shipping Co. (FMSC)**

Established in 1997, FMSC built the LNG carrier Golar Mazo to transport LNG purchased from Badak VI in Indonesia to Taiwan. CPC owns 40% of the company's equity.

● **Chun Pin Enterprise Co., Ltd. (CPEC)**

Established in 1998, the Chun Pin Enterprise Co. operates a logistics center at the Port of Taipei to engage in the storage and transshipment of petroleum and petrochemical products. CPC owns 49% of its equity.



● **KuoKuang Power Co. Ltd. (KKPC)**

In line with the government policy of opening power plants to private operation in order to increase the power supply capacity in northern Taiwan, CPC and private investors jointly established the KuoKuang Power Co. in 2000 and constructed a gas-fired power plant with an installed capacity of 480MW at Guishan Township in Taoyuan County. CPC owns 45% of the equity.

● **Kuokuang Petrochemical Technology Co. (KPTC)**

KPTC was established in 2006 by CPC and other domestic companies as a joint venture to facilitate the vertical integration of oil refining and petrochemical production. However, due to environmental protection policy considerations, in 2011 KPTC notified the Environmental Protection Administration of the withdrawal of the “Environmental Impact Assessment for the Changhua Southwest Corner (Dacheng) Reclaimed Land Industrial Zone Project.” In line with the government’s “quantity expansion overseas, quality enhancement at home” petrochemical policy, KPTC is currently assessing all potential alternative opportunities both at home and abroad. CPC’s share of the investment is 43%.

● **NiMiC Ship Holding Co., Ltd. (NSHC)**

Established in 2006, the NSHC has four ship-owning companies under its umbrella. Each ship-owning company has built one tanker to carry LNG purchased from RasGasII in Qatar to Taiwan. CPC holds 45% of the company’s equity.

● **NiMiC Ship Management Co., Ltd. (NSMC)**

Established in 2006, THE NSMC was organized to handle the operation and management of NSHC’s four LNG tankers. CPC holds 45% of the company’s equity.

● **Ras Laffan Liquefied Natural Gas Company Ltd. II (RasGasII)**

In 2008, CPC completed a capital injection into RasGas II and now owns a 5% interest in RasGasII’s Series B profit center. The company’s operations include natural gas production, liquefaction and marketing.

● **Global Energy Maritime Co. (GEMCO)**

Established in 2011, GEMCO is planning to build crude oil tankers and oil product carriers. CPC holds 48% of the company’s equity.

● **Taiwan Advanced Materials Corp. (TAMC)**

Established in 2012, TAMC is planning to set up a plant to produce SIS, DCPD, and C5 Tackifier. CPC holds 49% of the company’s equity.

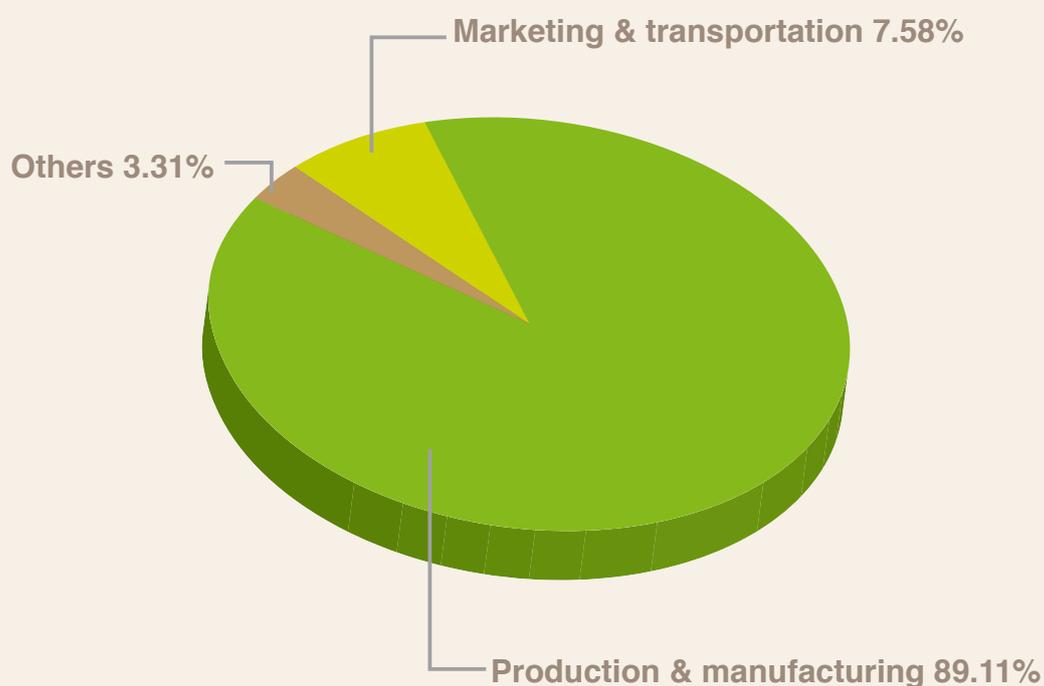


CPC Corporation, Taiwan

Financial Statements 2012

Included in the factors affecting CPC's financial performance in 2012 were: pricing adjustments of petroleum products returned to reflecting market prices; an increase in LNG prices was authorized by the Ministry of Economic Affairs; and recovery of previous losses on inventory, due to a resurgence in international oil prices. Consequently, CPC was able to generate profit in the last two quarters of 2012; for the whole year, its pre-tax loss was NT\$33,627 million – a variation of 13.1% year-on-year over 2011.

