PTT GROUP VISION

THAI PREMIER MULTINATIONAL ENERGY COMPANY

PTT GROUP MISSION

To conduct integrated energy and petrochemical business as the nation's energy company whose mission is to equally respond to all stakeholders through the following aspects:



To the country

Ensuring long-term energy security by providing sufficient high-quality energy supply at fair prices to support economic growth.

To community and society

Maintaining a good standing corporate status in Thai society by exercising environmental stewardship of internationally accepted standards and helping to improve the quality of life for community and society.

To shareholders

Operating profitable business that leads to sustainable growth while generating optimum returns.

To customers

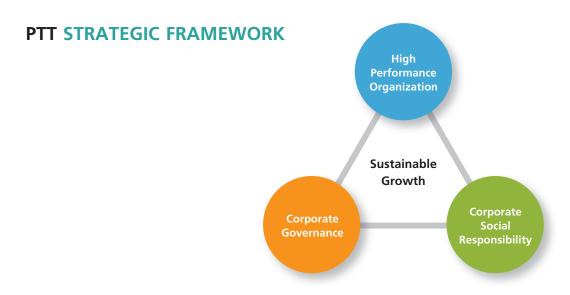
Ensuring customer satisfaction and loyalty by delivering world-class quality products and services at fair prices.

To business partners

Conducting fair business practice with all partners while promoting trust, relationship, and cooperation to expand business capability and increase efficiency in long-term business partnership.

To employees

Promoting capability building professionally and ensuring employees' well-being is on the level with other leading companies in order to embolden organization/ employee bond.





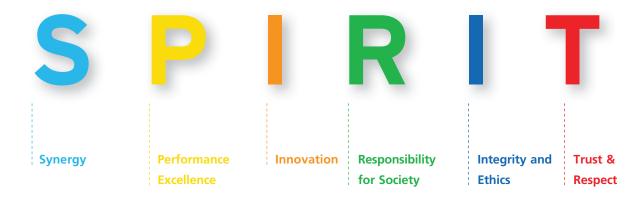
BIG A world class Company to be listed in Fortune 100 by 2020

LONG A Company with sustainable growth to be listed in DJSI in 2013

STRONG Operational excellence to achieve Top Quartile Performance by 2020

PTT GROUP VALUES





Financial Highlights

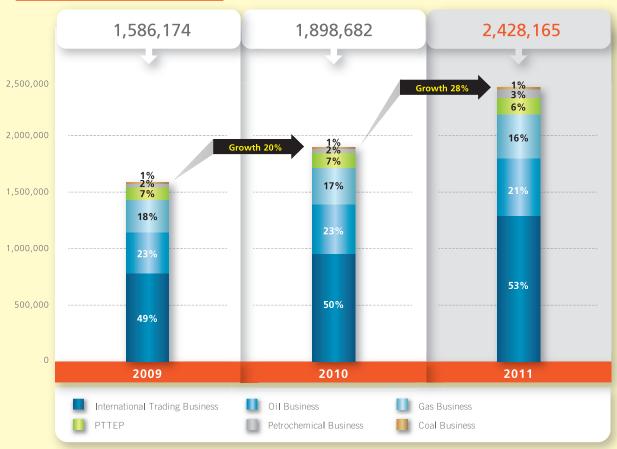
		2009	2010	/ 2011
Statement of Income	(Million Baht)			
Sales and Service Income		1,586,174	1,898,682	2,428,165
Earnings before Finance Costs, Income Taxes, Depreciation,		142,704	170,330	210,748
and Amortization including Other Non-operating Income and	l			
Expenses (EBITDA)				
Net Income (Loss)		59,548	83,992	105,296
Statement of Financial Position	(Million Baht)			
Total Assets		1,102,544	1,229,109	1,402,412
Total Liabilities		604,453	671,695	758,464
Total Equity Attributable to Equity Holders of the Company		429,180	480,704	555,920
Total Shareholders' Equity		498,091	557,414	643,948
Shares or Information about Common Shares				
Shares and Fully Paid-up Share Capital	(Million Shares)	2,833.78	2,849.04	2,856.30
Book Value per Share 1/	(Baht)	151.82	169.31	194.85
Earnings per Share ^{1/}	(Baht)	21.06	29.58	36.91
Dividend per Share	(Baht)	8.50	10.25	13.00 2/
Dividend Payout Ratio to Net Income	(%)	40.36	34.65	35.22
Share Price at the End of Financial Period	(Baht)	246.00	320.00	318.00
Financial Ratios				
Net Income to Total Revenues	(%)	3.68	4.35	4.26
Return on Equity	(%)	14.65	18.46	20.32
Return on Total Assets	(%)	5.99	7.20	8.00
Debt to Equity	(Times)	1.21	1.21	1.18
Net Debt to Equity	(Times)	0.50	0.41	0.44
Net Debt to EBITDA	(Times)	1.74	1.35	1.33
Interest Coverage	(Times)	10.07	12.30	13.24

Remarks : 1/ Based on the weighted common shares of 2,826.903 million (as of December 31st, 2009), 2,839.222 million (as of December 31st, 2010) and 2,853.013 million (as of December 31st, 2011).

^{2/} The Board of Directors, on February 17th, 2012, approved the rate of dividend paid to the shareholders, which will be tabled for the 2012 A GM's approval on April 10th, 2012.

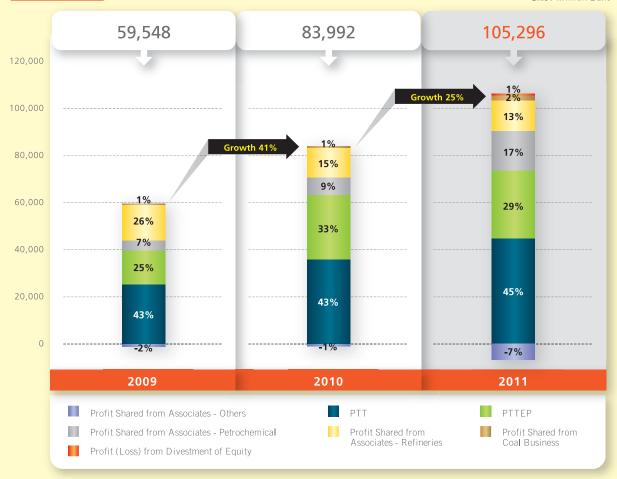
Sales and Service Income

Unit : Million Baht



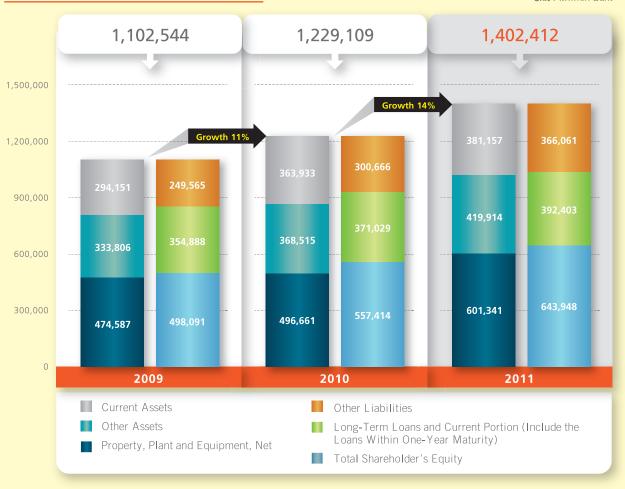
Net Income

Unit : Million Baht



Statement of Financial Position

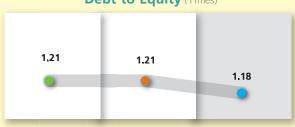
Unit : Million Baht



Financial Ratios









Return on Total Assets (%)







Interest Coverage (Times)





Name PTT Public Company Limited

Initial PTT

Registered Number 0107544000108

Type of BusinessEngage in petroleum business via investment through subsidiaries, joinly controlled

entities, and associated (Group of companies) who operate upstream and downstream

petroleum businesses and coal business.

Registered Capital 28,572,457,250 baht, including 2,857,245,725 common shares,

10 baht per share (as of December 31st, 2011)

Paid-up Capital 28,562,996,250 baht including 2,856,299,625 common shares, 10 baht per share

(as of December 31st, 2011)

Location 555 Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900, Thailand

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Corporate Communications

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E-mail : corporate@pttplc.com

Investor Relations Department Telephone : 66 (0) 2537-3518

Telefax : 66 (0) 2537-3948

E-mail : ir@pttplc.com

Telephone : 66 (0) 2537-3885-6

Telefax : 66 (0) 2537-3883

Office of the President and Corporate Secretary

E-mail : corporatesecretary@pttplc.com

References

Registrar

• Share Registrar Thailand Securities Depository Company Limited

4th Floor, SET Building, 62 Ratchadapisek Road, Klongtoey, Bangkok 10500

Telephone : 66 (0) 2229-2888

Telefax : 66 (0) 2229-2800

Office of the Auditor General

• Auditor Office of the Auditor General

Rama VI Road, Phayathai, Bangkok 10400

Telephone: 66 (0) 2271-8000 Telefax: 66 (0) 2618-5807 Siam Commercial Bank Plc.

Registrar 1, Markets Operations Division

2nd Building, 3rd Floor, 1060 Petchaburi Road, Ratchatawee, Bangkok 10400

Telephone: 66 (0) 2256-2323-8
Telefax: 66 (0) 2256-2406
Corporate Trust Sales, Corporate Trust

Corporate Trust Sales, Corporate Trust

9 Ratchadapisek Road, Chatuchak, Bangkok 10900 Telephone: 66 (0) 2544-3937, 66 (0) 2544-2923

Telefax : 66 (0) 2937-7662



Dear Shareholders.

In the auspicious year of 2011, in which His Majesty the King turned 84; PTT Group and alliance humbly presented to Her Royal Highness Princess Maha Chakri Sirindhorn a collective knowledge entitled "Sufficiency Subdistricts (Tambon Withi Phaw Pheang)," an ongoing body of works collected from PTT's own implementation of the "84 Tambons On A Sufficient Path Project." The project report was presented in her gracious presence at the inauguration of the exhibition entitled "United Thais Pay Tribute to His Majesty the King: Wonders of Sufficiency" at PTT Head Office on August 31st this year. This collection of knowledge resulted from the adoption of the Sufficiency Economy theory, as the way of life to form a stronger, self-reliant community and society. This royal initiative has also been adopted by PTT Group in our striving for energy security - a key fundamental for the nation's economy and society - in tandem with our stewardship of society, community, and the environment. The demonstration of our cause is evidenced in the project entitled the vetiver Development and Campaign Accorddig to the Royal Initiatives operated by PTT in its sixth year, which this year won "The King of Thailand Vetiver Award" for the second time. Another attestation is the Green Globe Award, an extended program from the "Reforestation Project in Honor of His Majesty the King on the occasion of the 50th Anniversary of the Accession to the Throne;" Dating back to 1999, which won this year's "National Outstanding Project Award (conservation of natural resources and the environment)" from the National Identity Committee, Office of the Permanent Secretary, Prime Minister's Office.

Our performance this year is nothing short of incredible; despite numbers of detrimental factors, being it the domestic economic slowdown in line with the global economy, the natural disaster in Japan in March, and Thailand's own Great Floods late in the year. PTT's outstanding performance was

due to the business synergy of PTT Group under the directions, goals, and strategies defined for success; which enabled PTT to register THB 47,246 million in operating profit and, including all PTT Group companies (at PTT's prorated equity shares), THB 58,050 million in additional profit. PTT Group therefore netted THB 105,296 million in total profit, THB 2,428,165 million in sales revenue, and THB 210,748 million in EBITD A. PTT's performance this year yielded THB 63,000 million in remittance to the state, of which THB 39,000 million in corporate income tax and THB 24,000 million in dividends - to be spent on national development and improvement of living standard for the public.

To elaborate on our improved performance, this could be contributed by the higher product prices driven by world markets and the higher sales volumes almost across the boardbeing it gas separation plant (GSP) products, the petrochemical group, the refining group, or international trading businesses. For the Gas Business Unit, notable successes included greater supply of natural gas from Chevron (extension) fields, the inaugural import of LNG through Southeast Asia's first receiving terminal managed by PTT LNG Co., Ltd., to accommodate the rising national demand, the commercial start-up of GSP Unit 6, and successful debottlenecking at GSP Unit 5.

Remarkable achievements of the Petrochemical and Refining Group this year included the establishment of PTT Global Chemical Plc., (PTTGC), resulting from the merging of PTT Chemical Plc., and PTT Aromatics and Refining Plc., to serve as the flagship chemical business for PTT Group; and also the start-ups of several polymer plants under PTTGC, HMC Polymers Co., Ltd., the Bis-phenol A Project of PTT Phenol Co., Ltd., and the jetty and petrochemical tank farm managed by PTT Tank Terminal Co., Ltd. In addition, to strengthen

PTT Group's competitiveness, PTT and other three subsidiaries set up PTT Energy Solutions Co., Ltd., to provide Group companies with engineering technical services in the company's effort to become a Technical Center of Excellence.

For the 19th consecutive year, we still maintained our market leadership for retail refined products with a 35.8% market share (a 1.3% rise from last year) and for lubricant products for the third consecutive year. We sold 8% more fuels and 1.3% more lubricant products than last year. Thanks to our growing number of service stations with integrated retail businesses, PTT service stations also won "Quality and Safe Service Stations Awards," presented by the Department of Energy Business, together with a "Thailand's Top Brand – Platinum Award," presented by Reader's Digest magazine. Also, the Café Amazon was awarded a "Thailand Franchise Quality Award 2011," presented by the Department of Business Development: And in an attempt to internationalize its service standard, PTT founded the Café Amazon Coaching Academy to serve as a training facility to our operators.

This year the International Trading Business Unit successfully sharpened its competitive edge by growing physical trading volumes for crude oil, refined products, and petrochemicals, thus paving the way for business capacity building. For instance, we signed a crude oil purchase agreement for Seria Light crude oil with Brunei Shell Petroleum Co. Sdn. Bhd., and a long-term Bis-phenol A sales agreement with Singapore Chemhub PTE LTD., together with initiation of out-out trading of Indonesian coal to China to grow our trade value in alternative-energy markets under PTT Group's core strategy. For the expansion of our international investment, we focused on efficient management of existing investments along with continued increasing in their productivity. Also as important is the consideration for more investment opportunities in related downstream businesses to build on existing businesses and leverage resources most efficiently.

For instances, our investment in the promising coal business by acquiring shares in Straits Resources Limited and our jointventure in a hydropower plant in Lao People's Democratic Republic.

Apart from managing these individual business entities, PTT also values the efficiency of corporate management in pursuit of excellence, as a company whose operational flow is on the level with other leading multinational corporations. To this end, we have applied the Thailand Quality Award (TQA) standards and have been so impressively successful to win the second TQA through our own Natural Gas Transmission group. PTT was also one of seven state enterprises to have adopted the State Enterprise Performance Appraisal (SEPA), in total compliance in its first year under a pilot project of the State Enterprise Policy Office, Ministry of Finance, to ensure that management and goal are efficiently aligned with corporate strategic directions in response to public policies. As a result, this year PTT, again, won the "Best State Enterprise of the Year: Best of the Best" for three successive years, "Outstanding Innovation" for two consecutive years, and "Induction to the Hall of Fame" on the basis of our attaining the "Outstanding Leadership Award" for three consecutive years.

As a commitment to business-driven technical expertise through environmentally friendly technology, we are sparing no resource to explore other alternative-energy products that can be further developed to establish viable sustainable-energy businesses in the future. A notable example is bio-jet fuels, which lower aviation emissions under the Emission Trading Scheme (ETS) enacted in European countries: To a satisfying result, we conducted an experiment with Thai Airways International Plc's planes. Another is PTT Bi-Fuel ECU, designed specifically for gasoline engines that run on indigenous natural gas. To support the technology, in collaboration with Mitsubishi Chemical Corporation, we set up PTT MCC Biochem Co., Ltd., to develop a project

for precursor Bio Succinic acid (BSA) and the world's first plant to produce sugar-based Polybutylene Succinate (PBS) for the first time in the world. PTT also launched a one-year biodegradable cup for Café Amazon, and developed other innovations to improve service and manufacturing efficiency: For example, the "PTT Corrosion Inhibitor" which is designed to prevent corrosion in gas pipelines; also, we came up with an electro-magnetic machine (EM machine) to eliminate grease found in oil pipelines and oil transportation compartments used in exploration and production work.

Other than ensuring Thailand of energy security, PTT also possesses one of the most efficient systematic and crisis management skills for uninterrupted business in all situations, to reassure stakeholders of the least impact in any event of crisis. For instances, the offshore gas pipeline leak and the Great Floods; thanks to our highly responsive crisis management procedures, PTT has garnered, for the first time ever in Thailand, Business Continuity Management (BCM) certification (TISI 22301-2553) from the Management System Certification Institute (Thailand) – a solid proof of corporate management capability and competency that affirms PTT's ability to overcome any crisis.

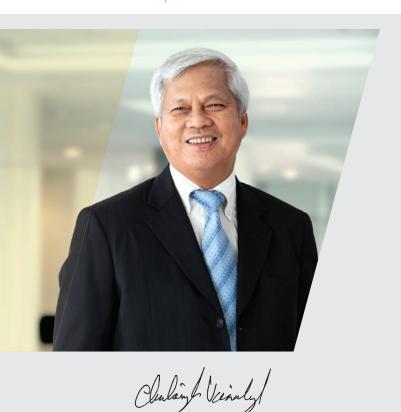
During the Great Floods, our key missions, as the nation's energy company, were to ensure public confidence of energy security by providing undisrupted energy supply so businesses could continue to deliver their services to consumers as usual. PTT also took our part in supplying fuels to missions from public organizations, the military, the private sectors, and the mass media in relieving people's plight. We also raised our capability by launching two key projects ("PTT Group Unites Thai Power to Relieve Flood Victims" and "PTT Group Unites Thai Power to Rehabilitate Flood Victims") in an attempt to provide, more effectively, aids and reliefs to flood victims with three operational phases were being integrated - prevention, remedial and relief, and restoration.

As our testament to corporate management efficiency, PTT's operational performance has gained extensive public acceptance as well as other recognitions; both domestic and international, namely management, product and service quality, corporate governance, and social responsibility. Probably, the most important of all was the "Thailand Corporate Excellence Award 2010," bestowed by Her Royal Highness Princess Maha Chakri Sirindhorn, in conjunction with "The Best of the Best of the Prime Minister's Export Awards 2011." Then there was this year's "Excellent" rating of the 2011 Corporate Governance Report of Thai Listed Companies, a "SET Award of Honor," for winning three consecutive years (2009-2011) of "Top Corporate Governance Report Awards." Other accolades include "Best Corporate Social Responsibility Awards" at the SET Awards 2011 and the "Thai Bond Market Association's Deal of the Year Award for 2010." On international front, we won an "Asian Excellence Recognition Award 2011" (Corporate Governance Asia magazine), the "Prestigious Platinum Award" for the third successive year (The Asset magazine), and a "Platts Global Energy Award 2011" at the Top 250 Energy Company Award ceremony. Finally, this year PTT was ranked 171st in 2011 Forbes Global 2000 magazine, and 128th in Fortune Global 500 magazine.

On behalf of the Board of Directors, we sincerely appreciate all stakeholders' continuing trust and support that enable PTT to consistently grow even more successful. As the nation's leading energy company, PTT is ready to respond to your resolution to a stronger Thai society with business philosophy in accordance to Sufficiency Economy Initiative. Our focus is on utilizing our years of knowledge as a problem-solving tool, thus, leading to a genuinely sustainable development path.

Report

of the Audit Committee



(Mr. Chulasingh Vasantasingh)

Chairman of the Audit Committee

Dear Shareholders

The Audit Committee consists of three independent directors who are knowledgeable and experienced in law, finance, and organization management, chaired by Mr. Chulasingh Vasantasingh, with Mr. Arkhom Termpittayapaisith and Mr. Krairit Euchukanonchai as members. This year the committee underwent a series of composition changes during the year as a result of Board of Directors Orders No. 4/2011, 10/2011, and 14/2011, which appointed Mr. Vasantasingh in place of Mr. Ampon Kittiampon as Chairman, effective from April 29; Mr. Euchukanonchai in place of Mr. Bhusana Premanode, effective from November 10; and Mr. Termpittaya paisith in place of Mr. Sommai Khowkachaporn, effective from November 25.

This year the committee carried out its Board-assigned duties while adhering to PTT's criteria and guidelines for the Audit Committee, which align with the regulations of the Stock Exchange of Thailand (SET). Given PTT's expanding businesses and more international investments in the midst of macro-financial volatility, the committee's policy is to focus on conformance to good corporate governance as well as good internal controls by

- Focusing on preventive audit to promote systematic business conduct, with knowledge creation mechanisms for PTT Group officers to understand and master for complete and accurate job performance and prevention of mistakes.
- Valuing risk management, particularly procedures for continuous risk management and the efficiency of risk management tools.

This year the committee held 14 meetings with the management, the external auditor, and the office of corporate audit, as summarized below.

1. Review of financial reports. The committee reviewed quarterly, annual, and consolidated financial statements with the management and the office of corporate audit. Each time quarterly and annual financial statements were examined, the external auditor was in attendance. The committee asked the external auditor about PTT's complete and accurate presentation, adjustments for key accounting entries materially affecting the statements, adequacy of accounting entry methods, scope of audit, accuracy and adequacy of information disclosure, and the external auditor's

independence. Satisfactory answers to these questions ensured the committee that PTT's financial statements had complied with legal and accounting standard requirements under generally accepted accounting principles, that the accounting procedures and financial statements were both accurate and reliable, and that adequate and timely information had been disclosed in the financial statements for the benefit of investors or users of such statements. This year the committee and the external auditor held one meeting in the absence of the management to examine the external auditor's scope, approaches, and annual audit plan.

2. Review of risk management. The committee scrutinized PTT's risk management policy, plans and approaches under corporate risk profile, risk management arising from impacts of natural disasters, and other event risks. It also reviewed internal and external risk factor management practices, including those arising from public-sector supervision and policies. To this end, the committee held quarterly meetings with the management to scrutinize the efficiency and suitability of risk management processes and provide recommendations for improvement.

3. Review of internal audit effectiveness.

Together with the external auditor and the head of the office of corporate audit, the committee reviewed the internal control system for each quarter with a focus on execution, resource application, stewardship of properties, and prevention or minimization of errors, losses, waste, and frauds. It also reviewed the reliability of financial reports together with laws, regulations, and cabinet resolutions. The external auditor agreed that no significant findings or shortcomings had been encountered. This year, PTT also assessed its internal controls against the regulations of the auditor commission on internal control standards of 2001, with greater cooperation from executives in responding to such questionnaires than last year. For even greater confidence, review techniques for internal controls have been added along with control self-assessment. The Management and the office of corporate audit concluded that PTT's internal control system was both adequate and effective for its business.

4. Review of good corporate governance. The committee reviewed PTT's performance against the designed processes and found that PTT's business had been conducted with fairness, and PTT had complied with laws on securities

and securities exchange, SET requirements, and other laws relevant to its business (particularly those concerning connected transactions among PTT Group) to ensure that PTT had conducted regular business under normal and sensible conditions. In addition, the committee carried out its own performance assessment, both as a whole and individually, against state-enterprise audit committee best practices and SET. The findings were that its performance was of a 'very good' quality.

5. Oversight of internal audit. The committee reviewed the strategic plans of the office of corporate audit, its annual and three-year audit plans, as well as their implementation. The audit findings were reviewed and recommendations given to follow up the corrective actions of those items considered significant for good corporate governance and adequate internal controls. The committee approved PTT's amended regulations on the committee's criteria and guidelines together with PTT's requirements for internal audits and a related manual in line with international standards. Finally, it reviewed the annual budget for the office of corporate audit, including its development, recruitment, and rotation plans, training, assessment of resource adequacy and suitability, key performance measurement indicators (KPIs), as well as appointments and transfers, and the annual merit consideration for its head. In addition, the committee stressed the roles of the office, which should rely on three principles: systematic and preventive work approach, modern business acumen and continuous development of its personnel to accommodate PTT's business directions and international standards, and promotion of the office's corporate social responsibility (CSR) role.

6. Appointment of the external auditor for 2012. The committee proposed the appointment of the office of the auditor-general as PTT's external auditor for 2012 to the Board, which will in turn submit it for shareholders' approval at their 2012 AGM.

In summary, the audit committee values internal control and continuous risk management so that PTT may command good corporate governance as well as management excellence, adequate internal control compatible with its business, effective risk management, together with accurate and reliable accounting practices and financial statements, and compliance with relevant laws and regulations.

Report

of the Corporate Governance Committee



S. Mthempot

(Mr. Surapon Nitikraipot)

Chairman of the corporate governance committee
February 10, 2012

Dear Shareholders

The PTT Board of Directors highly values the promotion and emphasis of PTT's execution by the corporate governance principles, the code of conduct, and the CSR framework of PTT Group for this improves PTT's corporate governance practices to bolster confidence of all stakeholders.

The Board has assigned the Corporate Governance Committee, consisting of three independent directors, to propose corporate governance guidelines to the Board, oversee the work of the Board and the management and ensure compliance with corporate governance principles and alignment with the Stock Exchange of Thailand's (SET) corporate governance principles, and the international elements of The Organisation for Economic Cooperation and Development. The committee's duties also encompass social, community, and environmental responsibility.

This year the committee held two meetings to follow up work under the corporate governance plans, and social, community, environmental, and sustainable development plans, as summarized below:

Disclosure of information and transparency

- Developed Form 56-1 and the annual report, together with disclosure of PTT's performance in quarterly reports and material information for shareholders, investors, and the public, marked by essential completeness, adequacy, credibility, and timeliness, continually through various channels, including SET's channels and PTT's website (www.pttplc.com). Investor Relations Department and Corporate Communications Department are the core units for information distribution.
- Developed PTT Group's CSR Report for 2011 in conformance to the international approach defined by Global Reporting Initiative (GRI) Generation 3 (G3) and set a goal of A+ assessment, due for completion by March 2012.
- Prepared the quarterly "Happiness" journal for debenture holders to communicate messages and foster positive relations between PTT and its debenture holders.
- Added complaint channels through PTT employees through the intranet. This year, no complaints were filed.

Rights of the shareholders

- \bullet Organized the 2011 Annual General Meeting of shareholders (AGM) and provided to the shareholders the date and time, venue, and agenda, as well as all other relevant data that are adequate and timely
- Informed the shareholders about the AGM rules and gave such information at PTT's website ahead of the time the meeting

notices went out. This would ensure that the shareholders have enough time to examine supporting documents well ahead of the AGM. PTT also made it easy for shareholders to exercise their full rights of attendance and voting. Thanks to these actions, PTT received full 100 marks against the AGM checklist, scored by the Thai Investors Association.

Equitable treatment of shareholders

- Allowed the shareholders to propose meeting agenda and nominate directors ahead of the 2011 AGM from October 28 to December 30, 2010, as specified by PTT
- Required that the directors and executives disclose information about their vested interests and those of their related persons for the year to enable the Board to examine PTT's transactions with potential conflicts of interest and decide matters in the best interests of PTT as a whole.
- Required that all directors, executives, and employees develop their reports of conflicts of interest every year. This year, no essential item needed remedial action.
- Required that all directors and executives must report their shareholding as required by law. The corporate secretary compiles these reports and reports to the Board every month.

Board responsibility

- Required three forms of Board assessment: overall assessment, self-assessment, and cross-assessment. The year saw "excellent" assessment all around.
- Ensured that directors undergo director training courses organized by the Thai Institute of Directors (IOD), specifically the Successful Formulation & Execution of Strategy, and other courses organized by the Thailand Management Association and the State Enterprise Policy Office.
- Underwent a study visit to a university in the Republic of Korea and acquired information for consideration of founding a PTT Group university in Rayong.
- Held a meeting among independent directors at least once a year.

Valuing stakeholders

- Encouraged PTT to provide flood relief to people of all regions, especially during the great floods of late 2011 under the "PTT Group Unites Thai Power to Fight Floods" project to provide urgent, all-out, and continued relief.
- Developed procedures for community relations and community development work.
- Developed a process manual for corporate social responsibility for supply and terminal operations and another for corporate social responsibility and corporate governance for PTT's corporate units.

Social responsibility and sustainable development

- Endorsed approaches for corporate social responsibility and sustainable development work, with the goal of being ranked among the Dow Jones Sustainability Indexes (DJSI).
- Launched the first DJSI application and bolstered confidence through third-party assurance of CSR/SD framework. Also, defined a structure to accommodate PTT Group's sustainable business management.
- The Board endorsed in principle the founding of a PTT Group university in Rayong.

Awards of pride

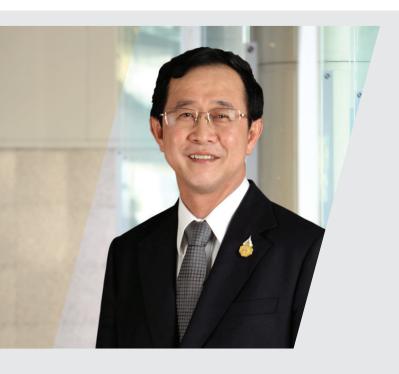
Thanks to the earnest commitment to, and intention for, operating with transparency and fairness in the best interests of all stakeholders, this year saw worldwide recognition of PTT's corporate governance and corporate social responsibility practices, including:

- Excellent ranking in the 2011 Corporate Governance Report of Thai Listed Companies, presented by IOD in cooperation with SET and Securities and Exchange Commission (SEC).
- SET Awards of Honor for winning three consecutive years (2009-2011) of Top Corporate Governance Report Awards and Best Corporate Social Responsibility Awards at the SET Awards 2011.
- Corporate Governance Asia Recognition Awards, presented for the sixth consecutive year by Corporate Governance Asia magazine.
- Best Corporate Governance in Thailand, presented by FinanceAsia magazine.
- The Green Globe Award as the National Outstanding Project for 2011 (natural resource and environmental conservation), conferred by the National Identity Office, Office of the Permanent Secretary, Prime Minister's Office.
- The King of Thailand Vetiver Award 2011 for outstanding promotion and technology transfer of the vetiver system (private operation). The award was bestowed by HRH Princess Maha Chakri Sirindhorn at the Fifth International Seminar on Vetiver, held in Lucknow, India.

The Corporate Governance Committee will remain committed to efficiency improvement of its corporate governance and social responsibility work for the benefit of PTT, shareholders, community, society, the environment, and all stakeholders, which will benefit Thailand as a whole.

Report

of the Remuneration Committee



Alebom Temp Hay agaised

(Mr. Arkhom Termpittayapaisith)

Chairman of the Remuneration Committee 10 February 2012

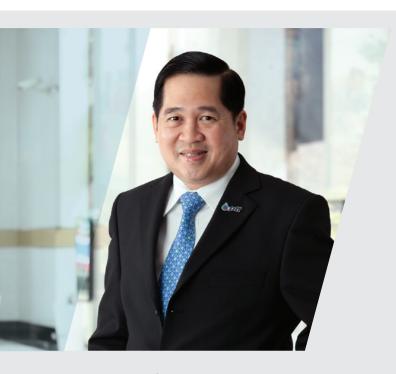
Dear Shareholders

Under PTT Plc's Articles of Association, the Remuneration Committee - chosen from and appointed by the Board of Directors - numbers at least three, one of whom must be an independent director. The Committee defines the compensation for the Board and the President & CEO through fair and sensible criteria of compensation procedures.

The Committee carried out its duties prudently, carefully, and sensibly. One meeting was held during the year to examine the compensation for the Board and the President & CEO by comparing their performance and accomplishments against the respective goals and applying efficient assessment. For the Board, the assessment methods consisted of overall assessment, self-assessment, and cross-assessment of directors. For the President & CEO, the Committee defined key performance indicators at the beginning of the year to be assessed at the year-end, taking into consideration his corporate leadership leading to success. As for their compensation scrutiny, the Committee considered directors' responsibilities, business size, economic situations, execution against performance, and a comparison with the rates of compensation at peer leading companies, both in and outside the Stock Exchange of Thailand. Directors' compensation rates have remained constant since 2005.

For transparency, the Committee has disclosed directors' compensation, committee members, and management team members in this annual report.

Report of the Nominating Committee



W. W.

(Mr. Watcharakiti Watcharothai)

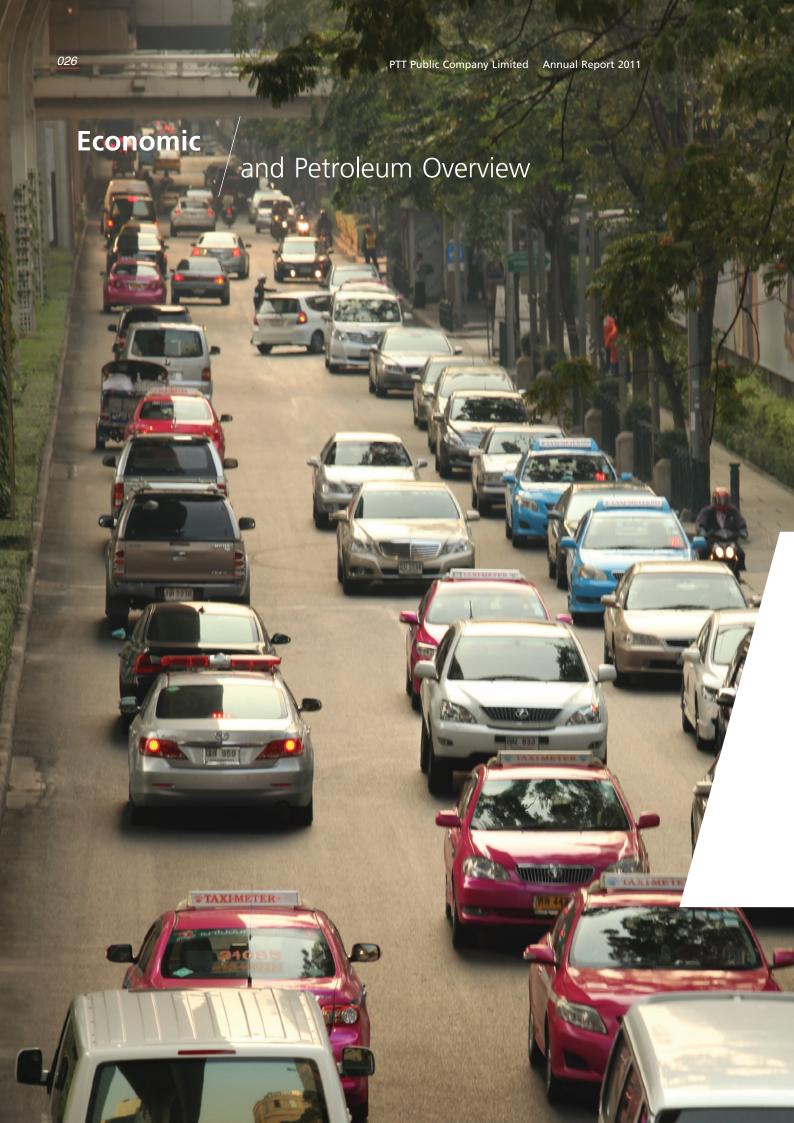
Chairman of the Nominating Committee 10 February 2012

Dear Shareholders

Under PTT PIc's Articles of Association, the Nominating Committee - chosen from and appointed by the Board of Directors - numbers at least three, one of whom must be an independent director. It recruits and nominates directors or the President & CEO by defining recruitment procedures and criteria for transparency, fairness, and goal accomplishment under the corporate direction.

This year the Committee performed prudently, carefully, and sensibly. Six meetings were held during the year to scrutinize the list of those from diverse professions, qualified by law and applicable criteria, dignified, and with clean records to serve as knowledgeable and qualified directors to fill vacant positions. It also provided minor shareholders with an opportunity to nominate directors.

To fill a given position vacated by a director who has completed his or her term, the Committee nominates candidates for the Board's consideration before forwarding the names to the next shareholders' meeting for consideration. To fill a given position vacated by a director resigning during the year, the Committee nominates candidates for the Board's appointment. Details have been disclosed for transparency and scrutiny in this Annual Report.



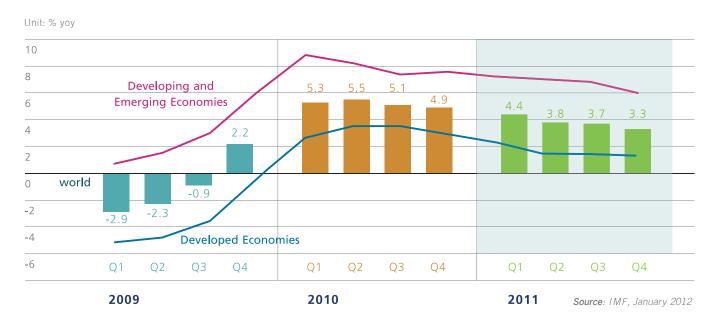


2011 Review

World Economic Review

The world economic growth this year ended up far below anticipated. Developing and emerging economies, led by China and India, were the main drivers of global economic growth as a result of their stringent monetary policies to curb rising prices of oil and commodities while the economic growth of developed economies was continuously weakening. The US economy remained sluggish following the continued high unemployment, a non-recoverable property market, and limited success of the US government's economic stimulation policies. Its budget deficit pushed the national public debt to 14.3 US\$ trillion. Standard & Poor's (S&P) consequently lowered the credit rating on the US long-term debt securities from AAA to AA+, a historic credit rating cut for the US. EU member countries, on the other hand, failed to resolve the huge public debts. The debt crisis has escalated from Greece, Ireland, and Portugal to Italy and Spain, two major regional economies. Consequently, S&P and Moody's Investors Service (Moody's) slashed credit ratings which triggered a series of blows to the world monetary and capital markets. In addition, the Great Earthquake and Tsunami of Japan devastated the global industrial supply which caused

2009-2011 World Economic Growth



major shortages of parts and materials for manufacturing worldwide, thus compounding the world economic contraction. The International Monetary Fund (IMF), in its January 2012 report, announced a world economic growth record for 2011 at 3.8%, a big drop from the 2011 level of 5.2%. The average economic growth for developing and emerging economies was recorded at 6.2%, while the record for developed countries was only 1.6%.

Petroleum and Petrochemical Review

The world economic growth continued to drive the oil demand higher from 2010 by 0.7 million barrels per day to an average of 89.0 million barrels a day in 2011, according to the International Energy Agency (IEA) 's January report in 2012. Developing and emerging economies, particularly China, India, and the Middle East were the main sources of higher demand. The actual oil demand this year was not much higher. However, the political unrest in Middle Eastern and Northern African countries (MENA) since 2009 had strained supply in the world oil market. IEA decided to call for its member countries to release 60 million barrels from the Strategic Petroleum Reserves to offset the 1.6 millionbarrel a day shortfall from Libya, following the escalating political unrest in that country. The depreciation of US dollar currency and oil forward speculations pushed the average Dubai crude price up from 78.0 US\$ per barrel in 2010 to 106.3 US\$ per barrel this year.

The daily traded refined crude products in Singapore continued to track rising world oil prices, reflecting the increasing demand for the market. There were two significant

events affecting the refined crude products supply this year, namely the fires at Taiwan's Formosa refinery and Shell Singapore refinery complex. The average price of 95-octane gasoline jumped from 88.3 US\$ per barrel in 2010 to 119.8 US\$ per barrel this year, following the continual demand rise in the Asia-Pacific region and the ethanol shortages in Brazil. An unusual cold weather early this year and the import levy reduction for diesel in China from 6% to 0% drove the average diesel price from 89.4 US\$ per barrel in 2010 to 124.6 US\$ per barrel in 2012. Fuel oil also rose from 72.3 US\$ per barrel to 101.2 US\$ per barrel, mainly due to a strong demand for electricity in Japan as a result of nuclear power plants shutdown after the earthquake and tsunami tragedy in March. With rising oil prices and higher demand for natural gas in the petrochemical industry, the average contract price of liquefied petroleum gas (LPG CP) rose from 712 US\$ per ton in 2010 to 846 US\$ per ton this year.

The higher prices of refined products buoyed the refining margins of hydro-cracking refineries in Singapore to an average of 8.27 US\$ per barrel this year compare with 4.58 US\$ per barrel in 2010.