Capital expenditure incurred in 2012 was NT\$25,400 million, a decrease of 19.78% over 2011. A breakdown of the expenditure in 2012 is as follows:



The exchange rate between the NT dollar and the US dollar was 29.051:1 on December 31, 2012.

STATEMENTS OF INCOME

FOR THE YEARS ENDED DECEMBER 31, 2012 AND 2011

(In Thousands of New Taiwan Dollars)

	2012	2011
Operating Revenues		
Sales	\$1,132,366,573	\$1,015,182,109
Other operating revenues	<u>14,840,407</u>	<u>13,109,170</u>
Total operating revenues	<u>1,147,206,980</u>	<u>1,028,291,279</u>
Operating Costs and Expenses		
Cost of goods sold	1,139,738,999	1,026,740,605
Exploration expenses	2,898,190	3,615,283
Rental expenses for leased properties	-	-
Oil and gas transmission and storage expenses	13,197,340	12,315,892
Other operating costs	<u>6,627,040</u>	<u>6,794,676</u>
Total operating costs and expenses	<u>1,162,461,569</u>	<u>1,049,466,456</u>
Gross Profit	<u>(15,254,589)</u>	<u>(21,175,177)</u>
Operating Expenses	<u>18,318,467</u>	<u>18,937,528</u>
Non-Operating Income and Gains	<u>8,218,124</u>	<u>10,832,434</u>
Non-Operating Expenses and Losses	<u>8,272,003</u>	<u>9,413,655</u>
INCOME (LOSS) BEFORE INCOME TAX	<u>(33,626,935)</u>	<u>(38,693,926)</u>
Income Tax Expense (Benefit)	-	<u>(6,278,035)</u>
NET INCOME (LOSS)	<u>\$(33,626,935)</u>	<u>\$(32,415,891)</u>

BALANCE SHEETS

DECEMBER 31, 2012 AND 2011

(In Thousands of New Taiwan Dollars)

Assets	2012	2011
Current Assets		
Cash	<u>\$ 2,365,248</u>	<u>\$ 4,240,541</u>
Financial assets at fair value through profit or loss-current	1,612	19,882
Hedging derivative assets-current	1,486	624
Accounts receivable, net	70,470,484	67,957,785
Accounts receivable-related parties	1,800,286	1,262,374
Income tax refund receivable	4,159	3,815
Other receivables	5,068,341	5,746,562
Inventories	210,311,199	171,618,735
Prepaid expenses	4,533,586	3,181,728
Advances to suppliers	8,036,128	9,731,616
Deferred income tax assets-current	411,423	1,259,645
Pledged time deposits	-	-
Other current assets	<u>2,355,197</u>	<u>2,740,875</u>
Total Current Assets	<u>305,359,149</u>	<u>267,764,182</u>
Special Funds and Long-Term Investments	<u>17,611,346</u>	<u>17,880,767</u>
Properties (Less Accumulated Depreciation and Accumulated Impairment Loss)	<u>440,919,703</u>	<u>429,722,047</u>
Oil and Gas Interests	<u>39,282,023</u>	<u>13,003,673</u>
Other Assets	<u>51,201,210</u>	<u>49,364,132</u>
Total Assets	<u>\$ 854,373,431</u>	<u>\$ 777,734,801</u>

BALANCE SHEETS

DECEMBER 31, 2012 AND 2011

(In Thousands of New Taiwan Dollars)

Liabilities and Shareholders' Equity	2012	2011
Current Liabilities		
Short-term loans	\$45,167,240	\$112,639,042
Short-term bills payable	146,315,432	55,604,039
Financial liabilities at fair value through profit or loss-current	-	-
Hedging derivative liabilities-current	421	4,433
Accounts payable	55,732,061	51,664,668
Accounts payable-related parties	777,162	605,786
Accrued expenses	47,218,412	19,230,668
Payable to contractors	6,321,865	5,607,379
Receipts in advance	9,684,380	8,818,481
Current portion of bonds payable	9,250,000	1,550,000
Current portion of long-term loans	12,200,000	11,400,000
Current portion of obligations under capital leases - current	-	-
Other current liabilities	8,998,605	10,477,539
Total Current Liabilities	<u>341,665,578</u>	<u>277,602,035</u>
Long -Term Debt	<u>176,460,000</u>	<u>127,310,000</u>
Reserve for Land Value Increment Tax	<u>83,730,352</u>	<u>83,753,539</u>
Other Liabilities	<u>13,056,177</u>	<u>15,466,376</u>
Total Liabilities	<u>614,912,107</u>	<u>504,131,950</u>
Shareholders' Equity		
Capital stock	130,100,000	130,100,000
Accumulated deficit	(69,864,051)	(36,237,116)
Other equity	179,225,375	179,739,967
Total Shareholders' Equity	<u>239,461,324</u>	<u>273,602,851</u>
Total Liabilities and Shareholders' Equity	<u>\$854,373,431</u>	<u>\$777,734,801</u>