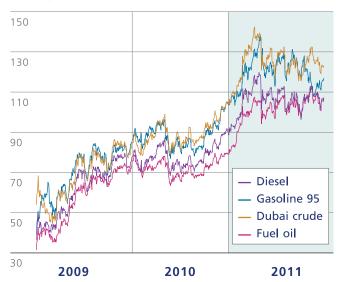
Global Oil Demand, 2009-2011



Source: IEA, January 2012

Prices of Dubai crude and refined petroleum products, 2009-2011





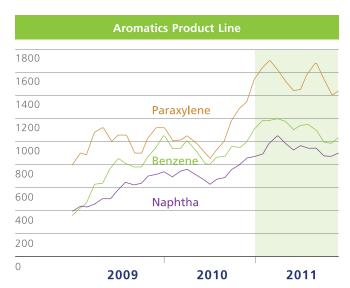
Unit: US\$/bbl

	2009	2010	2011
Dubai crude	61.8	78.0	106.3
Gasoline 95	70.3	88.3	119.8
Diesel	69.1	89.4	124.6
Fuel oil	57.1	72.3	101.0

Prices of Petrochemical Products in Asian Market, 2009-2011

Unit: US\$/ton Unit: US\$/ton

Olefins Product Line			
1800			
1600	Polypropy	lene /	
1400	\sim \mathcal{A}		
1200			
1000	High-dens	sity polyethylene	
800			
600	Naphtha		
400			
200			
0	2009	2010	2011



	2009	2010	2011
Polypropylene	1,088	1,340	1,584
HDPE	1,134	1,222	1,373
Naphtha	547	713	922

	2009	2010	2011
Paraxylene	984	1,042	1,540
Benzene	684	913	1,103
Naphtha	547	713	922

Source: ICIS



This year, the overall prices of petrochemical products rose in parallel to the prices of crude oil and naphtha, as well as, the higher global demand and production constraints. The price of olefins products soared as a result of rising demand for plastic and a severe shortage of supply regarding the petrochemical plants damage caused by the tragedy in March. For high-density polyethylene products, an average price jumped from 1,222 US\$ per ton in 2010 to 1,373 US\$ per ton. Also, the average price of polypropylene products, went up from 1,340 US\$ per ton in 2010 to 1,584 US\$ per ton this year. Likewise, for aromatics products, the average price of benzene rose from 913 US\$ per ton in 2010 to 1,103 US\$ per ton this year. The shift in demand for polyester in China and the economic sanctions on Iran (the world's major paraxylene producer) caused the average paraxylene price to jump from 1,042 US\$ per ton in 2010 to 1,540 US\$ per ton this year. Nevertheless, the prices of petrochemical products slighty decrease in the latter half of the year as a result of the global economic downturn, and also, the regional petrochemical plant was reopened after being maintenance.

Thailand Economic and Petroleum Overview

Economic Review

Thailand economic expansion lost ground this year due to three main factors: global economic slowdown, Japanese

domestic auto production in Japan is directly impacted by the natural disaster (Earthquake and Tsunami) in the year, and the devastating domestic flood crisis ("the Great Flood") later in the year. Destruction from the flood included seven industrial estates, particularly the automotives and electronics industries, which virtually came to a complete halt, thus affecting the entire industrial supply chain, including those in the agro-industry sector. The Bank of Thailand made a statement in its February 2012 report concluding a sizeable drop of GDP from 7.8% in 2010 to 0.1% in 2011. The average exchange rate stood at 30.5 baht per US\$ this year, appreciating from 31.7 baht per US\$ in 2010. This was due to the strength of the domestic economy as well as the Asian economy are better than those in the US and Europe. Speculations from rising interest markets had generated a steady influx of capital into the local bond markets and capital markets.

Petroleum Review

Despite the sluggish economic growth this year, an average of Thailand's primary commercial energy consumption for the first 11 months, excluding renewable energy, amounted to 1.845 million barrels per day, an increase of 3.5% from 2010, as a result of the government's subsidy policy on certain fuels. Consumption of natural gas, oil, and LPG rose by 3.3%, 3.3% and 10.3% respectively from last year. LPG consumption in the transportation sector rose by 35.3% and

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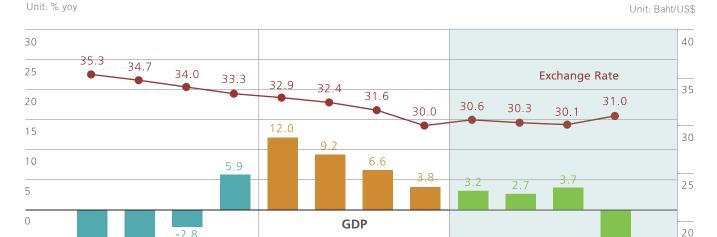
Thailand's Economic Expansion, 2009-2011

-5.2

2009

-7.0

-10



2010

Source: Office of National Economic and Social Development Board and Bank of Thailand

that in the household sector by 9.1%, both enjoying the fixed price of 18.13 baht per kilogram. On the contrary, with the government's approval to raise the LPG price quarterly for industrial use by 3 baht per kilogram in July and October to reduce LPG usage in industries, its consumption in this sector shrank by 7.8%. Meanwhile, Thailand continued to import LPG: this year's total imports totaled more than 1.4 million tons. Following the NGV price fix policy at 8.50 baht per kilogram, NGV consumption jumped 27.4% to 231 million cubic feet per day, as consumers deserted the considerably high gasoline prices.

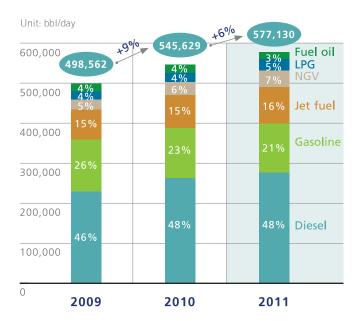
Energy consumption this year by economic sector is summarized as follows.

1. The transportation sector consumed 577,130 barrels a day, up by 6% from 2010. Aviation jet fuel consumption went up by 7.7% due to the economic expansion in Asia. Consumption of LPG and NGV rose by 35.3% and 27.4% respectively reflecting the retail price fixing in transportation. Consumption of gasoline dropped by 1.6% as a result of rising world market oil prices and a sudden drop in demand over two months in many provinces, including Bangkok, due to the flood crisis. Due to a government policy on the diesel price gap of 30 baht a liter since December 2010, this

insulation from external rises in world oil prices had resulted in a jump in diesel consumption of 5.3%. The Great Flood also encouraged more consumption of diesel for aiding flood

2011

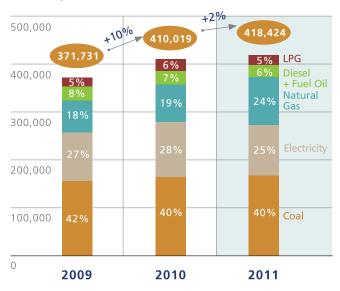
Thailand's Transport Energy Consumption, 2009-2011



Source: Department of Energy Business, Energy Policy and Planning Office, and PTT

Thailand's Industrial Energy Consumption, 2009-2011

Unit: bbl/day

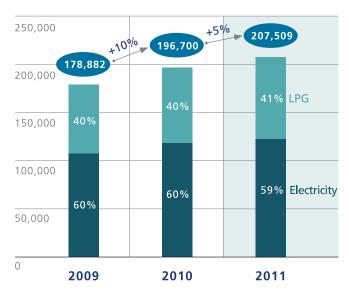


Remark : Excluding renewable

Source: Department of Energy Business, Energy Policy and Planning Office, and PTT

Thailand's Household and Commercial Energy Consumption, 2009-2011

Unit: bbl/day



Remark: Excluding renewable energy

Source: Department of Energy Business, Energy Policy and Planning Office, and PTT

recovery in terms of equipment and mitigate transportation. On the other hand, ethanol consumption this year dropped by 2%, following the change in government policy to reduce excise tax contribution to the Oil Fund from gasoline, resulting in a narrower price gap between gasoline (91 and 95) and gasohol (91 and 95) respectively. Also affected by the policy on a single commercial biodiesel grade with a 4% to 5% mixture of palm oil (B100), depending on the internal palm oil market, production and consumption of biodiesel jumped 9%.

- 2. The industrial sector consumed 433,959 barrels a day, an increase from 2010 of 4%, affected by the Great Earthquake and Tsunami of Japan early in the year and by the Great Flood in Thailand later in the year. The consumption pattern in this sector this year was similar to that of previous years, with the exception of a jump of 27.3% in the consumption of natural gas and a drop in LPG usage due to the government measure to gradually increase the price of LPG from July 19 this year by 3 baht per kilogram each quarter for four consecutive quarters, resulting in the substitution of LPG by natural gas.
- 3. Household and commercial energy consumption rose by 5% from 2010 to 207,509 barrels a day. The government continued to ease economic hardship with free buses and free passenger trains, free electricity use for household consuming power less than a given limit per month, and the capping of LPG prices for household cooking at 18.13 baht per kilogram. As a result, LPG consumption surged by 9.1% this year.

This year, the overall procurement of petroleum registered 1,791.98 KBD, a drop of 1.06% from last year. This included 56.30% import and the remainder from indigenous sources. Total imports consisted of 789.45 KBD of crude oil and condensate, 53.30 KBD of refined products, and 160.81 KBD of oil equivalent of natural gas. Indigenous petroleum consisted of 140.94 KBD of crude oil, 75.43 KBD of condensate, and 567.24 KBD of oil equivalent of natural gas. Total sales of petroleum rose by 3.44% from the previous year to 1,457.36 KBD. This included 728.01 KBD of refined products and 728.01 KBD of oil equivalent of natural gas. Total exports dropped by 9.14%, including a 11.92% drop in refined products to 181.49 KBD and a 10.61% jump in crude oil to 33.14 KBD.

Supply Sale and Distribution of Thailand 2011

Sales & Distribution Unit: KBD Supply Indigenous 126.35 16.69 Gasoline 789 45 -1.14% -27.81% (85%) -1.78% 930.39 (87%) Indigenous Indigenous -2.81% 87.70 Kerosene/Jet 23.18 140.94 +7.67% -26.53% (15%) Domestic consumption -8.20% volume 728.01 Indigenous Export +3.48% Diesel 330.72 81.09 +3.85% -14.53% Import Export Volume 4.80 181.49 (6%) 7 Refineries (3) Oil -11.92% Condensate -61.65% Combined Refining Capacity Indigenous 1,063.92 Export 80.23 Fuel Oil 42.32 60.02 (61%) 1,099 KBD (8%) -6.09% +7.70% -3.58% 75.43 (94%) -5.76% Indigenous Export LPG 140.92 0.52 +7.79% -34.58% Import (2) Refined Products 53.30 53.30 Export 33.14 Crude (100%)+10.61% -0.64% -0.64% 440.19 Electricity -8 62% 160.81 Natural Gas Industry/Transportation 139.43 +8.10% +27.29% 6 Gas Separation Plants (4) 567.24 Oil Combined Processing Capacity 149.72 (78%) Gas +1.48% 2,730 MMCFD +31.67%

Source: Energy Policy and Planning Office, Department of Energy Business, Department of Mineral Fuels, and PTT (as of January 2012)

Local Supply

Refined Products

Natural Gas

1,457.36

728.01

729.34

+3.44%

+3.48%

+3.41%

Export

Crude

Refined Products

214.62

181.49

33.14

-9.14%

-11.92%

+10.61%

Remarks: (1) Crude import, including long residue, waxy distillate, Heavy Naphtha

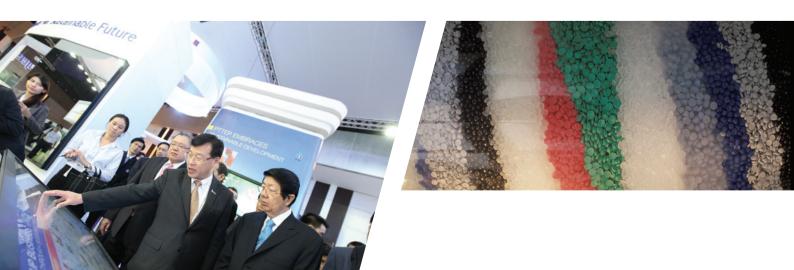
(2) Including LPG

Total Supply 1,791.98

-1.06%

- (3) Bangchak, Esso, IRPC, PTTGC, SPRC, and TOP, excluding condensate splitter of PTTGC and Fang refinery
- (5) PTT's GSP Units 1-6 (GSP included) and GSP of PTTEP Siam

Data set excludes bitumen supply and distribution.



World Economic and Petroleum Outlook for 2012

World Economic Outlook

The 2012 world economy is expected to grow at a slower pace from that of 2011. The IMF's forecast set sight on a 3.3% growth rate in 2012, a drop from 3.8% in 2011. The economic growth for developing and emerging economies, particularly that of China, is set to slow down. This was due to the global economic contraction in the governmental interventions to lower tension property market and also easing bad debts in the commercial banking sector. Developed countries will continue to be dominated by a sluggish and uncertain economy. The US will continue facing high unemployment and high public debts. Internal political conflicts there will remain an issue due to differences in budget cut policies. Extreme public debts and loan payment failures in Europe will continue and could escalate to other larger economies, which affect investors' confidence and volatility of the monetary markets. Moreover, variouus European countries have to pace with severe buddget cuts which lead to economic contraction. Nevertheless, US economic indicators have started to show positive signs in early 2012. Meanwhile, the Chinese government has recently implemented an economic stimulation program due to the visible decline in inflationary pressures. These latest developments could steer global economic growth higher than expected.

Petroleum and Petrochemical Outlook

The 2012 global demand for oil is expected to increase by 1.0 million barrels a day to 90.0 million barrels a day, according to IEA's report in January 2012. The additional demand will come from the developing and emerging economies, while the demand from developed countries is likely to fall. The 2012 Dubai crude price is therefore expected to fluctuate within a narrow range of US\$/100-110 per barrel. An economic depression in Europe is however caused recession which in turn affects world economic growth. Other crucail aspects for instance the increased guota of oil production from OPEC to 30 million barrels a day, and the restoration of Libya's oil production after the political unrest, as well as the extra supply from Non-OPEC countries, including the US, Canada, China, Brazil, and the former Soviet Union, are the factors that could floor the oil price. On the other hand, a sudden supply disruption from Iran's boycott reaction to the Eastern Bloc countries and allies, the US troop withdrawal from Iraq, and the political unrest in MENA could push the global oil price up significantly.

The refining margin of hydrocracking refineries in Singapore is likely to stay around 6-7 US\$ per barrel in 2012. It shows a slight drop from that of this year due to the decline in demand for refined products as a result of global economic contraction.

Likewise, for olefins prices in 2012, demand for petrochemical products will likely drop because of the market glut and the Eurozone debt crisis. The prices of high-density polyethylene and polypropylene are expected to be 1,335 US\$ per ton and 1,403 US\$ per ton. As for the aromatics products, benzene prices is expected to drop to 1,096 US\$ per ton, and paraxylene prices to drop to 1,504 US\$ per ton. In contrast, prices of value-added chemical specialty products will rise with the higher demand along with the growing of worldwide automotive industry, the Asian electronics and construction industries. Also the rapid rise in energy conservation for office space and residential areas, as well as the increase focus on bioplastics businesses, in which Thailand is highly competitive.

Thailand Economic and Petroleum Outlook for 2012

Economic Outlook

Thailand is expected to record an economic recovery in 2012 due to higher domestic consumption and investment to restore the economic system ravaged by the Great Flood of 2011. Business revival by the private sector-including repairs of machinery and installation of new equipment, public investment in basic infrastructure, economic stimulation package such as the minimum wage-raise policy, an adjustment of civil servants, basic salaries and 'first house-car's tax examption are the key drivers. However, the economic factors that should be focused are global economic contraction especially Chinese economic-proplably affecting the domestic export sector, and the money market volatility. The exchange rate for the baht during 2012 is expected to float between

30.5 and 31.5 to the US dollar. Other factors are negative impacts from natural disasters, a lack of clarity and details of the long-term flood and water management plan, and political uncertainty-all of which dictate foreign investors' confidence. Incidentally, the Bank of Thailand, in its February 2012 report, issued a forecast of Thailand's economic expansion in 2012 at between 5.5-6.5%.

Petroleum Outlook

The 2012 domestic demand for petroleum is set to rise at 4.5%. The main drivers are the higher oil and natural gas needed for post-flood revival, economic stimulation packages by the government, and domestic economic expansion supported by the Asian regional growth. On the other hand, factors affecting an uncertainty in energy demand include economic expansion in Asia, rising global oil price, natural disasters, and the success of the government's intervention program on LPG and NGV prices to lower energy consumption and ease the public burdens through oil subsidies.



PTT Public Company Limited Annual Report 2011 **Nature of Business** and Business Performance Oall Edital Lisquid Liedneway



Nature of Business

PTT is a fully-integrated national petroleum and petrochemical company with a philosophy of equitable business growth, environmental stewardship, and powering Thailand's society to strive for sustainable social development and economic growth.

PTT's operations cover an entire business value chain from upstream through to downstream with a focus on incremental value addition to promote national energy security and economic prosperity. The overall operations of PTT, including those conducted by both PTT directly and through PTT Group companies, are summarized below.







Upstream Business

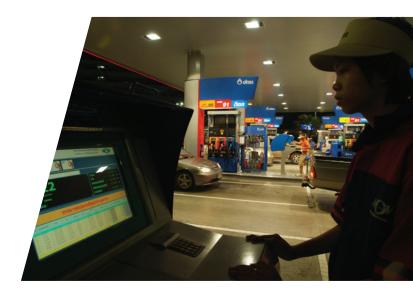
1.1 Gas Unit: The PTT Gas Business Unit conducts natural gas supply procurement, transmission, distribution, and processing, and invests in NGV service stations and sales, as well as gas-related value-added businesses through Group companies. Supply includes indigenous gas and imports from neighboring countries via natural gas transmission pipelines system, plus liquefied natural gas (LNG), sufficient to meet the growing demand. The distribution network includes major power producers through PTT's gas transmission pipelines, industrial users through PTT-invested gas distribution pipelines, and NGV distribution through NGV service stations. NGV is an alternative fuel for vehicles, in addition to gasoline and diesel. PTT also invests in gas separation plants to create additional business value by separating a variety of valuable chemical components from natural gas to provide petrochemical industry feedstock, which in turn represents essential elements of all other subsequent industries driving Thailand's economic growth. One of these products is liquefied petroleum Gas (LPG), which is used in households, industry and transportation.



Moreover, PTT LNG Co., Ltd., a wholly-owned subsidiary of PTT under the supervision of the Gas Business Unit, invests in LNG-receiving terminals, LNG storage and LNG re-gasification. PTT LNG also invests in gas-fired power business, and conducts generation and distribution of power, steam and water for industrial uses as part of the value creation business and optimal energy utilization, under the Combined Heat and Power Producing Company Limited, another wholly-owned subsidiary of PTT.

Natural gas supply procurement, transmission, and distribution businesses are operated under the Energy Industry Act, B.E. 2550 (2007), supervised by the Energy Regulatory Commission (ERC). The supply procurement and pricing structure to power producers and piped gas management fees are strictly controlled with a constant rate of return, while the pricing structure of procured gas to industrial users fluctuates with the world bunker oil price to ensure competitiveness with the domestic retail bunker oil price. The earning of the gas separation plants (GSPs) relies on the products sold to the petrochemical industry which the price is determined by the world petrochemical feedstock prices. However, for the LPG sold domestically, the pricing is partially subsidized by the government policy as a mitigation measure to the impact of rising world oil prices. The household LPG price is currently capped at 333 US\$ per ton, which is lower than the world LPG price. For industrial use, the LPG price rose to 12 baht per kilogram beginning July 19 this year every quarterly at 3 baht per kilogram for four consecutive quarters. This policy was approved by ERC on April 27 this year. For the transportation sector, the LPG price is set to rise to 0.75 baht per kilogram per month beginning January 16, 2012, until the total rise becomes 9 baht per kilogram. ERC approved this new LPG pricing structure on September 30 this year. Similar to the NGV, the price will rise to 0.50 baht per kilogram per month from January 16, 2012, to December 31, 2012. Additional support in the form of discounted price credit cards is provided for all public transport vehicles.

Supply of natural gas include 70% from indigenous production, and the remaining consists of piped gas from Myanmar and LNG imports.



Downstream Business

1.2 Oil Unit: The PTT Oil Business Unit is in charge of distribution of quality petroleum products, including gasoline, LPG, lubricating oil and other refined products via two major distribution channels: retail and export. The retail channels are PTT service stations, which have been upgraded and modernized with supplementary services and facilities to meet a variety of consumer demand, including convenience stores, Café Amazon coffee shops, restaurants and food shops, lube oil services, and car washes, as well as banking services and commercial markets. Establishments include civil servant groups, state enterprises' workers, industries, airlines, ocean liners, fishing vessels, gas-bottling plants, and gas supply stores. The export channel includes exports and sales of petroleum products to customers classified under Article 7, who are in the same industry. In addition to utmost customer satisfaction, PTT is committed to continuously introducing newly developed gasoline and lubricating oil products to the market to fulfill the needs of all customer groups.

As a national energy company, PTT is directly tasked with energy security for the nation and acts as a tool to drive and support government policies. For energy security, PTT provides services and storage of petroleum products in addition to its main responsibility of procurement and distribution. Under the policy of alternative energy for environmental stewardship, PTT consistently maintains its leadership in biofuel research and development. Moreover, the Oil Business Unit manages

investments through PTT Group companies, most of which are wholly owned by PTT, and are engaged in domestic and overseas oil businesses, such as retail sales and service stations, lubricating oil blending and bottling, and aviation fuel services.

The oil business has become more liberalized and highly competitive under several laws, including the Fuel Trade Act, B.E. 2543 (2000) and Fuel Oils Control Act, B.E. 2542 (1999). As of December this year, PTT was one of 42 fuel oil traders registered with the Department of Energy Business. Moreover, the oil business is heavy regulated by various authorities, including the Energy Policy and Planning Office, the Department of Energy Business, the Department of Internal Trade, and the Office of the Consumer Protection Board. Financial performance relies primarily on marketing

business, PTT International Trading has implemented an international risk management system covering all aspects of risk exposure equivalent to those systems adopted by leading international companies. Major risks affecting PTT's business are oil price volatility, reliability and integrity of trading partners, safety of delivery and shipment, and potential natural disasters. As world oil price volatility is the biggest risk, PTT's mitigation measures include not only closely monitoring movements of all contributing factors, but also exercising necessary financial transactions including futures, swaps, and derivatives trading. State-of-the-art information technology to verify details of trading partners and deals has been used for business transactional risk control. Similar practices have been adopted to control and alleviate possible impacts from shipment and transport of petroleum and



margins in retail stores and partly on other supplementary products and year-end inventory (stocks).

1.3 International Trading Unit: The PTT International Trading Business Unit operates fully-integrated international trading businesses, ranging from procurement, import and export of crude oil, condensate, petroleum products, petrochemical products (except plastics), to solvents and chemicals. The business unit is also in charge of providing shipment and logistics support, domestically and internationally, for PTT Group companies and generates revenues from overseas operations, with the main focus on providing energy security to the Kingdom and adding business value to PTT Group.

To cope with the changing nature of international

petrochemical products on the environment and the community. Procurement and logistics of all products are strictly managed and controlled by international standards and regulations.

To overcome possible cross-boundary legal barriers and to augment competitiveness in international trading of petroleum and petrochemicals, PTT International Trading has founded and appointed subsidiaries and agencies in many countries, including PTT International Trading Pte. Ltd. (PTTT) in Singapore, PTT International Trading DMCC in Dubai, United Arab Emirates, and PTT International Trading Guangzhou Representative in the People's Republic of China. Currently, PTT International Trading manages business transactions in more than 50 countries covering all regions of the world.



2. Businesses Invested through PTT Group Companies

• Upstream Business

2.1 Petroleum exploration and production business : PTT Exploration and Production Plc (PTTEP) operates domestic and international petroleum exploration and production (E&P) and invests in associated businesses for PTT. The bottom-line business objective is to seek and secure competitively priced crude oil and natural gas to ensure Thailand's energy security. PTTEP demonstrates this responsibility through its petroleum sales agreement with PTT on all produced petroleum locally and in neighboring countries, mostly natural gas, for consumption in Thailand. Moreover, PTTEP has expanded its petroleum E&P business to other global regions, including the Canadian Oil Sands KKD project in North America and the Floating LNG project in Australia. Petroleum production from these overseas projects is destined for distribution in Thailand, although it is sold internationally to produce a revenue inflow to support national economic growth.

PTTEP's financial performance is primarily dependent on the world oil price, petroleum exploration and field development success, efficient cost management of E&P projects, investment opportunities, and organizational competency development. E&P activities and petroleum pricing structures are subject to the Petroleum Act, B.E. 2514 (1971), under the supervision of the Petroleum Committee.

• Downstream Business

2.2 Petrochemical business: PTT invests in the petrochemical business to add value to its domestic natural gas production and products from its refineries by providing export-substituting feedstock to support the development of local petrochemical industries and other industries using petrochemical products as raw materials, such as the packaging industry, automotive industry, and construction industry. PTT operates its petrochemical business and integrated associated companies through its investment in 10 Group companies, including PTT Global Chemical Plc (PTTGC), HMC Polymers Co., Ltd. (HMC), PTT Phenol Co., Ltd. (PPCL), PTT Asahi Chemical Co., Ltd. (PTTAC), PTT Polymer Logistics Co., Ltd. (PTTPL), PTT Polymer Marketing Co., Ltd. (PTTPM), PTT Tank Terminal Co., Ltd. (PTT TANK), PTT Maintenance and Engineering Co., Ltd. (PTTME), PTT Energy Solutions Co., Ltd. (PTTICT), and PTT MCC Biochem Co., Ltd. (PMBC). This wide range of investments covers businesses from the processing and distribution of upstream, midstream, and plastic products, and marketing and distribution in both domestic and international markets, to integrated logistical services and the supply of related public utilities, integrated maintenance and engineering projects, and engineering technical solution services to PTT Group and other industrial plants. The main feedstock in petrochemical production comes from PTT's GSPs, including ethane, propane, condensate and Natural Gas Liquids (NGLs). Performance is primarily subject to world petrochemical prices, moving up and down in a cycle of supply and demand, and the year-end inventory (stocks).



2.3 Refining business: PTT invests in the refining business with the main objective of providing refining product security to the country and substituting locally produced refining products for imports. PTT operates its oil refining business and associated businesses using refined products as raw materials (or feedstock) through the investment in four Group companies, namely Thaioil Plc (TOP), IRPC Plc (IRPC), Star Petroleum Refining Co., Ltd. (SPRC), and Bangchak Plc (BCP). The business structure allows PTT to provide crude oil as feedstock for these Group companies and, in turn, buy all refined and petrochemical products from them to market and distribute domestically, and export to international markets.

Performance is primarily subject to the refining marginthe average value of refined products less the average cost of crude runs (based on world prices)-which is cyclical with the world-market supply and demand, the world oil price volatility, and the year-end inventory (stocks).



• International Investment Business

PTT intends to secure energy supply for the nation with overseas energy and new alternative energy sources. In these efforts, PTT integrates its entire organizational capability of knowledge, skills, personal experiences, and cooperation among the Group. All international investments are made through PTT's wholly-owned subsidiaries, PTT International Co., Ltd. (PTTI), and PTT Green Energy Co., Ltd. (PTTGE).

Currently, PTTI's investment portfolio includes coal mining businesses in Indonesia, a hydro-power plant in the Lao People's Democratic Republic, and a gas pipeline business in the Arab Republic of Egypt for piped gas transmission from Egypt to Israel. PTT International also plans to expand its investments in LNG development with PTTEP. PTT Green Energy has also invested in the development of palm plantations in Indonesia.

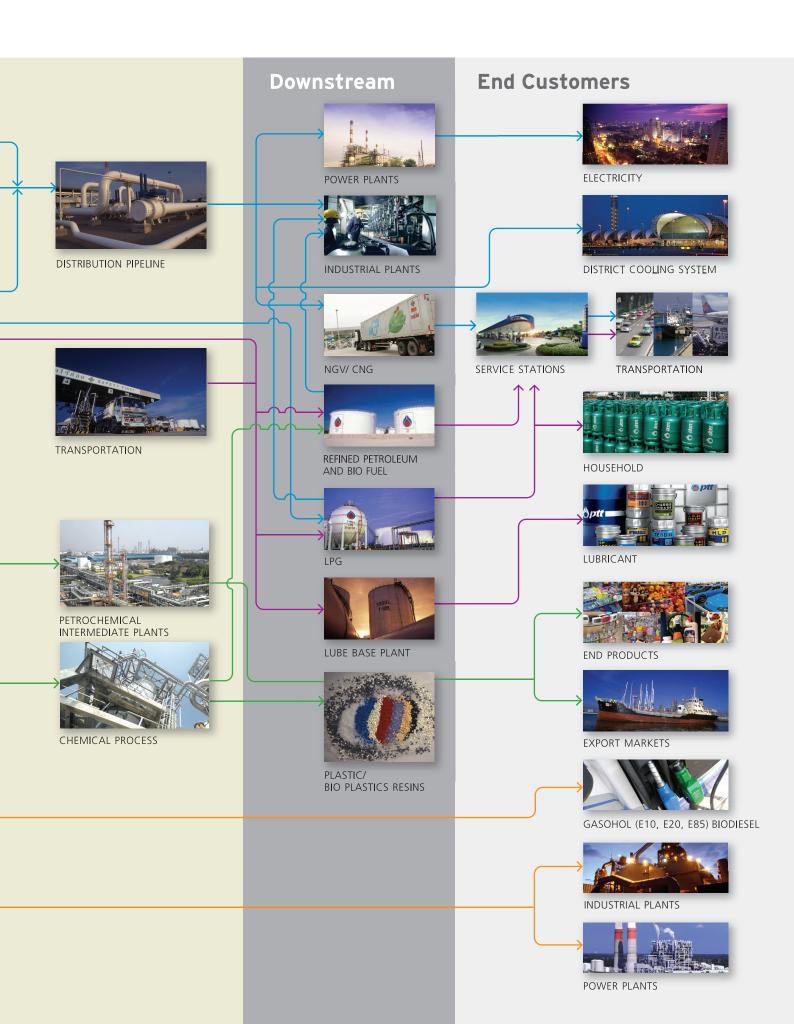
Business Performance 2011

The year was one of great achievements for PTT, with a jump in profits from 83,088 million baht in 2010 to 105,296 million baht this year (27%), a historic record. This new record is a reflection of the success in natural gas procurement to meet growing demand, efficiency improvement of GSPs and the commercial operation of GSP unit 6 (Rayong) that boost production capacity of the GSPs, PTTEP's production increase (especially from the Oil Sands KKD project in Canada), production capacity expansion in the petrochemical group, implementation of portfolio risk management, investment and development programs under Operational Excellence, and pricing risk management for PTT and PTT Group, as well as the synergy development among downstream businesses to add business value and reduce operating costs. Details of each business unit are summarized below.

COAL MINING

Intermediate **Upstream EXPLORATION & PRODUCTION** TRANSMISSION PIPELINE GAS SEPARATION PLANTS LNG PROCUREMENT LNG RECEIVING TERMINAL REFINERIES TRADING CRUDE OIL PROCUREMENT **OLEFINS & AROMATIC PLANTS** PLANTATION FERMENTATION PROCESS PALM PLANTATION BIODIESEL PLANTS, ETHANOL PLANTS

STOCK & TRANSPORTATION



PTT-operated Businesses

• Upstream Business

Gas Business Unit

This year's operational success of the Gas Business Unit resulted from the success in natural gas procurement from a supplementary agreement with Chevron, the first import shipment of LNG to meet the rising demand, especially from the industrial and transportation sectors, the gas separation capacity increase at GSP Unit 6 (Rayong), and gas separation operational efficiency increase at GSP Unit 5 (Rayong). Key operational performance results in 2011 for the Gas Business Unit are summarized as follows:

Natural gas procurement

Supply procurement totaled 4,175 MMcf/d, an increase of 117 MMcf/d (3%) from 4,058 MMcf/d in 2010. This year procurement includes 3,253 MMcf/d, from indigenous sources and 922 MMcf/d from import, or an equivalent indigenous/import ratio of 78:22.

Gas sales to the power sector

Sales to this sector totaled 2,500 M Mcf/d, about 60% of total sales, representing a drop of 262 M Mcf/d (9%) from 2010, due to lower electricity demand following the cold weather early in the year and the Great Floods later in the year. Sales were completed to the Electricity Generating Authority of Thailand (EGAT) at 1,148 M Mcf/d, or 46% of the total; and to seven independent power producers (IPPs) at a total of 866 M Mcf/d, or 35% of the total; and 20 small power producers (SPPs) at 486 M Mcf/d, or 19% of the total sales.

Gas sales to the industrial sector

Sales to this sector totaled 569 MMcf/d, equivalent to 14% of the total sales, an increase of 118 MMcf/d (26%) to 308 customers, nine more than last year. The customer group included 305 industrial users and three commercial ones.

Sales volumes rose as a result of the expansion of the gas distribution pipeline network, including a 24-inch pipeline project from Rayong GSP to IRPC's power plant, a pipeline project to Glow Energy Plc located in the Map Ta Phut Industrial Estate in Rayong, and a gas pipeline project to MTP HP JV Co., Ltd. in the Asia Industrial Estate, Rayong.

Note that natural gas sold to industrial users is used for power and steam generation to raise power generation efficiency and reduce energy losses in the transmission system. For example, this year the total gas sales to Bangchak's refinery facilities was 6 MMcf/d, an increase of 2 MMcf/d (50%) from those of last year, which was used for power and steam generation. PTT has continuously been expanding its gas distribution pipeline network. In 2011, a new network totaling 30 kilometers was installed and commenced operations for commercial use. As of this year-end, PTT operated a gas distribution pipeline network of 883 kilometers covering 10 provinces.

Gas sales to the transportation sector

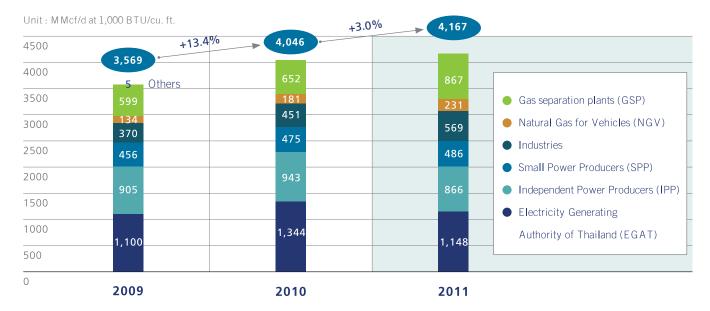
Sales to the transportation sector averaged 231 MMcf/d (6%) of the total sales, recording a 50 M Mcf/d (28%) increase from last year, due to the continuously growing number of service stations. Currently, there are 469 PTT NGV service stations, of which 385 are directly invested in by PTT and 84 invested by independents, covering 53 provinces. The use of natural gas in the transportation sector to replace gasoline and diesel rose from 8.5% in 2010 to 9.2% this year. At the year-end, the number of vehicles using natural gas increased by 74,913 (33.2%) from last year to 300,581 units in total. However, PTT has commenced the NGV price adjustment of 0.50 baht per kilogram per month from January 16, 2012, till December 31, 2012, and provided discount credit cards to all public transport vehicles, under ERC's ruling on September 30, 2011. If this NGV price adjustment scheme is successful, PTT's NGV sales deficit per unit will gradually drop.

Sales of products from GSPs

GSPs processed 867 M Mcf/d of natural gas this year, 21% of total sales, an increase of 215 M Mcf/d (33%) from 2010. The increase resulted from the commissioning of GSP Unit 6 in January this year with a capacity of 800 M Mcf/d, and debottlenecking project completion of GSP Unit 5 in July

this year, which has since increased its capacity from 545 M Mcf/d to 570 M Mcf/d. The total output was a jump in total processed product volume by 36% from 2010 to 5,827,131 tons a year this year. The products included 1,797,764 tons of ethane, 541,584 tons of propane, 2,853,407 tons of LPG, and 634,376 tons of NGLs.

Natural gas sales



Products from Gas Separation Plants

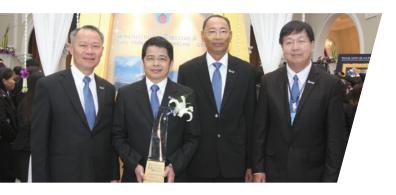


Gas Business Unit Milestones

January



- PTT GSP Unit6 (Rayong), the largest in Thailand, completed commercial commissioning. With a separation capacity of 800 M Mcf/d, the GSP can produce up to 630,000 tons per year of ethane, 1,030,000 tons per year of propane and LPG, and 160,000 tons per year of NGL, totaling 1,820,000 tons per year of products. All production serves growing local demand and enhances the indigenous petrochemical industry development.
- The 24-inch, 20.5-km gas distribution pipeline from Rayong GSP to IRPC refining complex was completed. Commercial gas flow was completed under a sales agreement with IRPC, of which 64,000 trillion BTU per day is the delivery obligation.



• PTT's gas transmission pipeline management was awarded the 2010 Thailand Quality Award (TQA) from the Thailand Quality Award Office. This prestigious award is the highest achievement to an organization with an outstanding integrated management system and the potential to compete internationally.

- PTT gas transmission pipeline operations achieved the following awards:
 - TPM Excellence in Consistency Award for:
 - 1. Chon Buri Operation Center
 - 2. Region 1 Gas Operations Division, Chon Buri
 - 3. Region 2 Gas Operations Division, Ayutthaya
 - 4. Region 3 Gas Operations Division, Rayong
 - 5. Region 4 Gas Operations Division, Khon Kaen
 - TPM 1st Category Excellence Award for;
 - 1. Region 6 Gas Operations Division, Bangkok
 - 2. Region 7 Gas Operations Division, Songkhla
 - 3. Offshore Gas Operations Division.

February

• Gas delivery commenced through the installation of the pipeline to Glow Energy Plc in Map Ta Phut Industrial Estate in Rayong. The sales contract calls for 56,710 trillion BTU a day of gas delivery.



- Khanom GSP achieved TIS 18001, ISO 9001, and ISO 14001 certification from the Management System Certification Institute (Thailand) (MASCI).
- PTT achieved a Safety and Occupational Health award, TIS 18001:2542, and BS OHSAS 18001:2007 certification from the MASCI for its 14 NGV mother stations nationwide.

March



- GSP Unit 4 (Khanom) was granted the Zero Unplanned Shutdown Award for its outstanding operation without unplanned shutdowns as the first PTT Group Excellence Award.
- GSP, Rayong, received several awards from MASCI on Integrated Management System (IMS), occupational health and safety (OHSAS 18001/TIS 18001), quality management system (ISO 9001), and environmental management system (ISO 14001).

April



• PTT and Universal Adsorbent and Chemicals PIc entered into a sales agreement on compressed biomethane gas (CBG), derived from manure and sewage from swine farms and compressed for quality improvement. Under the 15-year sales agreement, PTT is committed to purchasing 6 tons a day of CBG and distributing it to consumers as a substitute for NGV in remote areas. Once the project is fully commercial, it will save more than 21 million baht a year in foreign exchange for the substitution of import of diesel up to 2.2 million liters a year or 1.6 million tons a year of LPG.

May

• PTT co-invested in the formation of Nava Nakorn Electricity Generating Co., Ltd. (NNEG) with a 30% equity share in the development of combined-cycle power generation in Nava Nakorn Industrial Estate. Other partners are Nava Nakorn Plc (30%), and Ratchaburi Electricity Generating Holding Plc (40%). NNEG is a co-generation SPP using natural gas as fuel to generate 127 megawatts (MW) of electricity and 15 tons per hour of steam. From these products, 90 MW of electricity will be sold to EGAT, 7 MW will be used at the facilities, and the remaining 30 MW plus 15 tons per hour of steam will be sold to clients in the estate.



• The SCADA Control Unit of the Operation Center, Chon Buri Gas Operation Division, was awarded the IT Security Management System ISO/IEC 27001:2005 by Bureau Veritus, the first certificate ever awarded to PTT.

June

- The 36-inch interconnecting gas pipeline project from LNG Gas Dispatching Facility to Rayong GSP and the 42-inch portion from the GSP to the LNG facility, totaling 25.565 km, were fully installed. Gas delivery from the LNG Terminal to blend with natural gas from GSPs before transmission via the onshore pipeline network commenced. This new pipeline system is capable of delivering 1,200 MMcf/d of gas.
- ERC unanimously approved natural gas pricing of the Region 4 onshore gas distribution network (Chana) at 2.5659 baht per million BTU (excluding VAT), structured from a constant cost of 2.4855 baht per million BTU and a variable cost of 0.0804 baht per million BTU. This new pricing would become effective from June 2011.

- Rayong GSP was granted TLS8001:2553, the Thai Labor Standard from the Department of Labour Protection and Welfare, Ministry of Labour.
- Rayong GSP was granted a certificate from the Department of Industrial Works (DIW) for its Protection Strip project, a safety zone protecting the community from possible hazards from company operations. Rayong GSP was also selected as one of the 16 pilot plants in Thailand for such a project, and as a model for tree-planting within the facility complex as a tribute to HM the King. DIW was in charge of inspection and award presentation.

July

- ERC approved the pricing structure of natural gas storage and regasification from liquid to gaseous state (LNG), with a constant cost of 31.6859 baht and a variable cost of 1.7050 baht both per million BTU. This pricing structure became effective from July 2011 onward.
- ERC approved the adjustment of the variable cost of 1.1575 baht per million BTU pricing structure for this year, effective from July this year onward. This new variable cost is applied to the offshore gas pipeline network (Region 1), the offshore gas pipeline network to Khanom (Region 2), and the onshore gas pipeline network (Region 3).



• The Natural Gas Transmission group was granted the 2011 Outstanding Business award for its national level safety, occupational health and environment from the Permanent Secretary of the Ministry of Labour during the 25th National Safety Week on July 7, 2011. The award has been granted to PTT nine years in a row.

August

- Commercial piped gas delivery commenced to MTP HP JV Co., Ltd., in Asia Industrial Estate, Rayong, at a contractual rate of 10,775 trillion BTU per day.
- The Natural Gas Transmission group, Chon Buri Operation Center, was awarded the TLS 8001 (basic level and full compliance (initial) level) from the Department of Labour and Social Welfare.