Notes to Financial Statements

FOR THE YEARS ENDED DECEMBER 31, 2012 AND 2011

(In Thousands of New Taiwan Dollars)



Cash Flows From Operating Activities

	2012	2011
Net (loss) income	<u>\$(33,626,935)</u>	<u>\$(32,415,891)</u>
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	<u>13,618,377</u>	<u>13,664,748</u>
Amortization	<u>2,126,517</u>	<u>1,943,810</u>
Provision for doubtful accounts	<u>83,695</u>	<u>22,862</u>
Realized deferred gains	<u>(40,818)</u>	<u>(148,816)</u>
Unrealized exchange loss	<u>(11,000)</u>	<u>4,485</u>
Provision for loss on inventories	<u>(6,880,728)</u>	<u>6,970,367</u>
Gain on disposal of properties and other assets	<u>(593,123)</u>	<u>(655,326)</u>
Loss (gain) on valuation of financial assets, net	<u>13,395</u>	<u>(14,454)</u>
Investment income recognized by the equity method	<u>452,338</u>	<u>(2,511,289)</u>
Gain on oil and gas interests - Huffco	<u>(2,398,389)</u>	<u>(1,388,690)</u>
Earnings remitted by Huffco	<u>2,645,430</u>	<u>576,500</u>
Cash dividends from equity-method investees	<u>547,509</u>	<u>2,437,981</u>
Other operating revenue	<u>-</u>	<u>(10,581)</u>
Deferred income tax	<u>(1,182,510)</u>	<u>(6,278,045)</u>
Net changes in operating assets and liabilities	<u>(29,524,058)</u>	<u>(41,240,201)</u>
Net cash provided by (used in) operating activities	<u>(54,770,300)</u>	<u>(59,042,540)</u>

Cash Flows From Investing Activities

Decrease in pledged time deposits	<u>-</u>	<u>49,241</u>
Increase in oil and gas interests	<u>(1,637,287)</u>	<u>(1,496,805)</u>
Proceeds from disposal of properties and other assets	<u>970,091</u>	<u>876,629</u>

Acquisition of long-term investments recognized by the equity method	<u>(1,023,000)</u>	<u>(109,400)</u>
Net decrease (increase) in other assets	<u>(1,717,303)</u>	<u>119,557</u>
Acquisition of properties	<u>(24,685,383)</u>	<u>(31,011,322)</u>
Net cash used in investing activities	<u>(28,092,882)</u>	<u>(31,572,100)</u>
Cash Flows From Financing Activities		
Net increase (decrease) in short-term loans	<u>(67,471,716)</u>	<u>73,333,743</u>
Increase (decrease) in short-term bills payable	<u>90,711,393</u>	<u>(63,732)</u>
Increase in other liabilities	<u>98,212</u>	<u>401,996</u>
Repayment of long-term debts	<u>(11,400,000)</u>	<u>(8,440,000)</u>
Proceeds from long-term debts	<u>34,700,000</u>	<u>19,000,000</u>
Repayment of bonds	<u>(1,550,000)</u>	<u>(7,500,000)</u>
Issuance of bonds payable	<u>35,900,000</u>	<u>16,800,000</u>
Net cash provided by (used in) financing activities	<u>80,987,889</u>	<u>93,532,007</u>
Net Increase (Decrease) in Cash	<u>(1,875,293)</u>	<u>2,917,367</u>
Cash, Beginning of Year	<u>4,240,541</u>	<u>1,323,174</u>
Cash, End of Year	<u>\$ 2,365,248</u>	<u>\$ 4,240,541</u>

Notes to Financial Statements

1. ORGANIZATION AND OPERATIONS

CPC Corporation, Taiwan (the “Corporation” or CPC) was established on June 1, 1946 and engages mainly in oil and gas exploration, refining, procurement, transport, storage and marketing.

As of December 31, 2012 and 2011, the Corporation had 14,977 and 15,219 employees, respectively.

2. SIGNIFICANT ACCOUNTING POLICIES

■ Basis of Presentation

CPC is operated and managed by the Government of the Republic of China (ROC). CPC’s accounts are maintained generally in accordance with the accounting laws and regulations governing state-owned enterprises. The Corporation’s significant accounting policies conform to the Guidelines Governing the Preparation of Financial Reports by Securities Issuers, Business Accounting Law, Guidelines Governing Business Accounting, and accounting principles generally accepted in the ROC.

The Corporation’s annual financial statements are required to be examined by the Executive Yuan and the Ministry of Audit of the Control Yuan. The examinations are primarily aimed at determining the extent to which the Corporation meets its budget as approved by the Legislative Yuan. The Corporation’s financial statements are finalized on the basis of the results of these examinations. The Ministry of Audit’s adjustments should be reflected in the financial statements audited by independent certified public accountants. The opening balance of the following year of the Corporation’s books of accounts is based on the balance after adjustments made by the Ministry of Audit. The examinations of the Corporation’s financial statements as of and for the year ended December 31, 2011 by these government agencies had already been completed.

For readers’ convenience, the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the ROC. If inconsistencies arise between the English version and the Chinese version or if differences arise in the interpretations between the two versions, the Chinese version of the financial statements shall prevail.