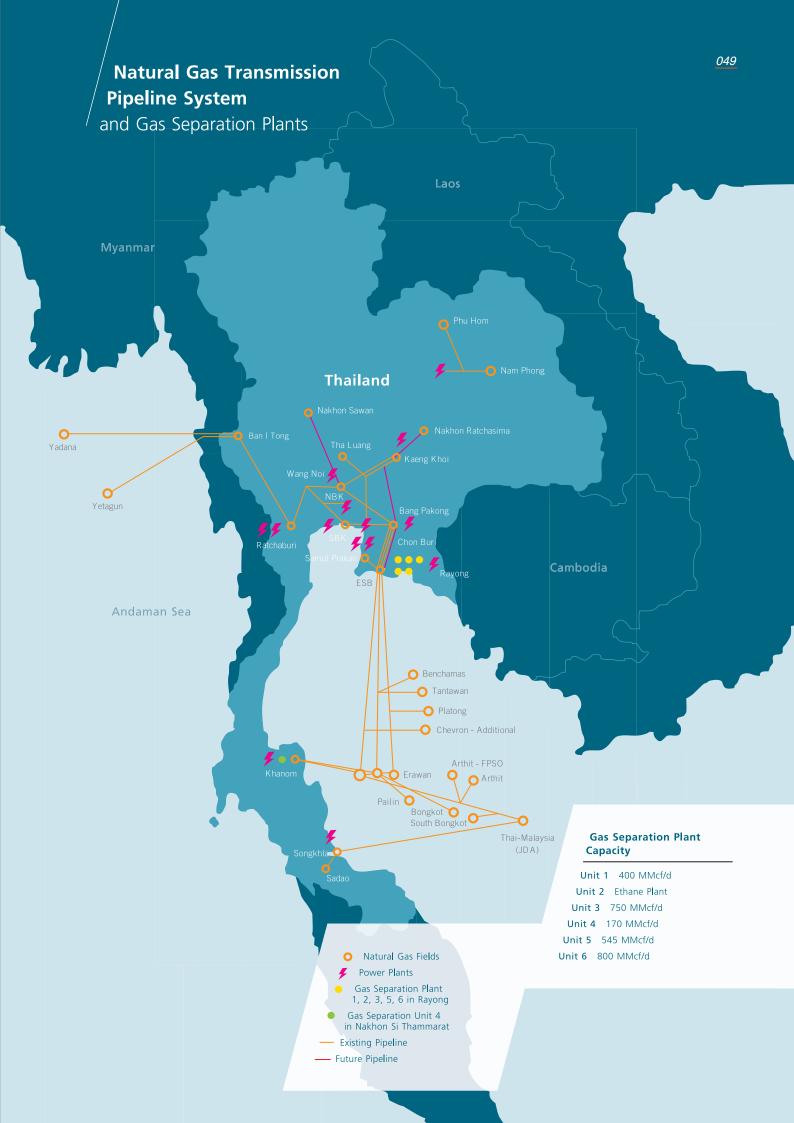
September



- PTT LNG Co., Ltd., officially commissioned its 5 million tons per year (MTA) LNG Receiving Terminal at Map Ta Phut. This first such terminal in Southeast Asia has a capacity equivalent to 700 M Mcf/d and is set to soon expand from 5 to 10 MTA, equivalent to 1,400 M Mcf/d.
- Rayong GSP and Khanom GSP were awarded the CSR-DIW Continuous Awards from the Department of Industrial Works (DIW) and MASCI for their continuous practices on social responsibility.
- Rayong GSP became the first PTT facility audited by a third party to be in full compliance with the PTT group CSR Framework. This first audit and achievement has become a model for other PTT facilities.

November

• Commercial commissioning of the 42-inch, 48-km offshore pipeline connecting the Chevron Platong Gas II to the PTT Trunk Line # 3 successfully commenced.





Oil Business Unit

PTT continued to maintain its leading position in the domestic fuel retail market for 19 consecutive years, with 1.3% growth in market share. For the lubricating oil market, PTT also succeeded in maintaining its leading position for three years in a row. Sales of gasoline and lubricants grew by 8% and 1.3% respectively. These increases were the result of expansion of fully-integrated service stations. This year's business performance of the Oil Business Unit is summarized below:

Fuel Sales

In 2011, PTT sold 15,038 million liters of fuel, an increase of 1,086 million liters (8%) from the previous year. This represents 35.8% of the overall market share. Sales breakdown included 2,310 million liters of gasoline, 6,163 million liters of diesel, 1,683 million liters of jet fuel and kerosene, 1,728 million liters of fuel oil, and 3,154 million liters of LPG. Sales volume, including sales of PTT Retail Management Co., Ltd. (PTTRM), stood at 16,251 million liters, equivalent to 38.7% of the total market share, or 35.1% if the fuel oil sold to the Electricity Generating Authority of Thailand (EGAT) is discounted.

The average marketing margin was 1.29 baht/liter against 1.43 baht/liter of 2010, a 9% drop. This margin is lower than the suitable margin of 1.50-2.00 baht/liter, based on the coverage of operating expenses and appropriate financial

returns for the Oil Business Unit and retailers who own service stations. Because of the higher world oil price early in the year, additional profits from this year's year-end stock gain were recorded at 5,449 million baht.

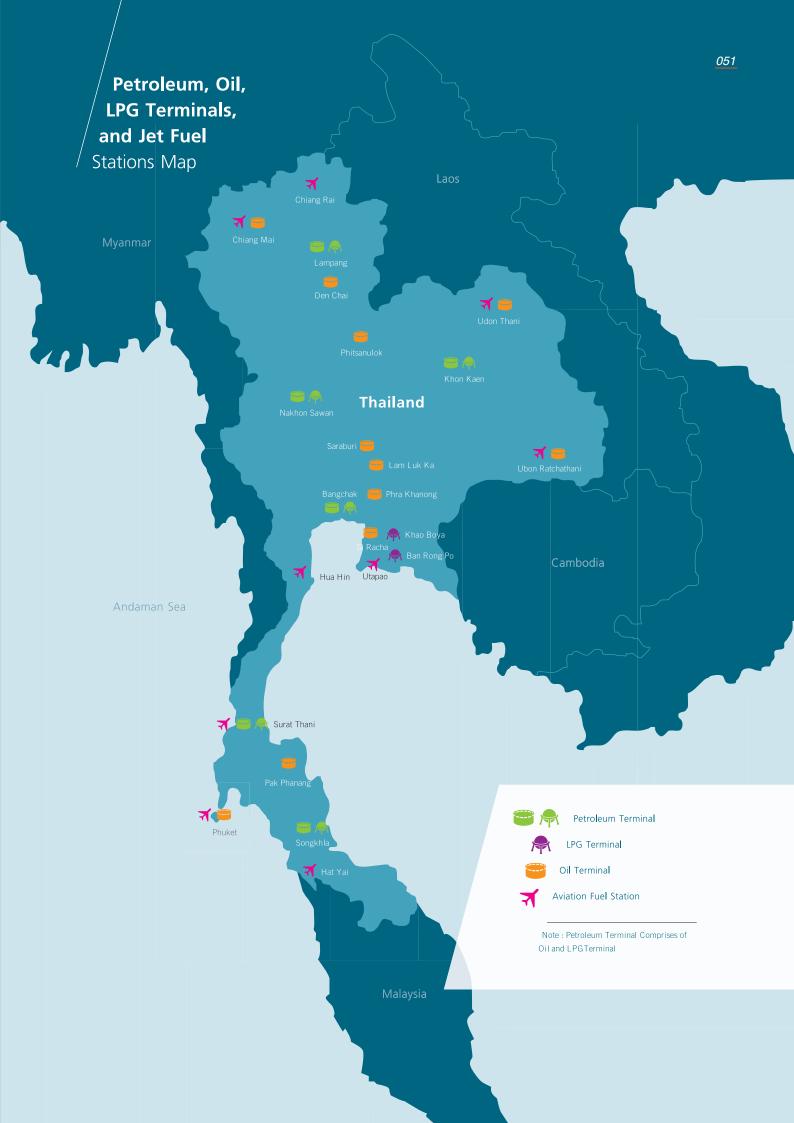
As of December 2011, PTT operated 1,180 service stations across the country, or 6% of the total, nine jet fuel stations, 11 oil terminals, two LPG terminals, six petroleum tank terminals, four LPG-bottling plants, 936 Seven-Eleven convenience stores, 634 Café Amazon outlets, and 137 Pro-Check lube service centers.

Biofuel Sales

PTT continued to promote biofuel energy as an alternative option, with gasohol to replace gasoline and biodiesel to replace diesel. The distribution and sales of Gasohol E10, E20, and E85, and biodiesel have been continuously increasing. The market shares in 2011 for PTT Gasohol E10, Gasohol E20, and Gasohol E85, were 31.1%, 43.7% and 41.6%. For biodiesel, after the market standardization to a single standard of B4, PTT's market share of B4 was 32.6% this year. To ensure biofuel supply security, PTT has signed long-term contracts for ethanol and methyl ester with domestic producers.

Lubricating Oil Sales

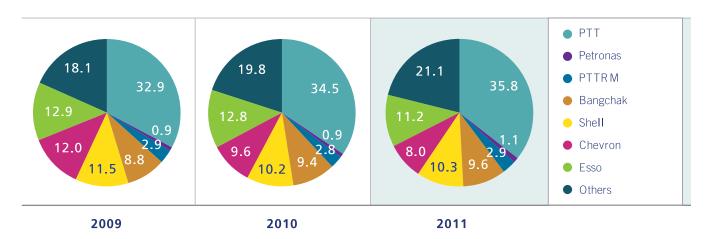
This year, through its long-term commitment in research and development (R & D), PTT achieved the highest standard, API SN, from the American Petroleum Institute (API), as well as the International Lubricant Standardization and Approval Committee (ILSAC) GF-5 standard. Also this year, PTT launched a series of new products. Performa Super Synthetic Hybrid is a 100% premium-grade synthetic lubricant, with the world's premium lubricating API SN standard specific to hybrid engines. AUTOMATCVT (Continuously Variable Transmission) is a synthetic automatic transaxle fluid specific to vehicles with the CVT automatic steering system. PTT continued to expand its lubricating oil business in Indochina this year. The overall sales this year totaled 139 million liters, an increase of 2 million liters, or 1.3% from last year, of which 130 million liters were sold domestically, representing a 37.5% market share.



Domestic Petroleum Product Sales

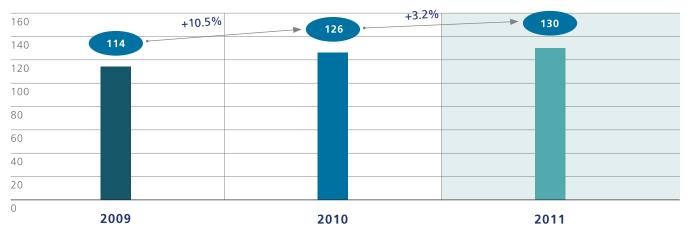


Domestic Market Share



Domestic Lubricating Oil Sales

Unit: million liters



Note : Excluding LPG used as petrochemical feedstock

Source : Department of Energy Business, Ministry of Energy

Oil Business Unit Milestones

February



• PTT was awarded the 2011 Thailand's Most Admired Brand from BrandAge Magazine for running the most reliable gas service stations for eight years in a row, and for its most reliable motor lubricant for two years in a row.

March



• The Department of Health, Ministry of Public Health, awarded PTT the HAS (Healthy Accessibility Safety) recognition for clean service stations under the "Nation Prosperity...with Clean Toilets" campaign. The inspection was handled by the Department of Health on public toilets in service stations along eight main highways nationwide. Out of the 111 stations which qualified for full compliance, 74 were rated very highly. PTT was awarded the highest number of service stations in this category. Locations of all these service stations will be downloaded onto the 2012 Highway Map with the GPS Navigator, resulting in a higher reputation for PTT service stations.

April

• PTT was awarded by the Department of Energy Business with the highest gold medals, three years in a row, under the



"Quality and Safe Service Stations Award" campaign. PTT received 5-star gold awards for 201 stations, silver awards for 159 stations and bronze awards for 81 stations.



• To commemorate the "63 Million Thais Join to Mitigate Global Warming for HM the King" campaign, launched by the Ministry of Energy to raise the awareness of energy conservation and global warming, PTT kicked off the PTT Engine Tune Up 2011 project with free engine tune-ups at 84 service stations nationwide during the Songkran Festival, April 4-13 this year. The campaign was extended to the yearend at 97 ProCheck stations nationwide.

May



• PTT was voted the most trusted brand in a survey conducted by Reader's Digest. The Platinum award was given to PTT for its gas service stations for 11 years in a row and for its lubricant products for two years in a row.

June



• With cooperation from Thailand Post Co., Ltd., PTT invested in the "Post Park", a botanical garden for learning and recreation. The park is located in each service station with a post office. This new design will include a botanical garden and service stores under the PTT Life Station concept. The first station will be constructed in the area of the Thailand Post Headquarters along Chaeng Wattana Road, scheduled to be completed around the end of 2012.



• A new service station with a rest area was put on steam at Km. 98 (inbound), Laem Chabang, to serve commuters on the east coast. With this new station, PTT also installed its 2nd "Restroom 20" concept aimed to raise funds to support education for children nationwide.



• PTT inaugurated the Café Amazon Coaching Academy, located on the seventh floor of its Phra Khanong Office, for training, skill development, and as a knowledge center for all owners and operators of Café Amazon outlets to ensure

international service standards at all shops. The academy will also serve as a R&D center for high-quality standards of raw materials and selection processes, as well as to continually develop new formulas for beverages to serve diverse lifestyles of consumers.

September

- Under the concept of "Go Green Everyday Everywhere", Café Amazon and PTT introduced the Amazon Bio Cup, a 100% biodegradable cup which consumers can use as part of the campaign to protect the environment. The introduction was first made available at the Café Amazon, Energy Complex.
- PTT launched the application of the "PTT Life Station" for consumers using iPhones and iPads to access the database to check gas prices and information on service stations and convenience stores at all 1,180 locations, and more than 450 NGV stations nationwide.
- Café Amazon achieved Thailand Franchise Quality Award 2011 (TFQA) under the "Excellence Franchise Business Performance Award" category for the first time from the Department of Business Development.

November



• PTT launched the API SN standard 100% synthetic premium-grade lubricating oil specifically for hybrid engines to provide better engine performance and protection in all conditions.



- Under the flood disaster relief program, PTT initiated the "Light during the Crisis" program at its NGV station at Rojana Industrial Estate 1. The program included distribution and at-cost sales of LPG and accessories, LPG lamps with a rod connected directly to the LPG tank to serve as night lighting, LPG tanks, stoves, nozzles, hose, etc.
- Also under the flood disaster relief program, PTT launched cleaning service for cooking gas food shops and houses with high-pressure water pumps at its Phra Khanong Office Center. The program, jointly organized by PTT and PTT LPG Club, was aimed to quickly restore the food store business as part of the crisis rehabilitation (Stage 3) of the flood relief program.



• With cooperation from the Ministry of Energy and Office of Vocational Education Commission (VEC), PTT launched the PTT Engine Tune Up campaign to serve the public for vehicle checks of engines, lighting systems, brake systems, power steering systems and other systems at no charge. Under this flood relief program, a series of lubricating oil products were sold at a big discount. The campaign was launched at all PTT service stations and 100 ProCheck stations in all 21 provinces affected by the floods.

December



• PTT introduced "The Amazon's Embrace" on the fourth floor of CentralPlaza Grand Rama 9. This was the first branch

of a premium coffee shop aimed to serve and expand the market segment to consumers in the business sector.

• PTT introduced a new synthetic automatic transaxle fluid, AUTOMA CVT (Continuously Variable Transmission), a specific automatic transaxle fluid for vehicles with CVT automatic steering systems to increase their efficiency, provide a smooth driving experience and reduce gasoline consumption.



• PTT won the Most Popular Automotive Business Award in the TAQA Awards 2011, organized by the Thailand Productivity Institute, Ministry of Industry, in cooperation with Inter-Media Consultant Co., Ltd., Custom Asia Co., Ltd., and Manager Multimedia Co., Ltd. The awards were given to businesses recognized by public consensus in different categories. PTT won in two categories for fuels and service stations.



• PTT, in collaboration with Thai Airways International Plc., Aeronautical Radio of Thailand, and Airport of Thailand Plc., launched a special event, Thai Travel Green: Thai First Flight; which the aircraft was fueled with bio jet and Jet A-1 in the portion of 50:50. Eight ton of bio jet worth an amount of 2.5 million baht was provided by PTT to promote this Asia's first green air travel.

International Trading Business Unit

During 2011, the International Trading Business Unit successfully increased its competitiveness and physical trading of crude oil, fuel oil, and petrochemical products. Another success was the use of risk management tools, including the use of Futures Exchange Market to mitigate price risks and reduce the price volatility for crude oil that PTT procured for itself and refineries within PTT Group. In addition, PTT jointly worked with downstream group companies to form the Group Integrated Supply Chain management & Optimization (GISMO) to create more business value, improve the group's competitive advantage through group synergy, expand the group's business overseas, and to cooperate on managing the logistics for petroleum and petrochemical products of PTT Group.

Crude oil, petroleum product, and petrochemical trading

In 2011, PTT International Trading Unit's physical trading amounted to 62,684 million liters (about 1.08 MMBOED), a 1.6% or 991 million liters drop from 2010.

This traded volume consisted of 39,683 million liters of crude oil, a 5.4% drop; condensate, 7,422 million liters, a 1.5% rise; fuel oil, 11,358 million liters, a 0.9% drop; and petrochemicals, 4,221 million liters, a 42% rise. Imports of crude oil and domestic crude oil plummeted due to the planned shutdowns of local refineries early in the year and the impacts of the disastrous floods later in the year. However, the physical trading of petrochemical products soared as a result of Out-Out Trading transactions with business partners in the Middle East and additional exports to China. In addition, physical trading of coal, crude palm oil, and alternative energy under the PTT's strategic business option commenced in 2011.

Price risk management

Price risk management this year amounted to 34,439 million liters, 3.4% more than that in 2010, as a result of world oil price volatility, which demanded more price risk management.

International Trading Volumes



International Trading Unit Milestones

February

• Signed a trading agreement for Seria Light crude with Brunei Shell Petroleum Co. Sdn. Bhd, Brunei national oil company. The trading volume amounted to 2.4 million barrels, with a total value of more than 6,000 million baht. The agreement marked the first agreement among the two companies, a stepping stone not only for additional business



transactions in the future, but also for national cooperation on strategic energy reserves.

April



- Signed a long-term trading agreement with Singapore Chemhub Pte., Ltd., for Bisphenol-A product. The agreement, valued at more than 2,000 million baht, marked PTT Group's business expansion into the Chinese market. Singapore Chemhub Pte., Ltd., is a subsidiary of Nantong Chemical & Light Co., Ltd., one of the largest petrochemical trading firms in the People's Republic of China.
- Signed a cooperation agreement with Arcadia Energy Pte., Ltd., to market diesel (270,000 barrels) valued at 7,950 million baht during April December 2011. The agreement increased both physical and paper trading and involved vessel allocation, which generated more revenue for PTT.

June



• Signed a trading agreement and import of LPG, DES Sriracha, with E1 Corporation, a major Southeast Asian LPG trading arm from South Korea. The total trading volume and value reached 484,000 metric tons, approximately Baht 14,500 million. The agreement was to expire in December this year and can be considered another success of PTT in the effort to provide energy security to meet the domestic demand.

• Initiated an out-out trading for coal with PTT International Trading Pte., Ltd., to deliver 50,000 metric tons of coal from Indonesia to China at a value of approximately Baht 135 million. A similar agreement is scheduled for 2011 with the amount and value of 185,000 metric tons and 480 million baht respectively. The agreement serves PTT's strategic business in increasing the use of alternative energy.

August

• Successfully provided price risk management for Thai Airways International Plc for 1.35 million barrels of Jet A-1 fuel. This marked the first cooperation in providing price risk management to the state-owned enterprise and was a stepping stone for PTT to expand into a similar line of service to other domestic and international airlines.

December

• Signed a contract of affreightment (COA) with Sinochem Shipping Co., Ltd., of China for the use of shipment of 140,000 tons a year of benzene from domestic refineries to the Kingdom of Saudi Arabia. This is the COA for the largest shipment and farthest destination PTT has achieved.

Investment Business through Group Companies

• Upstream Business

Exploration and Production

Beginning in the first quarter this year, PTTEP adjusted and prepared its financial budget in US dollars under a new accounting standard, including the equivalent in Baht currency shown in parallel. This year PTTEP and its subsidiaries recorded a total revenue of 5,685 million US\$, equivalent to 173,375 million baht, a 25% rise or 1,153 million US\$, from the 2010 level of 4,532 million US\$, equivalent to 143,506 million baht. The rise was mainly due to the rise in the world oil price, as the product price climbed from 44.83 US\$/BOE in 2010 to 55.49 US\$/BOE in 2011. The sales volume edged up from 264,575 BOED in 2010 to 265,047 BOED this year, with the increase from Block B-17 of the Malaysia-Thailand Joint Development Area, Canadian Oil Sands KKD project, and Block 16-1 of Vietnam.

This year's financial performance for PTTEP and its subsidiaries recognized a total net profit of 1,468 million US\$, equivalent to 44,748 million baht, a 6% rise from 2010 when the net profit was reported at 1,380 million US\$ or 43,774 million baht. The rise in net profit was less than anticipated due to the accounting impacts from the higher business income tax resulting from asset exchange from US\$ into Baht during the Baht depreciation, and the foreign-exchange loss incurred during the lending transaction between PTTEP and PTTEP Canada, its subsidiary, during the Canadian dollar depreciation versus the US\$ currency. Both losses were accounting losses and had no impact on its actual liquidity and did not reflect poor operating performance of PTTEP.

Below is a list of 41 successful projects in 13 countries of PTTEP during 2011:

Exploration

PTTEP has continuously conducted exploration activities in Thailand and overseas to assess petroleum potential of interested blocks and increase petroleum reserves. This year PTTEP drilled a number of exploration and appraisal wells in many projects including:

- Domestic and Southeast Asian Region Projects
- Arthit Project in Thailand : Commercial petroleum was found at Arthit-14-19-A & B, and a development plan is soon to be proposed.
- SEMAI II Project in Indonesia: PTTEP holds 28.33% equity with Murphy Semai Oil Co., Ltd., the operator. The Lengkuas-1 exploration well discovered petroleum in the targeted reservoir, though not in a commercial quantity. The well result is extremely valuable to the petroleum potential assessment of the block and the adjacent area, which will be the key to future exploration and investment plans in this area.
- MTJDA-B17 Project in Thailand : Five exploration wells were drilled with all significant discoveries, confirming the block's potential.
- M3 Project in Myanmar: With the natural gas discovery from the Aung Sinkha-2 exploration well, PTTEP decided to accelerate the exploration work program by moving the 1,000 sq. km. 3D seismic acquisition from earlier scheduled for the first quarter of 2012 to the last quarter this year so that appraisal wells to determine petroleum potential of the structure can start as early as the final quarter of 2012. At this moment, seismic acquisition preparation is being carried

out between PTTEP and relevant authorities. Meanwhile, Myanma Oil and Gas Enterprise (MOGE) has tentatively agreed to a one-year exploration period extension so that PTTEP can have sufficient time to conduct proper exploration and appraisal drilling, and thus prove the potential for commercial development.

• International Projects

- PTTEP Australasia Project in Australia: PTTEP successfully made a natural gas discovery at the Cash-Maple structure with the Cash-2 appraisal well. This appraisal success is vital to the feasibility study for the development of the floating liquefied natural gas (FLNG) in the Australian Timor Sea, a stepping stone to the possible development of remotely located gas fields. PTTEP has planned more appraisal wells in 2012 to confirm petroleum reserves in the structure and define the commerciality of project development.
- Oman 44 Project in the Sultanate of Oman: The Munhamir-3 exploration well was drilled to identify additional petroleum resources in the Munhamir field. Unfortunately, no petroleum was found. Nevertheless, PTTEP plans to increase condensate production from Munhamir-2 in 2012. With this production increase, when combined with natural gas and condensate production from the Shams field, PTTEP can increase its overall output from the Oman 44 Project.

Project Development

Some of the PTTEP's domestic and international field development projects are as follows:

- Domestic and Southeast Asian Region Projects
- Bongkot Project in Thailand: Construction and installation of Bongkot South Central processing platform, wellhead platforms (WPs) and living quarters have already been completed. Production of natural gas is scheduled for the first half of 2012.
- Zawtika Project in Myanmar: Construction of the main production platform, the bridge connecting to the wellhead platform and an interconnecting pipeline network, offshore and onshore trunk lines, and associated onshore production facilities, is ongoing. Production of natural gas is anticipated in 2013.

• International Projects

- PTTEP Australasia Project in Australia: PTTEP successfully completed the installation of a new production platform at Montara and has scheduled to commence produc-

tion in the second half of 2012. PTTEP has won a permit to continue exploring and producing petroleum in Australia from the Australian Government. Regarding the filing for insurance compensation from the Montara incident, PTTEP has received 119.5 million US\$ as of December this year.

Regarding the compensation filing from the Indonesian Government from the Montara incident, PTTEP has been constantly engaged in communication with the Indonesian Government to utilize scientific data and proven record of impacts.

- Algeria 433a & 416b Project in Algeria: The project is at the detailed engineering design stage for the production process and the transport pipeline, while fabrication of the living quarters and utility facilities is ongoing. Development drilling has commenced since late 2011. Production is set to be on stream within 2014.

Production

The overall average production of PTTEP this year was 301,367 BOED. PTTEP has continuously worked to maintain this production capability and increase production from new projects, some of which are as follows:

- Domestic and Southeast Asian Region Projects
- Vietnam 16-1 Project in Vietnam: Initial production commenced in August 2011 at 15,000 barrels a day. The current production stands at 32,000 barrels a day.
- Arthit Project in Thailand: PTTEP successfully negotiated a supplementary gas sales agreement with PTT, the buyer, with the adjustment of the daily contract quantity (DCQ) from the original 330 MMcf/d delivery from the Arthit Project to 220 MMcf/d. The pricing formula was accordingly adjusted while other terms in the contract had little change.

• International Projects

- Canada Oil Sands KKD Project in Canada: PTTEP commenced bitumen production from the Leismer field this year. The output in November was up to 3 million barrels, which drove the final quarter's average production to 14,300 barrels a day. The December output averaged 18,190 barrels a day.

Investment Portfolio Management

PTTEP continued its investment portfolio management to manage risks associated with the portfolio and properly allocate funds to various projects in support of business expansion, as well as to appropriately assign skilled human resources and technology experts for project handling.

• Domestic and Southeast Asian Region Projects

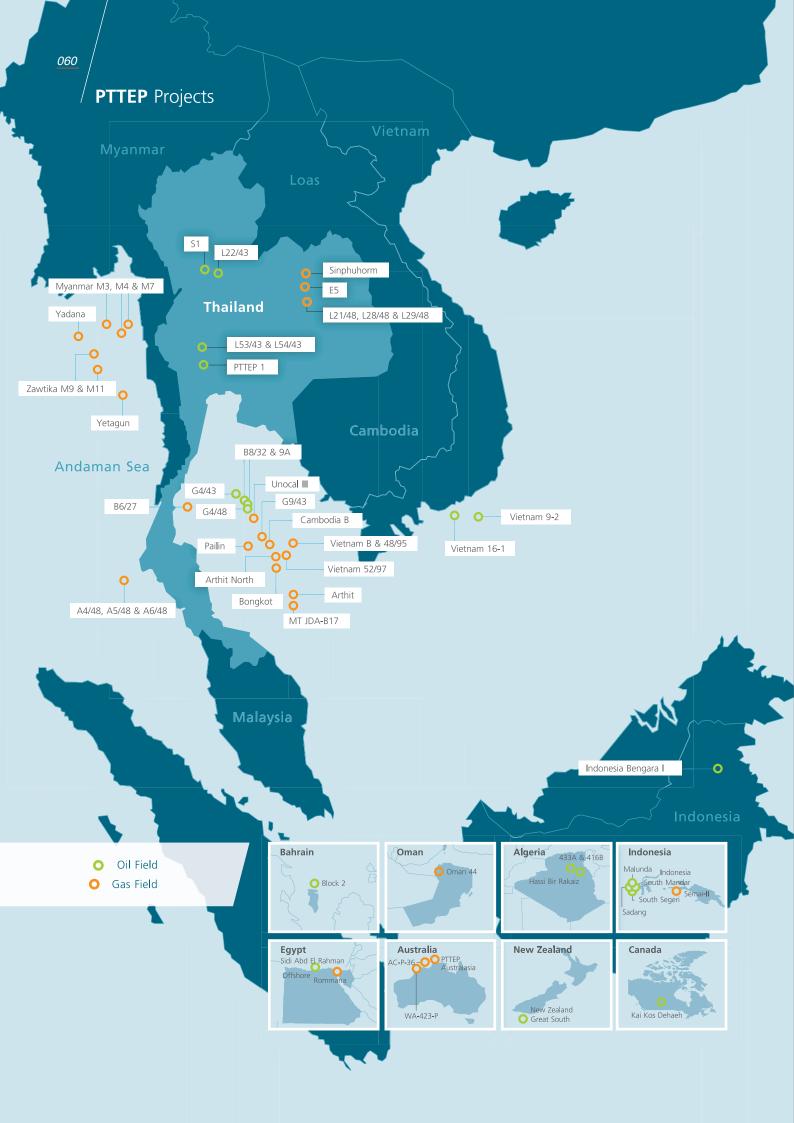
- M-4 Project in Myanmar: PTTEP ended the exploration activities and filed total relinquishment to the Union of Myanmar after fulfilling all the work commitments. The effective relinquishment date was in May this year.
- South Mandar, Sadang, and South Sageri Projects in Indonesia: PTTEP achieved successful reduction of investment and equity in three Makassar Strait blocks, which are South Mandar, Sadong, and South Sageri, to Total E&P Indonesia, the operator. Such reduction was part of the strategic portfolio adjustment of PTTEP. Moreover, Total, PTTEP's strategic alliance, is known worldwide in deepwater exploration and drilling, which are directly applicable to these three blocks.

• International Projects

- PTTEP Australasia Project in Australia: PTTEP Australasia (Ashmore Cartier) Pty., Ltd. (PTTEP AAA), a subsidiary of PTTEP, signed a total acquisition of Block AC/P54. The acquisition which was officially approved by the Australian Government and PTTEP Australasia (Ashmore Cartier) Pty., Ltd., has 100% equity in the block. Also this year, PTTEP Australia Offshore Pty., Ltd., a wholly-owned subsidiary of PTTEP, ended the investment in Block AC/P36. Likewise, PTTEP Australasia Pty., Ltd., a wholly-owned subsidiary of PTTEP, ended the investment in Block WA378P.
- Sidi Abd El Rahman Offshore Project in the Arab Republic of Egypt: After a thorough petroleum assessment study of the block, PTTEP decided to notify joint investors in the block in January this year of its intention to cease its 30% investment in the Sidi Abd El Rahman Offshore project after the fulfillment of all obligations.
- Great South Project in New Zealand: PTTEP ended its exploration and filed for a total relinquishment of Block PEP 50121 to the New Zealand Government. The official approval was granted in August 2011 for this low petroleum-potential block.

Corporate Capability Development

To cope with world oil price volatility and an unstable world economy, PTTEP has closely monitored the world economy in relation to energy demand and continuously



adjusted its strategic direction to duly respond to these external changes in order to maintain its capability to provide energy to meet the country's need, continuously grow organizational efficiency and improve operating cost management, expand its overseas investments, properly manage and select investment projects, handle risk management in accordance with the volatility of the oil price and manage human resources.

• Downstream Businesses

Petrochemicals and Refining

Petrochemical and refining Group companies consistently expanded their investments to add product lines and trade channels to increase the competitive edge for PTT Group in managing its business and creating additional business value from the synergy among members of the Group as part of the Group Integrated Supply Chain Management & Optimization (GISMO), in turn part of Petrochemical Integrated Supply Chain Management (PIM) for the downstream cooperation program, and Oil Supply Chain Integration Management (OIM) for the refining cooperation program. Also as a group, PTT Group companies jointly drove the overall organizational development toward PTT Group Operational Excellence, with its performance of the petrochemical and refining group captured as follows:

Petrochemical and refining performance

The petrochemical business, led by PTT Global Chemical Plc (PTTGC), reported sales volume in 3 core product groups which were petroleum and utility products at 55.09 million barrels, dropped by 2.68 million barrels from 2010 due to 47-day temporarily oil refinery shutdown in the first quarter of 2011; aromatics product group at 4,282,971 tons, increased by 237,250 tons; and olefins and related products at 2,248,005 tons, increased by 534,114 tons due to the HDPE production capacity expansion to 250,000 tons per year and LDPE to 300,000 tons per year from its subsidiaries which began commercial production on January 1 and February 1, this year. With higher product-to-feed margins resulting from world petrochemical prices, PTTGC's 2011 performance proved better than the 2010 performance of non-amalgamated companies.

HMC Polymers Co., Ltd. (HMC), recorded a total output of 558,847 tons, a rise of 162,126 tons from 2010. This jump was a result of the commencement of PDH production unit completion and commercial production on February 16 this year and the higher average product-to-feed margins of all petrochemical products following the tight polypropylene (PP) supply caused by a delay of additional production. This year's performance was therefore better than last.

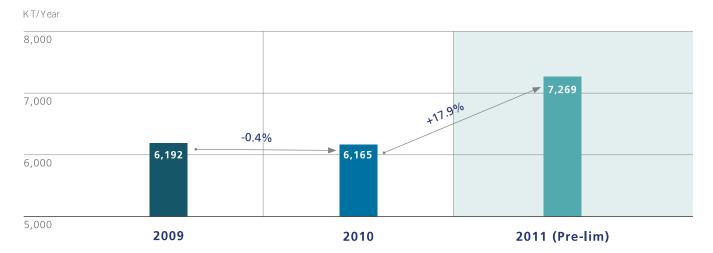
PTT Phenol Co., Ltd. (PPCL), recorded overall sales of products at 432,946 tons, a jump of 105,791 tons from last year. The higher product-to-feed margins for products due to the very tight supply following the Great Tsunami in Japan in March this year was a key factor. However, the 150,000 ton-per-year Bisphenol A (BPA) production beginning April 16 this year resulted in lower depreciation and higher interest payment. Combined with the foreign-exchange loss, PPCL's performance this year was therefore not as good as last year's.

PTT Polymer Marketing Co., Ltd. (PTTPM), the main distribution arm of petrochemical products for PTT, achieved a sales record of 1,439,295 tons, a hike of 478,767 tons from last year, mainly due to higher sales of HDPE and LDPE produced from the new plants of PTTGC. As a result, PTTPM's performance this year outdid last year's.

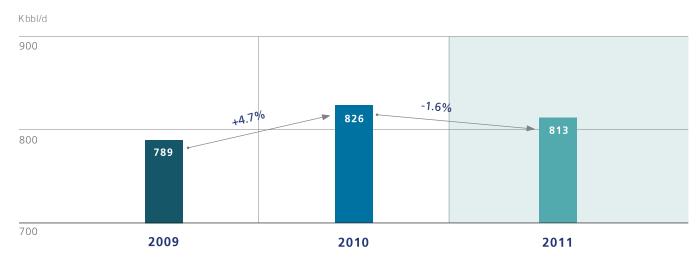
PTT Polymer Logistics Co., Ltd. (PTTPL), the fully-integrated logistics arm of PTT Group for plastic production, achieved services totaling 7,407,205 tons, a surge of 3,444,083 tons from last year due to additional services provided for PTTGC on its new production of HDPE and LDPE. As a result, PTTPL's 2011 performance improved over last year's.

For its overall refining business this year, crude imported by PTT Group for refining, including the refining unit of PTTGC, was 813 bbl/d, a drop of 13 bbl/d from last year. Considering the average equity holding in all refineries by PTT at 28%, PTT shared in the country's total refining capacity for 1,239 bbl/d. The utilization rate of the refineries owned by PTT was 78%, a drop from 79% in 2010, due to the annual planned maintenance shutdown at IRPC in November 2011 for 30 days. The average gross refining margin (GRM) and gross integrated margin (GIM) of all four PTT refining businesses stood at US\$8.95 per bbl against US\$6.93 per bbl

Sales Volume of overall Petrochemicals (Olefins + Aromatics + Plastics)



Total Refining Capacity (Imported Crude)



last year as a result of the rising market GIM, the difference between the product price and the oil price, and an increase in production efficiency. Additionally, higher gains from price risk management and stock gains at the year-end enhanced net profits from the refinery business from last year.

Petrochemical and Refining Unit Milestones

January

- Bangkok Polyethylene Co., Ltd. (BPE), a subsidiary of PTT Global Chemical Plc (PTTGC), began commercial production of 250,000 tons/year of HDPE.
 - Thaioil Plc (TOP) commenced commercial production

of 50,000 tons/year of TDAE.

• PTTGC entered a joint venture with Myriant Technologies, Inc., a leading biotechnology R&D firm from the US, to jointly develop green chemicals to pave the way for PTT to become a bio-based chemical company.

February

- PTTGC commenced commercial production of 50,000 tons/year of HDPE. Its subsidiaries PTT Polyethylene Co., Ltd., and Thai Ethanolamines Co., Ltd., also commenced commercial production of their 300,000 tons/year of LDPE and 50,000 tons/year of EA plastics.
- \bullet HMC commenced commercial production of 310,000 tons/year of PDH.

March



- PTT jointly founded a company named PTT MCC Biochem Co., Ltd., with Mitsubishi Chemical Corporation (MCC), a leading bioplastics technology development company of Japan. The joint venture aims to develop and eventually produce the chemical reactant called BioSuccinic Acid (BSA) and Polybutylene Succinate (PBS) at a rate of 36,000 tons/year and 20,000 tons/year from raw materials of molasses.
- Thaioil Marine International Co.,Ltd., a subsidiary of Thaioil Public Company Limited, entered a joint investment project with Nippon Yusen Kaisha (NYK) on the time charter of 280,000 DWT very large crude carrier (VLCC).
- TOP and Bangchak Petroleum Public Co., Ltd. (BCP), jointly invested in Ubon Bio-Ethanol Co., Ltd., to expand their alternative-energy production. The 400,000-liter/day ethanol plant is being constructed, with the use of fresh cassava and cassava chips as raw materials. Commercial production is slated for 2012 with a plan to export to China.
- IRPC introduced a new brand "Polimaxx" for its petrochemical and plastic products as the first innovation milestone for the Company.

April

- PPCL commenced commercial production of 150,000 tons/year of Bisphenol A (BPA).
- PTT Tank Terminal began commercial berthing operations with a total capacity to provide storage of petrochemical

products for import and export of 2 million tons/year.

- PTT Asahi Chemical Co., Ltd. (PTTAC) completed the construction of a 200,000-ton/year AN compound production plant and 70,000 tons/year MMA compound production plant. Plant commissioning was successfully completed with commercial production set to begin in 2012.
- IRPC introduced the IRPC Intelligent Port Service by the name of iPort, an on-line electronic system accessed by smart phone and PDA, which provides real-time information services to customers.

June

• PTT founded PTT Energy Solutions Co., Ltd., to provide engineering consultancy services to PTT Group and become a technical center of excellence for the Group. It is a joint investment of four PTT Group companies: PTT, Thaioil, PTTGC, and IRPC.

July

• PTTPM inaugurated its third dealer's office in Shanghai, People's Republic of China, to serve as a distribution center for all plastic products of PTT Group. With cooperation from Bangkok Bank Plc, PTTPM launched a Smart Chain Solution, a fully financial integrated service provider for



customers to manage its business with solid liquidity, business cost reduction, and effective time management.

September

• PTTPM in conjunction with PTT MCC Biochem and PTT introduced a new biodegradable cup for Café Amazon. This environmentally friendly product is 100% biodegradable within a year and was created under the new concept of "Go Green Everyday Everywhere".

October



- TOP launched its official marketing of all refined products with EURO IV standards, the first petroleum refinery in Thailand to produce all refined products under such standards. The launch came earlier than the enforcement date by the Thai government of January 1, 2012.
- Completed the formation of PTTGC, a new entity resulting from the amalgamation of PTT Chemical Plc and PTT Aromatics and Refining Plc, to serve as the chemical flagship for PTT Group. PTTGC is the largest, fully-integrated petrochemical and refining company in Thailand. It is registered and listed on the Stock Exchange of Thailand (SET) under the petrochemicals and chemicals sector on October 21 this year.
- PTTGC entered into a joint venture with Cargill Company from the US, a major investor in NatureWorks LLC, the world's largest bioplastic (Polylactic Acid, PLA) producer. This marked the first stepping stone in the bioplastics business for the PTT Group.

December

• IRPC, in conjunction with Kasikornbank Plc, introduced the "IRPC Global Export Insured", an innovative insurance package providing export insurance coverage of up to 100% of product value and insurance claim period at half of the existing insurance, but twice as fast. Not only can this innovative insurance reduce risk exposure, but it can also provide more distribution channels and opportunities for new customers.