Significant accounting policies are summarized as follows:

■ Foreign Currencies

Nonderivative foreign-currency transactions are recorded in New Taiwan dollars at the rates of exchange in effect when the transactions occur. Exchange differences arising from the settlement of foreign-currency assets and liabilities are recognized in profit or loss.

At the balance sheet date, foreign-currency monetary assets and liabilities are revalued using prevailing exchange rates, and the exchange differences are recognized in profit or loss.

At the balance sheet date, foreign-currency nonmonetary assets and liabilities that are measured at fair value are revalued using prevailing exchange rates, with the exchange differences treated as follows:

- a. Recognized in shareholders’ equity if the changes in fair value are recognized in shareholders’ equity;
- b. Recognized in profit and loss if the changes in fair value are recognized in profit or loss.

Foreign-currency nonmonetary assets and liabilities that are carried at cost continue to be stated at exchange rates at trade dates.

If the functional currency of an equity-method investee is a foreign currency, translation adjustments will result from the translation of the investee’s financial statements into the reporting currency of the Corporation. Such adjustments are accumulated and reported as a separate component of shareholders’ equity.

■ Accounting Estimates

Under the above guidelines, law and principles, certain estimates and assumptions have been used for the allowance for doubtful accounts, allowance for loss on inventories, depreciation of properties, impairment of properties and idle assets, amortization and impairment of oil and gas interests, income tax, pension cost, loss on pending litigations, etc. Actual results may differ from these estimates.

■ Current and Noncurrent Assets and Liabilities

Current assets include cash, and those assets held primarily for trading purposes or to be realized, sold or consumed within one year from the balance sheet date. All other assets such as properties and intangible assets are classified as noncurrent. Current liabilities are obligations incurred for trading purposes or to be settled within one year from the balance sheet date. All other liabilities are classified as noncurrent.

■ Financial Assets and Liabilities at Fair Value through Profit or Loss

Financial instruments classified as financial assets or financial liabilities at fair value through profit or loss (FVTPL) include financial assets or financial liabilities held for trading and those designated as at FVTPL on initial recognition. The Corporation recognizes a financial asset or a financial liability on its balance sheet when the Corporation becomes a party to the contractual provisions of the financial instrument. A financial asset is derecognized when the Corporation has lost control of its contractual rights over the financial asset. A financial liability is derecognized when the obligation specified in the relevant contract is discharged, cancelled or expired.

Financial instruments at FVTPL are initially measured at fair value. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in profit or loss. At each balance sheet date subsequent to initial recognition, financial assets or financial liabilities at FVTPL are remeasured at fair value, with changes in fair value recognized directly in profit or loss in the year in which they arise. Cash dividends received subsequently (including those received in the year of investment) are recognized as income for the year. On derecognition of a financial asset or a financial liability, the difference between its carrying amount and the sum of the consideration received and receivable or consideration paid and payable is recognized in profit or loss. All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

A derivative that does not meet the criteria for hedge accounting is classified as a financial asset or a financial liability held for trading. If the fair value of the derivative is positive, the derivative is recognized as a financial asset; otherwise, the derivative is recognized as a financial liability.

Fair values of financial assets and financial liabilities at the balance sheet date are determined as follows: publicly traded stocks - at closing prices; open-end mutual funds - at net asset values; bonds - at prices quoted by the Taiwan GreTai Securities Market; and financial assets and financial liabilities without quoted prices in an active market - at values determined using valuation techniques.

■ Available-for-sale Financial Assets

Available-for-sale financial assets are initially measured at fair value plus transaction costs that are directly attributable to the acquisition. At each balance sheet date after initial recognition, available-for-sale financial assets are remeasured at fair value, with changes in fair value recognized in equity. When the financial assets are disposed of, the cumulative gain or loss previously recognized in equity is included in profit or loss for the year. All regular purchases or sales of financial assets are recognized and derecognized on a trade date basis.

The recognition, derecognition and the fair value bases of available-for-sale financial assets are the same as those of financial assets at FVTPL.

Cash dividends are recognized on the ex-dividend date, except for dividends distributed from the pre-acquisition profit, which are treated as a reduction of investment cost. Stock dividends are not recognized as investment income but are recorded as an increase in the number of shares. The total number of shares after the increase is used for the recalculation of cost per share. The difference between the initial cost of a debt instrument and its maturity amount is amortized using the effective interest method, with the amortized interest recognized in profit or loss.



An impairment loss is recognized when there is objective evidence that the financial asset is impaired. Any subsequent decrease in impairment loss on an equity instrument classified as available-for-sale is recognized directly in equity. If the fair value of a debt instrument classified as available-for-sale increases as a result of an event which occurred after the impairment loss was recognized, the decrease in impairment loss is reversed to profit.

■ Hedging Derivative Financial Instruments

Derivatives that qualify as effective hedging instruments are measured at fair value, with subsequent changes in fair value recognized either in profit or loss, or in shareholders' equity, depending on the nature of the hedging relationship.

■ Revenue Recognition, Trade Receivables and Allowance for Doubtful Accounts

Revenue from sales of goods is recognized when the Corporation has transferred to the customer the significant risks and rewards of ownership of the goods, primarily upon shipment, because the earnings process has been completed and the economic benefits associated with the transaction have been realized or are realizable.