International Investment Business

With very high potential in coal mining and the continued impressive performance of Sakari Resources Ltd. (SAR), PTTI made a move this year to acquire outstanding shares of Straits Resources Limited (SRL) to increase PTTI's equity in SAR. In addition, PTTI entered into a joint venture in a hydropower plant in the Lao People's Democratic Republic. This year's significant international investments are captured below:

Coal Business



PTTI, through its subsidiary PTT Mining Limited (PTTML), made a 100% share acquisition of Straits Resources Limited (later changed to International Coal Holdings Limited), a legal entity with 40% equity in PTT Asia Pacific Mining (PTTAPM), with a total investment of approximately 545 million A\$ or 16,831 million baht (at 30.88 baht per A\$). The acquisition resulted in a change of equity structure, so that PTTI is now holding 100% in PTTAPM and 45.4% in SAR. In 2011, SAR's coal production and distribution was 10.7 million tons, all of which was exported to Japan, Hong Kong, South Korea, India, and Taiwan.

Natural Gas and Liquefied Natural Gas (Gas/LNG)

PTTFLNG, a subsidiary of PTTI and PTTEP, concluded a feasibility study of the floating production and storage



unit (FLNG). The project is now at the preliminary frontend engineering & design (pre-FEED) phase. Commercial production is anticipated in 2017.

The previous investment in a gas transmission pipeline project in the Arab Republic of Egypt through East Mediterranean Gas S.A.E. (EMG) encountered the political unrest within the country this year. A number of explosions of the supplier's pipeline were reported, which resulted in a series of production halts. Although none of these explosions caused serious damage or losses of property to EMG, the sales of natural gas this year declined to only 67 MMcf/d.

Power Business

PTTI, through its subsidiary Natee Synergy Company (NSC), made a share acquisition of Xayaburi Power Company Limited (XPCL), an investor in the hydropower project in Laos. The acquisition cost was 200,000,010 baht. NSC is now holding 25% equity in the project, which is set for commercial power production in 2019.

Palm Oil Plantation and Development

This year PTT Green Energy Co., Ltd. (PTTGE), had a net ownership of 1,085,989 rai of land used for palm oil plantations. To date, the Company has completed work on 138,788 rai (net to PTTGE). The investment decision was

based on the fact that Indonesia had the most suitable geography and climate for palm oil plantations, and that the world's largest palm oil plantations were in Indonesia. The total output of Indonesian palm oil (fresh fruit bunch, FFB) is 65,306 tons. PTTGE has also conducted a feasibility study for palm oil plantation investment in nearby countries, including Myanmar and Cambodia. In support of environmental stewardship, PTTGE introduced the Clean Development Mechanism (CDM) concept and applied it to the project, including the wastewater treatment of the CPO Mill and the use of all palm materials in an optimal way. The Company has also paid special attention to look after the community under the CSR program and adopted zero-waste management for this project, as well as the production of biogas from a palm oil extraction unit for use in power generation for the plant and the community.

PTTI & PTTGE Current Investment



PTTGE signed a 77.56% share purchase agreement with Chancellor Oil Pte., Ltd. (CO), a company holding 95% of PT First Borneo Plantations (PT.FBP), an ownership of 108,000 hectares (Ha), approximately 657,000 rai, of a palm oil plantation in western Kalimantan.

Began crude palm oil (CPO) production from 14,000 Ha at Pontianak, western Kalimantan and from 7,000 Ha at Palembang, Indonesia, with a capacity of 45 tons/hour and 30 tons/hour. The total production this year was 13,000 tons.

Regarding international investments, PTT's strategy is to focus on continuous efficiency improvement and production growth for existing projects, and on consistently seeking value-adding business development opportunities with optimal use of existing manpower.

In addition to improving the performance of its business units, PTT and the PTT Group of companies were also involved in the following business activities:



• Strategic Planning Management

PTT Group, with the consent of the PTT Board of Directors, held its annual Top Executive Thinking Session

to define the direction and strategies of the Group so that its businesses can move in the same direction, create maximum added value, promote synergy, and maximize resources. The defined direction and strategies are used in the preparation of the corporate plan and the operating plan of each business unit and supporting line, both long-term and short-term. This year the direction and strategies toward enabling execution focused on high-return business expansion and operational excellence to enhance Group competitiveness, in parallel with environmental conservation, and community and social development. The monitoring process for reporting performance progress was established to adjust the strategies, business plans, and operating plans to suit changing situations to optimize value for the Group.

PTT Group's Financial Management

PTT is the largest company on SET with a market capitalization of over 908,000 million baht, or about 10.8% of total market capitalization as of the year-end. If all listed companies under the Group are included, the market capitalization of the Group would be over 1,982,000 million baht, or about 23.6% of SET's total market capitalization. PTT Group continues to grow steadily. In order to ensure a strong financial status and discipline with credit ratings compatible with industry peers, financial management must be efficient and well-disciplined, and disclosure of information to all investors must be equitable and transparent. To this end, PTT has applied its treasury and credit policy as a guideline in managing the finances of PTT and PTT Group.

This year PTT managed its financial portfolio including cash liquidity, risk management on exchange rates and interest rates to reduce costs, and/or add value to the corporation by taking the following actions:

- Issued financial derivatives to lower risks arising from its long-term loans, which resulted in a reduction of the loan cost of about 348 million baht.
- Managed its foreign-exchange risks in its commercial transactions in the import, export, international sales, and procurement of crude oil to the refineries under PTT Group, valued at 31,150 million US\$, and added value to the Group of about 1,700 million baht.



Performance Management and Efficiency Management

PTT pays extraordinary attention to the development of organizational capability toward becoming a highperformance organization through continuous improvement of its organizational efficiency and business processes to achieve the benchmark of world-class management. With the application of Thailand Quality Award (TQA) criteria to maintain its management at international standards first at the GSP in 2002, success became real with the TQA award in 2006. PTT subsequently applied the same principles to Natural Gas Transmission, which achieved the TQA award in 2010. In addition, PTT has prepared itself to adopt the State Enterprise Performance Appraisal (SEPA), a system using TQA criteria, since 2008. This year PTT, as one of the seven selected state enterprises under the Ministry of Finance's State Enterprise Policy Office's pilot study, has fully adopted SEPA. PTT has established a PTT Organization Excellence Roadmap and an organizational performance management improvement plan, including the cascading plan to all units of the organization to ensure alignment between business plans and targets, and organizational strategic direction to ensure its ability to efficiently respond to changing government policy. All these efforts have resulted in significant successes as demonstrated by the 2012 TQC awards to the Gas Business Unit, Oil Business Unit, and PTT International Trading Business Unit.

This year PTT won the Best of the Best Award, the highest prize awarded by the Ministry of Finance to outstanding state enterprises with high standards in all areas of operations for three consecutive years. PTT was also granted an innovation award for the second consecutive year and CEO of the

Year Award for three years in a row, and was honored with a listing in the Hall of Fame as a good model for the next generation.



Innovations

This year PTT successfully developed several innovative lubricating oil products, including Performa Super Synthetic Hybrid, Performa NGV (5W-40), Dynamic II Plus, Dynamic G Plus, and Challenger Synthetic 4-T, as well as special lubricating oil products for export to China. These new products were aimed to provide customers of all segments access to lubricating oil under the new standards. To cope with the EU's newly regulated emission trading scheme (ETS), PTT developed environmentally friendly Bio-Jet, a new jet fuel for aircraft to reduce the release of pollution to the atmosphere. The first test was done with a Thai Airways aircraft in December this year. Also this year, PTT successfully developed PTT Bi-Fuel ECU, specifically designed for gasoline vehicles but later changed to use NGV as engine fuel. In the petrochemical sector, PTT reached an innovative milestone with the PL A/PBS, a bioplastic material which is 100% degradable.

In other areas, PTT has implemented the use of the PTT Corrosion Inhibitor to prevent gas pipeline corrosion, which will in turn extend the pipeline's life and increase transmission efficiency. An electromagnetic machine (EM Machine) was brought in to clean emulsion residue in oil transmission pipelines and oil storage tanks to support the E&P business.

• Key Crisis Management

Gas Pipeline Leak in the Gulf of Thailand

A gas pipeline leak was reported on June 25 this year. The location of the leak was at the 24-inch T-bar connection of the Platong gas pipeline with the 34-inch main trunk line (main pipeline #1). The accident took place during field construction and installation of the 28-inch pipeline connecting the Platong Gas II facilities to the third main trunk line and associated subsea structures under the supplementary Third Gas Transmission Pipeline Master Plan, B.E. 2544-2554 (2001-2011), approved by the Cabinet to support increasing gas demand in the fourth quarter of this year, with the procurement of additional natural gas from Platong field at 330 MMcf/d. Inspection of the physical construction and laying of this pipeline was conducted by London Offshore Consultants Pte., Ltd. (LOC), a marine warranty surveyor (MWS), under the conditions previously stipulated in the construction insurance for the work during the monsoon season.

PTT immediately activated an emergency response system after the accident, including an emergency announcement and setting up of an emergency center. All operating units involved in the delivery of the gas supply chain convened to develop possible solutions and mitigation measures to reduce impacts on all users along the entire supply chain. The emergency plan also included procurement of alternative fuel sources for power producers to avoid disruption in the national power supply and sufficient public consumption capacity. Details of the operations plan are as follows:

- Converted all natural gas within and through the main, first 34-inch pipeline to the main, third 42-inch pipeline to mitigate negative impacts on the first pipeline, and to increase the gas supply in the system to compensate for the loss by 3 million liters of fuel oil equivalent per day.
- Moved immediately to procure and deliver fuel oil to power producers in compensation for the loss incurred by the incident, through cooperation with EGAT. All efforts were made to ensure there would be no disruption to the power generation and supply to the national grid.
- Increased the release of LNG from the LNG storage tanks into the piped natural gas system. Also, began to

process procurement of additional LNG to secure national energy supply.

- Made an adjustment to the GSP production management system to ensure alignment with the sudden increase in LPG imports to compensate for the loss of indigenous LPG production.
- Coordinated with all gas producers to be on alert at their operations and make sure no additional incidents occur during the crisis.

Contractors and PTT proceeded with all the repairs and reconstruction work. The offshore pipeline system was fully resumed on August 15 this year.

The activities in response to the incident includes;

- 1) Proceeding strictly with all requirements under the risk management and policy at all times.
- 2) Conducting natural gas pipeline emergency plan reviews and emergency drills annually.
 - 3) Putting in place a fuel reserve emergency plan.

PTT has conducted a lesson-learned program to improve relevant standard procedures to prevent similar incidents from recurring, and to share knowledge with all relevant stakeholders to be on alert, avoid, and prevent similar incidents. Close monitoring of the repairs and solutions was carried out to assess the efficiency and effectiveness of operations.



The Great Floods

PTT fully recognized the severe and widespread damage and loss caused by the flooding crisis. The management of PTT exerted all efforts to provide assistance and ease negative impacts on the public, including its staff, and to continue or resume its operations using the measures summarized below.



Energy Security

With its direct responsibility for national energy security, PTT and all of its business units activated the emergency plans on energy procurement, product distribution and storage, delivery and shipment, and the disaster management plan if the situation escalated to impact PTT operations directly, as well as cooperation and communication with business partners and customers to be aware of PTT's plans.

• Precaution Measures and Crisis Response

PTT executed its precaution measures in response to potential crisis as follows:

- Set up a PTT emergency management center (EMC) to closely track the flooding and possible impacts on operations of PTT and the Group. The center also provided 24-hour assistance to the public and injured people.
- Coordinated closely with the government-operated emergency center and conducted a periodic assessment of the situation
- Adopted the use of a tracking system to support rescue operations and monitoring of daily operations.
- Executed facility protection with strips of sandbags and flood prevention, including putting manpower on standby for situation monitoring and elevating flood barriers.

• Business Continuity Management (BCM)

PTT's BCM plans are:

- Made adjustments to ensure no disruption of fuel supply to the affected areas. Additional land transport to supply LPG and rearrangement of the LPG terminal delivery system were made in a timely manner to secure LPG supplies to Northern provinces when the rail system was disconnected due to the floods. A change of 91-octane gasoline delivery point from the northern and northeastern terminals to Thaioil and



SPRC refineries was another emergency measure to ensure a sufficient supply of gasoline in the market.

- Set up evacuation plans and evacuation centers such as the Phra Khanong Center and Rayong GSP. The plan was developed as a backup to ensure business continuity with all operations and customers.

• Flood Relief Disaster Management Plan

As the national energy company, PTT recognized the suffering of the public and set up a PTT Group Flood Relief Project to provide help to the public and injured parties. The project was executed in three phases: preventive, remedial and relief, and restoration.



- Preventive phase activities included distribution of sandbags, drinking water, flood prevention handbooks, and emergency kits
- Remedial and relief phase activities included immediate rescue operations, setting up emergency assistance centers in Ayutthaya, Ang Thong, Nakhon Sawan, Phitsanulok, and Sara Buri, as well as Thammasat University, Rangsit Campus, and supporting the manufacturing of "little duck electrical leak warning", as an electrical leak-detecting device for the public and especially for rescue workers to protect themselves from electrocution.
- Restoration phase activities included the setting up of restoration centers and mobile units to provide flood-affected

communities with general assistance, including renovation, repair, and cleaning of government offices, temples, schools, and inspection and repair services for electrical appliances, cooking gas tanks and accessories, agricultural machinery, haircuts, physical health and environment-related care, vocational training, EM Ball production, and multipurpose cleansing solutions. Additional free services were provided for vehicles used during the floods at service stations in all affected provinces. Moreover, all PTT products, including gasoline, diesel, LPG, and lubricating oil were sold at special discounts.

- In addition to the social programs, PTT Group, Ministry of Energy, and EGAT jointly launched an emergency restoration program for industrial estates affected by the floods. Several large water pumps installed on floating rafts were deployed to remove floodwater from areas for quick restoration, which would directly benefit national economic resumption.

It should be noted that PTT bravely went through this crisis successfully as a result of the power of sacrifice, unity, and cooperation among all members and supporters of PTT Group.



Strategies and Business Directions of PTT Group

The PTT Group has defined a vision that focuses on consistent, sustainable growth in order to become a Thai Premier Multinational Energy company under strategic sustainable growth in 3 principles: continuous organizational performance management toward an organizational excellence (High-Performance Organization: HPO), corporate governance (CG), and responsibility to society, community, and the environment (Corporate Social Responsibility: CSR). In addition, PTT operations are strategically executed to create sustainable business values, reduce costs and increase profits, and continuously build competitiveness. Details of these efforts are summarized below.



Strategies to reduce costs, increase profits, and continuously build competitiveness:

- Performance: Best-in-Class to achieve operational excellence, increase operational efficiency, reduce costs, and enhance energy/petrochemical security.
- Synergy: Deeper and broader collaboration to forge synergy and cooperation among PTT Group in a broader and deeper dimension, to reduce costs and increase competitive edges, to ensure that investments and operations enjoy an advantage in economies of scale, to share resources, to jointly carry out research and technological development, to ensure the adequacy of business data management, and to promote knowledge management and knowledge sharing.

• Strategies regarding sustainable growth and value creation

- Growth: Sustainability and innovation to promote sustainable business growth and innovations in products, processes, and the business model to accelerate growth. The PTT Research and Technology Institute will be the core unit coordinating the R&D of all innovations for PTT and the Group.
- Stakeholder Excellence: Multi-stakeholder balance was to create excellence in managing stakeholders and providing equitable balance among all parties. With the nature and sizes of PTT's businesses, impacts on stakeholders are inevitable. In order to drive the organization and the business to achieve their visionary targets, strategic directions and objectives, PTT needs to gain the trust and confidence of all stakeholders.

To achieve its vision and strategic objectives, PTT Group has defined the business direction and objectives of each

business unit during the PTT Top Executive Thinking Session (TTS) and relayed this information to its Group executives in the PTT Strategic Thinking Session (STS). The goal was to define strategies and initiatives to achieve the defined vision and strategic objectives, and to use them as a framework and guideline for all business units, including supporting lines and other companies within the Group, in preparing their five-year business plans. The TTS, in 2011, has defined the future business direction of PTT Group as follows:

- 1. Achieving "BIG" Aspiration: Growth: This can be achieved through business expansion in various geographical areas simultaneously with business development in other energy sources, diversification to related businesses relevant to the supply chain, and proper risk management and investment priority. Under the new approach, PTT has developed a business portfolio divided into the Resource Owner group, the Value Creator group, the Optimizer group, and the Green Energy group.
- 2. Achieving "LONG" Aspiration: Sustainability and Green Growth: Given the sizes and nature of PTT businesses, which are prone to environmental concerns, PTT has been facing several challenges, including 1) industrial challenges, irregular changes, uncertainties, complexities, and ambiguities, 2) the public outcry toward global warming and its call for increasing of the green energy business, 3) higher expectations from the public for more social contributions from PTT, and 4) government policy to control LPG and NGV prices, which directly affects PTT's business performance.
- 3. Achieving "STRONG" Aspiration: Functional Excellence: This will drive PTT Group toward recognition of being a company in the top quartile of world's leading energy companies in 2020. PTT Group has therefore defined development strategies to drive the organization with operational excellence to build and maintain its capability to compete in the international arena.

Both TTS and STS outcomes are reviewed, and directions and strategies are revised each year to reflect the changing economic conditions, energy situations, and petrochemical industry situations, as well as internal factors that might affect its business in the future.

Power for Sustainable Future





Sustainability through sufficiency ways, supported by a united spirit to jointly restore Thailand

Throughout its existence, PTT Group has been committed to its missions toward each of its stakeholders, recognizing its role as the national energy company, which have responsibility to create sustainable energy security and prosperity for the nation with three aspects of management balance: being a high performance organization committing to good corporate governance, and having social responsibility. To this end, PTT has focused on good practices in compliance with international standards as framework and with a goal of becoming a Thai Premier Multinational Energy Company. Early in 2012 PTT has achieved one of its goals by being ranked 17th on Dow Jones Sustainability Indexes (DJSI).

This year, PTT Group consistently accomplished its missions to take care of the Thai people and participated in highly auspicious national events on the grand occasion of HM the King's 84th birthday anniversary. PTT and its alliance network humbly presented their accomplishments based on the implemented Sufficiency Economy philosophy under HM the King's initiative so as to turn it into community ways that strengthened communities to self-reliance. When several regions of Thailand faced the most devastating floods in recent history, PTT Group forged synergy among Thai energy companies to show its determination to work alongside Thais, in good times and bad, by confronting the crisis together with them, relieve hardship and restore livelihoods, and provide moral support to victims. This move is a proof of the power of unity and Thai hearts, which enabled us all to make great strides toward our future.

Sustainability through sufficiency ways

Under the Reforestation in Honor of HM the King Project on the 50th Anniversary of the Accession to the Throne, involving 1 million rai of land, in which PTT and Thais applied a royal initiative to the preservation of national forests, massive reforestation began in 1994. PTT completed the targeted areas and humbly presented the achievement to HM the King in 2002. Such was a page in history that illustrated Thais' unity and allegiance as a tribute to the monarchy. PTT then



extended this success to various environmental projects to produce manpower and communities that can continuously look after their forests and create natural prosperity and balance for Thailand's sustainability.

In order to carry out the 84 Tambons on a Sufficient Path Project, PTT applied HM the King's initiative by transfering knowledge to nine pilot communities in 2007 and expanded it to 87 communities in 58 provinces throughout the country this year. Each community now appreciates the true meaning of "sufficiency" through learning and changing people's mindset. What resulted were stronger communities, able to defend themselves, and their true contentment. In view of the success, PTT introduced the collection of "sufficiency" knowledge to the urban community through the "Mindset Change to Sufficiency for Sustainable Happiness" activity and establishment of a website called www.84tambonsforking. com to urge all Thais to learn and practice together the true meaning of "sufficiency." One can study and experiment by oneself-model people's and communities' profiles, self-analysis, and simple household accounting. Moreover, "sufficiency ambassadors" stationed in each of five pilot areas, and joint resolution-making for "mindset change" as a tribute to HM the King on his 84th birthday anniversary. These activities attracted over 900,000 persons.

PTT humbly presented the "Sufficiency Tambon" collection of knowledge derived from the project to HRH Princess Maha Chakri Sirindhorn on her gracious inauguration of an exhibition called "United Thais Pay Tribute to HM the King: Wonders of Sufficiency", held at PTT Head Office on August 31st this year. For wider publicity and sustainable happiness, PTT staged the exhibition at the Bangkok Convention Hall, CentralPlaza Ladprao, from August 31st to September 4th this year.













Sufficiency ways, supported by a united spirit to jointly restore Thailand

Thailand's Great Floods, spanning September to December 2011, ravaged 26 provinces of the North to the Central Region, affecting about 700,000 households or 2 million people. Devastated were lives, properties, productivity, industrial plants and factories, domestic investment, and national economic security.