Revenue is measured at the fair value of the consideration received or receivable and represents amounts agreed between the Corporation and the customers for goods sold in the normal course of business, net of sales discounts and volume rebates. For trade receivables due within one year from the balance sheet date, as the nominal value of the consideration to be received approximates its fair value and transactions are frequent, fair value of the consideration is not determined by discounting all future receipts using an imputed rate of interest.

An allowance for doubtful accounts is provided on the basis of a review of the collectibility of accounts receivable. The Corporation makes this review by an aging analysis of the outstanding receivables and assessing the value of the collaterals provided by customers. Accounts receivable that have been outstanding for more than six month are reclassified to overdue receivables.

As discussed in Note 4 to the financial statements, on January 1, 2011, the Corporation adopted the third-time revised Statement of Financial Accounting Standards (SFAS) No. 34, "Financial Instruments: Recognition and Measurement." One of the main revisions is that the impairment of receivables originated by the Corporation should be covered by SFAS No. 34. Accounts receivable are assessed for impairment at the end of each reporting period and considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the accounts receivable, the estimated future cash flows of the asset have been affected. Objective evidence of impairment could include:

- Significant financial difficulty of the debtor;
- Accounts receivable becoming overdue; or
- It becoming probable that the debtor will enter into bankruptcy or undergo financial reorganization.

Accounts receivable that are assessed not to be impaired individually are further assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of accounts receivable could include the Corporation's past experience of collecting payments and an increase in the number of delayed payments, as well as observable changes in national or local economic conditions that correlate with defaults on receivables.

The amount of the impairment loss recognized is the difference between the asset carrying amount and the present value of estimated future cash flows, after taking into account the related collaterals and guarantees, discounted at the receivable's original effective interest rate.

The carrying amount of the accounts receivable is reduced through the use of an allowance account. When accounts receivable are considered uncollectible, they are written off against the allowance account. Recoveries of amounts previously written off are credited to the allowance account. Changes in the carrying amount of the allowance account are recognized as bad debt in profit or loss.

■ Inventories

Inventories include raw materials, supplies and spare parts, finished goods, work in process, semifinished goods, merchandise, construction in progress, materials in transit - crude oil, and merchandise in transit - fuel oil. Inventories are stated at the lower of cost or net realizable value. Inventory write-downs are made by item, except where it may be appropriate to group similar or related items. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and costs necessary to make the sale. Inventories are recorded at weighted-average cost on the balance sheet date.

■ Construction in Progress

When construction contracts are accounted for by the percentage-of-completion method, the stage of completion of each contract is measured by the percentage of actual cumulative costs to the total estimated costs. Construction revenues and costs for the current year are the actual cumulative construction revenues and costs in excess of the cumulative construction revenues and costs recognized in prior years. Any estimated loss on a construction contract is recognized currently.

■ Financial Assets Carried at Cost

Investments in equity instruments with no quoted prices in an active market and with fair values that cannot be reliably measured, such as non-publicly traded stocks and stocks traded in the Emerging Stock Market, are measured at their original cost. The accounting treatment for dividends on financial assets carried at cost is the same as that for dividends on available-for-sale financial assets. An impairment loss is recognized when there is objective evidence that the asset is impaired. A reversal of this impairment loss is disallowed.

■ Impairment of Assets

If the recoverable amount of an asset (mainly properties, deferred assets, intangible assets, leased assets, idle assets, and investments accounted for by the equity method) is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is charged to earnings unless the asset is carried at a revalued amount, in which case the impairment loss is first treated as a deduction from the unrealized revaluation increment, and any remaining loss is charged to earnings.

If an impairment loss subsequently reverses, the carrying amount of the asset is increased accordingly, but the increased carrying amount may not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years. A reversal of an impairment loss is recognized in earnings, unless the asset is carried at a revalued amount, in which case the reversal of the impairment loss is first recognized as gains to the extent that an impairment loss on the same revalued asset was previously charged to earnings. Any excess amount is treated as an increase in the unrealized revaluation increment.

For long term equity investments on which the Corporation has significant influence but over which it has no control, the carrying amount (including goodwill) of each investment is compared with its own recoverable amount for the purpose of impairment testing.

■ Investments Accounted for by the Equity Method

Investments in which the Corporation holds 20 percent or more of the investee's voting shares or exercises significant influence over the investees' operating and financial policy decisions are accounted for by the equity method.

The acquisition cost is allocated to the assets acquired and liabilities assumed on the basis of their fair values at the date of acquisition, and the acquisition cost in excess of the fair value of the identifiable net assets acquired is recognized as goodwill. Goodwill is not being amortized. The fair value of the net identifiable assets acquired in excess of the acquisition cost is used to reduce the fair value of each of the noncurrent assets acquired (except for financial assets other than investments accounted for by the equity method, noncurrent assets held for sale, deferred income tax assets, prepaid pension or other postretirement benefit) in proportion to the respective fair values of the noncurrent assets, with any excess recognized as an extraordinary gain.

Profits from downstream transactions with an equity-method investee are eliminated in proportion to the Corporation's percentage of ownership in the investee; however, if the Corporation has control over



the investee, all the profits are eliminated. Profits from upstream transactions with an equity-method investee, whether or not the Corporation has control over the investee, are eliminated in proportion to the Corporation's percentage of ownership in the investee.

When the Corporation subscribes for its investee's newly issued shares at a percentage different from its percentage of ownership in the investee, the Corporation records the change in its equity in the investee's net assets as an adjustment to investments, with a corresponding amount credited or charged to capital surplus. When the adjustment should be debited to capital surplus, but the capital surplus arising from long-term investments is insufficient, the shortage is debited to retained earnings.

When the Corporation's share in losses of an investee over which it has significant influence equals its investment in that investee plus any advances made to the investee, the Corporation discontinues applying the equity method. The Corporation continues to recognize its share in losses of the investee if (a) the Corporation commits to provide further financial support to the investee or (b) the losses of the investee are considered to be temporary and sufficient evidence shows imminent return to profitability.

■ Properties

Properties are stated at cost plus revaluation increment less accumulated depreciation and accumulated impairment losses. Major additions and improvements to properties are capitalized, while costs of repairs and maintenance are expensed currently.

Interest expenses for construction in progress are capitalized. Interest capitalized each month is calculated using the following formula:

Interest capitalized = Accumulated payments × Budgeted financing ratio of individual capital expenditure plans × Actual interest rate of loans

The total interest capitalized each month may not exceed the interest expense recognized in that month.

Depreciation is computed using the fixed-percentage-on-declining-balance method over the following estimated service lives prescribed by the Executive Yuan:

Machinery and equipment

Main part of the distillation equipment	15 years
Main part of the reforming feedstock prefraction equipment	15 years
Main part of the reforming equipment	15 years
Main part of the fluidized catalytic cracking equipment	10-15 years
Main part of the alkylation equipment	8-25 years
Main part of the visbreaking equipment	15 years
Main part of the vacuum distillation and bitumen equipment	7-15 years
Main part of the defat equipment	3-15 years
Main part of the chemical refining equipment	4-10 years
Main part of the hydro desulfurization equipment	5-15 years
Main part of the lube oil blending equipment	8-20 years
Main part of the light oil rectifying equipment	12 years
Main part of the cracking equipment	7-10 years
Main part of the boiler type heater and other heating equipment	10-25 years
Main part of the machine and equipment for oil transportation and storage	15-20 years
Main part of the oil storage tank	8-15 years
Main part of the submarine pipeline for natural gas	15 years
Main part of the main land-pipeline for natural gas	15 years
Main part of the LNG storage tank	20 years

Transportation equipment

Motor vehicles	5-15 years
Oil tankers	14 years

Buildings

Factory building	30-45 years
Office building	35-60 years

The related cost (including revaluation increment), accumulated depreciation, accumulated impairment losses and any unrealized revaluation increment of an item of properties are derecognized from the balance sheet upon its disposal. Any gain or loss on disposal of the asset is included in nonoperating gains or losses in the year of disposal.

■ **Leased Properties and Idle Assets**

Idle assets are transferred to other assets at net book value. Leased properties and idle assets are stated at cost plus revaluation increment less accumulated depreciation and accumulated impairment. Depreciation on leased properties and idle assets is computed using the fixed-percentage-on-declining-balance method over service lives prescribed by the Executive Yuan. When leased properties and idle assets are disposed of, the difference between their net book value and the selling price is credited or charged to nonoperating gains or losses.

■ **Mineral Resources**

Mineral resources previously recorded referred to the estimated value of the mineral reserves in areas for which the Government of the ROC had gratuitously granted the Corporation in 1990 the right to extract minerals. The estimated market value of these mineral reserves less costs to extract the minerals and normal gross profit up to June 2009 was capitalized as mineral resources and credited to capital surplus arising from donations. The capitalized costs were amortized using the unit-of-production method.

Under the Mining Law, which took effect on December 31, 2003, the Corporation has to make a payment for ownership of a mine based on the type of the mine, mining area and the right to explore or extract mineral deposits. When mining begins, the Corporation also has to pay for mining rights at 2% to 50% of the value of the minerals extracted. Therefore, the Corporation wrote off the net book value of mineral resources and reduced capital surplus arising from donations by the same amount on December 31, 2003.

■ **Exploration Expenses**

All geological and geophysical exploration costs are charged to current income.

The costs of drilling exploratory wells (“exploration well expenses”) in sites that have not yet proven to contain reserves of commercial quantities (“unproven sites”) are initially charged to current income. Exploration well expenses are subsequently capitalized as part of “oil and gas interests” accounts when (i) sites are proven to contain mineral reserves of commercial quantities and (ii) the construction of the wellhead equipment or offshore production platforms and flow lines is complete. The exploration expenses incurred in the current year are reclassified from “exploration expenses” to assets. Costs already charged to income in prior years are recognized as assets and as “nonoperating income.”

The costs of drilling commercial wells, which are constructed after the sites are proven to contain mineral reserves of commercial quantities, are capitalized as assets. However, if the commercial wells turn out to be dry, such costs are charged to current income.

■ **Oil and Gas Interests**

For oil site acquisitions, the Corporation’s payments for this purchase or investments in foreign joint ventures involving interest in oil sites - including the Corporation’s share in the costs of drilling commercial wells, production, transport and storage equipment but excluding the Corporation’s share in the costs of drilling exploratory wells and other exploration expenses - are capitalized as oil and gas interests. The Corporation’s share in joint ventures’ net earnings (or net losses) is recognized as other operating revenues (or other operating costs). The Corporation recognizes earnings remitted by joint ventures as a reduction of oil and gas interests. These costs are amortized at the ratio of the actual quantity of minerals extracted from the wells for the year to the estimated mineral reserve. The amortized costs and operating expenses paid to joint ventures are regarded as the cost of the Corporation’s share of the oil and gas extracted. The accompanying financial statements included the related sales and cost of goods sold attributable to the Corporation’s share of the oil and gas sold by the joint ventures.

The Corporation recognizes earnings from OPIC-Houston (“Huffco”) and translation adjustments based on the financial statements of Huffco for the same reporting period as that of the Corporation.

■ **Deferred Charges**

Deferred charges are amortized over periods ranging from 5 to 27 years.

■ **Intangible Assets**

Intangible assets acquired are initially recorded at cost and are amortized on a straight-line basis over their estimated useful lives. Computer software and trademarks are amortized over five years.

■ **Pension Cost**

Under a defined benefit pension plan, pension cost is recognized on the basis of actuarial calculations without considering the planned privatization. The transition obligation is amortized over 17 years and 18 years, depending on the classification of employees. Under government regulations, the Corporation may recognize additional pension cost to meet the additional pension obligation arising from the planned privatization, but the additional pension cost should not affect the budgeted dividends to be distributed to the government.

Under a defined contribution pension plan, the Corporation makes monthly contributions to employees’ individual pension accounts and records them as current expenses.

■ **Income Tax**

The Corporation applies the intra-period and inter-period allocation methods to its income tax, whereby (1) a portion of income tax expense is allocated to the cumulative effect of changes in accounting principles; and (2) deferred income tax assets and liabilities are recognized for the tax effects of temporary differences, unused loss carryforwards and unused tax credits. Valuation allowances are provided to the extent, if any, that it is more likely than not that deferred income tax assets will not be realized. A deferred tax asset or liability is classified as current or noncurrent in accordance with the classification of related asset or liability for financial reporting. However, if a deferred income tax asset or liability does not relate to an asset or liability in the financial statements, then it is classified as current or noncurrent based on the expected length of time before it is realized or settled.

Tax credits for purchases of machinery, equipment and technology, research and development expenditures, and personnel training expenditures are recognized using the flow-through method.

Adjustments of prior years’ tax liabilities are added to or deducted from the current year’s tax provision.

■ **Reclassifications**

Certain accounts in the financial statements as of and for the year ended December 31, 2011 have been reclassified to conform to the presentation of the financial statements as of and for the year ended December 31, 2012.



Long-Term Investments

DECEMBER 31, 2012 AND 2011

(In Thousands of New Taiwan Dollars)

	2012	2011
Long -Term Investments		
China American Petrochemical Co., Ltd.	\$ 4,210,415	\$ 5,281,578
-CPC owned 38.64% equity		
Kuo Kuang Power Company Ltd.	1,938,118	1,949,508
-CPC owned 45% equity		
Taiwan Advanced Material Corporation	731,580	
-CPC owned 49% equity		
Faraway Maritime Shipping Corp.	2,047,259	1,893,616
-CPC owned 40% equity		
CPC Shell Lubricants Company Ltd.	664,536	1,091,401
-CPC owned 49% equity		
NiMiC Ship Holding Co., Ltd.	677,863	409,938
-CPC owned 45% equity		
Chun Pin Enterprise Co., Ltd.	389,957	354,688
-CPC owned 49% equity		
Daihai Petrol Corporation.	117,059	124,701
-CPC owned 35% equity		
Global Energy Maritime Co., Ltd.	370,258	96,004
-CPC owned 48% equity		
Kuokuang Petrochemical Technology Co., Ltd.	19,910	19,771
-CPC owned 43% equity		
NiMiC Ship Management Co., Ltd.	18,326	13,663
-CPC owned 45% equity		
Total Long-Term Investments	<u>\$ 11,185,281</u>	<u>\$ 11,234,868</u>

Properties

DECEMBER 31, 2012 AND 2011

(In Thousands of New Taiwan Dollars)

	2012	2011
Land	\$281,051,042	\$282,023,127
Less: Accumulated impairment loss on land	99,368	7,252
Land improvements	14,892,065	14,669,500
Less: Accumulated depreciation on land improvements	11,303,120	10,947,905
Buildings	36,996,138	36,501,183
Less: Accumulated depreciation on buildings	24,016,172	23,646,848
Machinery and equipment	415,289,696	396,527,028
Less: Accumulated depreciation and accumulated impairment loss on machinery and equipment	360,141,558	352,123,240
Transportation equipment	21,067,180	26,040,411
Less: Accumulated depreciation and accumulated impairment loss on transportation equipment	15,634,966	20,504,490
Miscellaneous equipment	4,847,068	4,863,615
Less: Accumulated depreciation and accumulated impairment loss on miscellaneous equipment	4,203,441	4,235,158
Land improvements	422	805
Less: Accumulated depreciation on leasehold improvements	383	713
Construction in progress	82,175,100	80,561,984
Net Properties	<u>\$440,919,703</u>	<u>\$429,722,047</u>

Pension Plans

The pension plan under the Labor Pension Act (LPA) is a defined contribution plan. Based on the LPA, the rate of the Corporation's monthly contributions to employees' individual pension accounts is at 6% of monthly salaries and wages.

The Corporation also has defined benefit plans under the Labor Standards Law (LSL). Benefits under the plans are based on employee's length of service and average basic pay in the last six months before retirement (for the length of service before the LSL was enacted) or three months before retirement (for the length of service after the LSL was enacted).

Personnel employed by the Corporation are referred to as either appointees or employees. The appointees' retirement fund (ARF), established under the guidelines of the Ministry of Economic Affairs, requires monthly contributions of amounts equal to 15% of monthly salaries and is administered by a pension plan committee. The ARF is deposited in the committee's name in a bank. The employees' retirement fund (ERF) entails monthly contributions by the Corporation to a fund at amounts equal to a fixed percentage of 15% of salaries and wages. The ERF is administered by a monitoring committee and is deposited in the committee's name in Bank of Taiwan.

On June 1, 1999, the Corporation stopped paying pensions out of the pension funds. Pensions paid by the Corporation were charged instead to accrued pension cost. Pension payments totaled \$18,998,592 thousand from June 1999 to December 2011 and \$1,648,684 thousand in 2012, resulting in a decrease of \$20,647,276 thousand in accrued pension cost.

Under government regulations, the Corporation may recognize additional pension cost to meet the additional pension obligation arising from the planned privatization, but the additional pension cost should not affect the budgeted dividends to be distributed to the government.

Certain pension information is summarized as follows:

DECEMBER 31

(In Thousands of New Taiwan Dollars)

	2012	2011
Appointees' retirement plan	\$5,365	\$682,984
Employees' retirement plan	8,591,825	10,381,798
Accrued pension cost	\$8,597,190	\$11,064,782



A Five-year Financial Summary

(In Thousands of New Taiwan Dollars)

	2012	2011	2010	2009	2008
Sales and other operating revenues	1,147,206,980	1,028,291,279	934,202,259	735,000,475	957,630,646
Income before income tax	(33,626,935)	(38,693,926)	24,102,004	28,922,608	(138,681,109)
per dollar of sales and other operating revenues (NT\$)	(0.03)	(0.04)	0.03	0.04	(0.14)
Cash dividends	–	–	–	–	–
per dollar of capita l(NT\$)	–	–	–	–	–
Owner's equity	239,461,324	273,602,851	267,989,508	253,209,847	213,867,151
per dollar of capital (NT\$)	1.84	2.10	2.06	1.95	1.64
General taxes and import duties	57,207,234	52,271,166	55,437,560	38,801,757	50,668,842
Commodity tax	67,823,886	67,071,667	66,106,757	65,295,400	61,703,178
Total taxes	125,031,120	119,342,833	121,544,317	104,097,157	112,372,020
Working capital (current assets less current liabilities)	(36,306,429)	(9,837,853)	26,123,750	16,379,420	(29,877,272)
Ratio of current assets to current liabilities	0.89	0.95	1.13	1.08	0.86
Long-term Liabilities	260,190,352	211,063,539	175,879,811	171,863,196	147,149,705
Properties, plant, and equipment-gross	856,318,711	841,187,653	766,639,519	743,756,832	729,952,388
Properties, plant, and equipment-net	440,919,703	429,722,047	361,408,567	346,392,870	339,115,223
Expenditures for plant and related assets	25,399,869	31,663,368	29,193,071	24,040,843	18,170,583
Exploration expenses (including all dry holes)	2,898,190	3,615,283	3,465,271	2,411,914	2,557,275
Total assets	854,373,431	777,734,801	658,272,961	646,672,019	590,868,764
Employed capital (owner's equity, long-term debt)	499,651,676	484,666,390	443,869,319	425,073,043	361,016,856
Employees on December 31	14,977	15,219	14,871	14,931	14,843
Sales and other operating revenues per employee	76,598	67,566	62,820	49,226	64,517

A Five-year Operation Summary

(In Thousands of New Taiwan Dollars)

	2012	2011	2010	2009	2008
Crude oil produced-total KL	7,408	88,264	575,648	564,059	857,151
daily average KL	20	242	1,577	1,545	2,348
Natural gas produced-total MCM	454,696	336,735	293,403	356,744	357,357
MCM per day	1,246	923	804	977	979
Wells drilled during the year	2	3	4	4	4
Crude oil processed-total KL	26,741,560	24,549,203	25,358,686	27,395,603	26,009,603
daily average KL	73,265	67,258	69,476	75,056	71,259
Natural gas sold-total MCM	16,009,345	15,276,357	14,056,431	11,139,358	11,449,599
MCM per day	43,861	41,853	38,511	30,519	31,369
Refined products sold-total KL	33,594,429	33,261,506	36,161,661	34,174,102	35,160,109
daily average KL	92,040	91,127	99,073	93,628	96,329
Petrochemicals sold-MT	4,309,053	4,509,329	4,636,198	4,160,566	3,893,507
daily average MT	11,806	12,354	12,702	11,399	10,667



Supreme Quality Superb Service Selfless Contribution



CPC Corporation, Taiwan

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