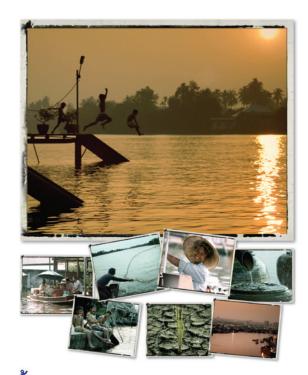
To deal with this emergency, PTT Group activated its business preparedness by safeguarding vital sites from impacts or minimizing impacts. While some PTT facilities and some employees were affected, PTT Group, as the national energy company, persisted in performing duties of securing energy supply—not only to ensure that Thailand would have access to energy supply, but to ensure that the mission of "the power of care" by helping others through various channels (public agencies, the military, the private sector, and the mass media) was duly supported.

Meanwhile, an ad hoc plan was devised by PTT Group to coordinate help under the "PTT Group Unites Thai Power to Relieve Flood Victims" project (for Phase 1 and Phase 2) and the "PTT Group Unites Thai Power to Rehabilitate Flood Victims" project (for Phase 3).

Phase 1 (prevention): Emphasis was on helping those in risky areas to remain prepared for the floods by securing sand bags, drinking water, and preparedness & response manuals for distribution to the target groups and funding them through the public sector.

Phase 2 (remedial and relief): Emphasis was on providing urgent essential items, including more than 100,000 survival bags

and canned food along with more than 1 million bottles of drinking water, and setting up 11 assistance centers in eight provinces, namely Nakhon Sawan, Phitsanulok, Ayutthaya, Lop Buri, Sara Buri, Ang Thong, Pathum Thani, and Samut Prakan. Employee teams took turns visiting these centers to serve the public every day by providing boxed meals, drinking water, mobile toilets, mobile phone charging, physical examinations, haircuts, and lessons on EM ball molding. An average of 2,000 people per day eased their hardship at such centers.



น้ำเป็นเพื่อน เป็นที่พึ่ง เป็นความหวัง เป็นผู้หล่อเลี้ยงชีวิค เป็นวิถีทำกิน...

แค่วันนี้ เรากลับมองน้ำเป็นผู้ทำลาย

ชีวิคที่เปลี่ยนไป อาจทำให้ความรู้สึกที่มีค่อสายน้ำไม่เหมือนเคิม แค่เราเชื่อว่า เพียงเขียนรู้ที่จะอยู่กับธรรมชาติอย่างเกื้อกูล สายน้ำที่เรารักและผูกพัน จะกลับมา สวยงามเหมือนเคิมและอยู่กับเราอย่างยั่งขึ้น



Besides these, a program was launched to supply PTT fuels to ease flood victims' plight (which was a part of the Family Love Engagement Project), in which a caravan of tank trucks carrying more than 400,000 liters of gasoline and high-speed diesel, along with 30,000 liters of lubricants for boat enginestotaling Baht 25 million in value-was dispatched to PTT service stations in Ayutthaya, Sing Buri, and Sara Buri to fill 15-liter tanks used in relief efforts by disaster mitigation units in various areas. Then there was support to a project called "Government United to Relief Victims throughout Thailand", in which

13,200 liters of 91-octane gasoline was put into 18-liter tanks to facilitate the public sector's relief missions.

PTT mobilized a mobile energy service unit by modifying oil trucks into caravans selling low-priced fuels (91-octane gasoline and high-speed diesel) around areas of high flood levels around Bangkok and its perimeter, especially those with demand for boat fuels or with large water pumps and vehicles. Direct filling or filling of five-liter or 18-liter tanks were possible. PTT also dispatched two 5,000-liter oil trucks to serve communities that stayed put, including those on Rama II Road, Rom Klao Road, and the Eastern Ring Road of Bangkok, and secured two 15,000-liter oil trucks to serve in place of flood-suspended service stations on Ram Indra Road and Nakhon In - Rama V Road, also in Bangkok. It launched boats selling household LPG at discounted prices for those living on Buddhamonthon 5 Road and launched sales outlets at 14 PTT service stations in Bangkok and its perimeter, where 15-kilogram LPG tanks could be exchanged.

Stage 3 (restoration): PTT Group speeded up a project to revive properties and mental health of affected people by setting up rehabilitation centers of two types (main centers and mobile centers) in six provinces and joined external volunteer clubs and PTT employees from PTT Volunteers Club in cleaning public places, temples, educational institutions, and communities for a prompt return to their working conditions. It launched other assistance programs, including the complimentary PTT Engine Tune-Up program at 100 PTT service stations in 21 affected provinces, lubricating oil and LPG at special discounts, distribution of 2 million EM balls to neutralize floodwater, and an invitation for the public to join in EM ball molding and EM ball distribution to affected areas.

In addition, PTT Group provided help in other forms, including the PTT Group Seal program, designed for safe evacuation mission of employees and the public from their homes, and the Little Duck Detector program featured an electrical leak detector in flooded areas. Others included donated water filters for drinking water, excretion bags, an emergency light program (in which a light bulb was connected to the cooking gas tank to provide makeshift illumination), and a program to clean LPG outlets and other flood victims by using high-pressure water jets/sprays to ease dealers' rehabilitation efforts.

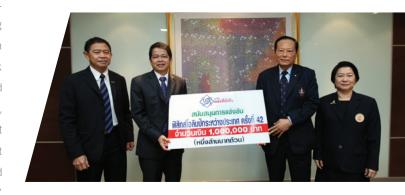
Thanks to PTT's background of contributing to community and social development based on their own potential in a sustainable way, PTT encouraged its alliance network to earnestly and continually join its social responsibility activities under six frameworks, namely education and youths, community development, biodiversity management, town environmental development, network development to make a name for Thailand, and cultivation of volunteering spirit among employees.

Education and youths

PTT produces smart and conscientious youths in science and energy fields by valuing comprehensive aspects of educational development, ranging from laying down infrastructure, developing schools' quality, giving educational opportunities, skill training, to cultivating virtue and ethics to develop the country. Below are PTT Group's efforts this year:



• PTT scholarships: These 2,000 scholarships (worth 6.5 million baht) were given to primary-level to college education students, provided that needy youths from schools near PTT's operation sites across the country commanded decent academic records.



• Sponsorship of the 42nd International Physics Olympiad: This contest gave Thai youths an international forum for showcasing their talents.



• PTT enriching youths' quality of life (also known as 5S Schools Project): This program has educated students on 5S since 1997. To date, 42 schools have joined.



• School building and library construction: This year PTT was engaged in two schools: Ban Cho Krathin Patthana School in Nakhon Sawan and Ban Krok Yai Cha School in Rayong.



• Thai energy for Thais Library construction: A 28th library was dedicated to Ban Huai Kood School of Phrae, and library books were donated to 78 Group network schools across the country, worth some Baht 1.8 million.

- PTT Youth Camp 2011: In its third successive year, the camp enriched 120 college students' knowledge of science and energy.
- Intellectual Seeds, Saplings of Hope: This program developed Rayong's primary educational system for sustainable development.



• PTT Comic Contest: This contest supported education of alternative energy and energy-conscious consumption by youths.

Community development

This community strengthening focused on sufficient ways of life with a view to self-reliance. Since 2007, PTT Group has executed the 84 Tambons on a Sufficient Path Project, expanding from nine pilot communities to 87 tambon in 58 provinces this year in line with the project goal that aspired for each community's self-realization and discovery of their potential, ready to propagate communities' concepts so as to produce mutual learning.



Biodiversity

Participation by all society sectors is a key factor for the collective success of conserving and restoring biodiversity resources. PTT Group is continuing the project, involving communities and society in a sustainable manner.



• Environment: From the origin (The Reforestation in Honor of HM the King Project on the 50th Anniversary of the Accession to the Throne), PTT expanded the success to the cultivation of

awareness for environmental conservation and created a network of forest stewards through the PTT Youths to Conserve Forest Program, the forest Wildfire Volunteer training project, and the People Volunteer for Forest Protection training project-all these to serve as a key force for forest stewardship from one generation to another. In addition, PTT this year staged the Green Globe Award contest in its 13th successive year to promote its network of environmentalists under the "Sufficiency Ways, Sharing and Caring for Soil, Water, and Forests" theme. A related activity in which employees engaged themselves was mangrove reforestation at the Khlong Khone Mangrove Forest Conservation Center in Samut Songkhram to enrich the fertility of mangrove forests and maintain ecological balance.





• Conservation of soil and water: Designed to promote vetiver planting, the contest on the development and campaign for vetiver application in line with HM the King's initiative was continued by the PTT Group for six successive years. The Group developed vetiver into a value adder while encouraging communities to successfully develop their product designs and production to generate income for communities. The community vetiver products have become regular sales items of Pat Pat shop, the realization of the vitiver benefit has resulted in the number of communities making use of vetiver to protect soil and water.

PTT's consistent development work on vetiver application has earned it The King of Thailand Vetiver Award bestowed by HRH Princess Maha Chakri Sirindhorn, for outstanding promotion and technology transfer by a private entity in the 5th International Vetiver Seminar held in India.

• Promotion of learning: PTT Group developed the Sirinath Rajini Center for Mangrove Forest Studies on 786 rai at Amphoe Pran Buri, Prachuap Khiri Khan province, into a virtual archive of the redemption of forests from a crisis and a narrative of the lessons learned from yesteryears. The center will serve as a base for further cultivation and restoration of mangrove forests, as well as future integrated management of natural resources. In 2011, there were 55,669 visitors to the center.



• Research works: PTT joined a project on development of knowledge and investigation of Thailand's policy on biological resource management in the first-ever national study of holistic ecological research from the coast to the mountain peak. This "Project on Biological Resource Management from the Coast to the Peak (Khanom - Khao Nan)" studied the biodiversity of the cloud forest of Khao Nan National Park, Nakhon Si Thammarat. This area, sensitive to global temperature change, is also a main watershed. The project created a body of fundamental knowledge, developed personnel and researchers, and supported research and dissertations numbering 23 pieces through team expeditions. Such information yielded information on 1,587 species that represented the discovery of new organisms of the world and Thailand, and that of rare species and near-extinct ones. Equally important, these species have played a key role in explaining the impacts of global warming on biodiversity changes.



Also, in 2011, PTT was a second place winner of Asean Champions of Biodiversity, from Asean Centre for Biodiversity in the Philippines, for its continuous works on biodiversity preservation in Thailand.

Town environmental development

Fully recognizing its good citizen role, particularly that in Map Ta Phut, Rayong province-both a home and a vital production hub-PTT Group takes very seriously operation with social responsibility, earnest and consistent participation with communities, and looking after and developing the quality of life for the local community to be truly satisfactory and contented. To this end, the Group executed its development plan in three aspects: promotion of the quality of life, addition of green areas, and support to education.

• Promotion of the quality of life: The Group has long run a program called Community Sharing and Mobile Clinic to provide complimentary basic medical care, and another on promotion of community enterprises to strengthen community livelihoods, and analyze and develop their capability to match community needs.



youths to pursue their college study. The target group was schools

in areas where PTT units were located.



• Addition of green areas: This year the Green Rayong program has expanded its green areas by planting a 42-rai "forest park" as a tribute to HM the King on his 84th birthday anniversary at Wat Krok Yai Cha while looking after trees in communities and various Group-operated areas, including a 780-rai area around the Rayong Child Welfare Home, with continual monitoring since 2008. The Princess Maha Chakri Sirindhorn Herb Garden continued to serve communities and public visitors to the garden and its activities. This year it welcomed more than 300,000 visitors, generating more than 20 million baht in income for communities.



Besides looking after society and communities on behalf of PTT Group, PTT joined other companies located in Map Ta Phut in setting up a Community Partnerships to establish standard systems for running safety, health, and environmental operation even better than legally required, to develop model environmentally friendly plants, and to promote the quality of life for communities through health and education so that Rayong can serve as a model of livable towns. This year the initiative presented 200 nursing scholarships, worth 12 million baht, to students who were interested in pursuing the nursing profession and wished to work in the area. Besides easing the shortage of local medical professionals, this move will upgrade public health service for Rayong residents. Finally, the initiative has launched a program to tutor youths for university entrance examinations to raise their chances of gaining admission to universities.



Network development to make a name for Thailand

PTT Group is committed to making a name for Thailand through a positive image and bolstering confidence in Thailand's stability among the world community. To achieve this, PTT has continually sponsored national and international activities-whether sports, arts, or cultural.

• **Sports**: Besides sponsoring various sports associations to raise standards of Thai athletes at the local and national levels, PTT has carved national sports development opportunities through the PTT Invitational 2011 soccer competition to prepare and upgrade the PTT Rayong team, formed in 1983, to step up to the professional level, whether that of Thai Premier League or international premier leagues.



This year PTT hosted and co-hosted world-class tournaments, including an ATP male tennis tournament (PTT Thailand Open 2011) and a WTA female tennis tournament (PTT Pattaya Open

2011), a youth tennis tournament (PTT Junior Championships 2011), a world-class female golf tournament (Honda LPGA Thailand 2011), the 8th Khon Kaen International Marathon race, and a Thai boxing competition (the 2nd Thai Fight).



The Company also sponsored a polo horse race (Asian Beach Polo Championship B. Grimm-Intercontinental) to raise funds in support of the "Kamlang Chai (Morale Support)" project under the initiative of HRH Princess Bhachara Kittiyabha, designed to help the underprivileged in Thai society.

This year PTT organized a third PTT Sports Lovers activity to enlist youths nationwide to gain experience and improve their sports skills with professional athletes in the PTT Thailand Open 2011 tennis tournament. This move promoted youths' capability while educating them on the rules and etiquettes of world sports. To grow volunteering spirit in Thai youths, PTT engaged them in coral breeding at the Air and Coastal Defence Command in Amphoe Sattahip in Chon Buri.



• Arts: PTT staged an arts exhibition on its 25th anniversary, entitled "Art: The Power beyond Infinity", together with an auction of 19 drawings by national artists, half (3.16 million baht) of the proceeds of which was humbly presented to HM the King. PTT and Silpakorn University organized the 26th PTT Arts Contest under the "84 years ... King Bhumibol the Great" theme and continued its arts contests at regional levels-for the 12th year in the North with Chiang Mai University, the 8th year in the South with Thaksin University, and the 6th year in the Northeast with Khon Kaen University.



• Cultural: PTT joined in the restoration and conservation of the Poo-cha drum-beating tradition by organizing in Lampang province the 10th Poo-cha Drum-beating Festival in honor of HM the King. It also organized the ninth PTT youth camp for Poo-cha drum-beating conservation, engaging more than 100 youths from schools in 13 districts of the province to attend the camp to master drumming from drum experts at Sao Lang Pagoda.

Cultivation of volunteering spirit among employees

PTT Group's policy is to grow a value for the awareness of social responsibility participation by allowing employees to spend at least four hours a year each in undertaking CSR activities through the Power of Thai Volunteers club, including mangrove reforestation, packing survival bags, or other public service activities and social projects. This represents participation in activities over and above their professions. Employees are free to bring their family members to participate as part of PTT Group's volunteer families-a nice way to boost morale among the Group from one generation to another, and to foster volunteering spirit in Thai families.

PTT Group's social responsibility role today implies not only the total dedication of its employees, but also a brimming collective force of the network of all Thais who joined one another in bringing out the best in Thai society with their common spirit and aspiration: sustainable happiness and strength of Thailand and Thai society under the moral authority of our beloved monarch.





Quality, Security, Safety, Health and Environmental (QSHE) Management for Organizational Excellence

On its stride toward becoming a sustainable organization with management excellence, PTT has laid a firm foundation for its operation, which includes quality, security, safety, health, and environmental (QSHE) management, by applying fundamental international management standards. These consist of ISO 9001, ISO 14001, ISO/IEC 17025, and TIS/OHSAS 18001 in all facilities and key work processes under the framework of the PTT Group QSHE policy and the PTT Group SSHE Management Standard (PTT Group SSHE MS), defined as the operating approach for PTT Group so as to reinforce its foundation.

With results already felt in each of its facilities, work processes, and subsidiaries of PTT, this year the company stressed its assorted management aspects more clearly to add efficiency and effectiveness to link to its sustainability goals. These are captured below.







Policy revision and facility-level strategy formulation

The first QSHE policy was announced for PTT Group implementation in 2010. This year the policy was reviewed as planned by looking at the Group's past performance, aspiration, and expectations of all stakeholders. What emerged was a policy content revision, marked by specific statements illustrating more clearly PTT Group's commitment, particularly that to product responsibility and green products. Added was a framework for implementation in major aspects of the oil and gas industry, including

biodiversity and greenhouse gas emission management, apart from total quality management through efficient quality management tools and work processes.

Yet, the policy and directions defined by corporate PTT provide an overall management framework of general matters or areas, which may prove inadequate for issue management dealing with environmental and social impacts of Map Ta Phut, Rayong, last year. The Petrochemical and Refining Business Unit has therefore cooperated with PTT Group units in charge of safety, health, and environment and those with plants located at Map Ta Phut-a total of nine companies-so as to investigate and formulate an environmental management strategic plan, made up of a vision, goals, strategic objectives, development project, and work processes. This move integrated knowledge of the environment with a social context to bring about innovations for environmental development to serve as a common standard for the Petrochemical and Refining Business Unit while aligning with the QSHE policy and strategic plans of PTT Group.



Extension of Quality Management System (QMS) implementation

Thanks to the desire to put in place sustainable operating standards for PTT, which add efficiency and minimize potential human errors in its operation, the Gas Business Unit extended QMS to all office units by integrating the TQA (Thailand

Quality Award) framework into QMS from day one, out of its need to meet customers' and stakeholders' needs and satisfactions and result in organizational management excellence, work process improvement, and personnel development to the point of leading the organization. PTT's policy is to develop QMS for the entire PTT by the year 2014.



Extension of PTT Group SSHE MS and acceleration of its application

Today, all business units and facilities are operating and have SHE certification under ISO. However, desiring PTT Group SSHE MS to serve as a fundamental requirement for all within PTT Group to observe in order to manage risks and SSHE impacts, PTT has defined a strategy to accelerate the application of PTT Group SSHE MS in supporting units as well as business units. To this end, it launched a management communication and preliminary assessment to identify gaps of current operations against requirements. The findings are then used to formulate a relevant implementation plan for each business unit, work group, and supporting unit that is conducive to quick improvement. This year, this work was done in many work groups and facilities, namely Supply and Terminal, Natural Gas Transmission pipelines, NGV Operations, Project Management (Gas Business Unit), service stations, PTT Research & Technology Institute, and supporting units (both corporate and business units), together with PTT Group companies, namely IRPC Plc, PTT Global Chemical Plc (Refinery), PTT Phenol Co., Ltd., and PTT Asahi Chemical Co., Ltd.



In addition, the company has developed standards and key operating procedures, trained, and communicated matters to relevant PTT Group executives and employees through several methods and channels, including a seminar on the gaps identified from the preliminary assessment, train-the-trainer program, distribution of articles, publicity, and introduction of standards during SSHE meetings/training.



Extension from fundamental management systems to specific management systems

TIS 22301-2553 (2010): Business Continuity Management

Apart from the mission of sustained national energy security, if any crisises with potential impacts on its overall business

should happen, PTT can systematically and efficiently manage and keep its operation going - thanks to the so-called Business Continuity Management (BCM). To achieve this, PTT develops proactive action plans to accommodate any situation, including a business continuity plan, a crisis management plan, a disaster recovery plan, a human resource plan, a work area recovery plan, and a site recovery plan. This move has enabled PTT to operate uninterruptedly and avoid affecting stakeholders under any circumstances, as seen in the offshore gas transmission pipeline leak and the Great Floods of late 2011. This year, PTT Head Office and supporting units have applied and sought certification of its business continuity management under TIS 22301-2553 (2010) from MASCI (Management System Certification Institute (Thailand)). It is now the sole certified company in Thailand, an illustration of the capability and competency for organizational management that has efficiently overcome all crises.



ISO 50001: Energy Management System

Energy management being one pivotal issue of the oil and gas industry, PTT is convinced that sustainable energy management must result from the awareness of its own personnel, which is why PTT keeps promoting competency development and awareness of energy among its people. In addition, for even more systematic management, PTT plans to extend its environmental management system to achieve ISO 50001 (Energy Management System) in its various operations. Serving as a pilot entry, the Gas Separation Plant (GSP) in Rayong had been constantly committed to energy management, resulting in Southeast Asia's lowest production cost according to a study by The Collaborative Business Experience: Capgemini Worldwide. The GSP also won the Thailand Energy Awards 2010 (Energy Conservation) for outstanding controlled plants, presented by the Ministry of Energy, and the ASEAN Energy Awards 2010 (first runnerup) for outstanding energy management in a sizeable plant, presented by the ASEAN Centre for Energy. The GSP has now passed stage 1 verification for ISO 50001 and is due to seek certification by 2012.

Product Carbon Footprint

The product carbon footprint is another mechanism to help an organization recognize how much greenhouse gas emission is created during each stage of product life-cycles, ranging from product extraction, processing, transporting, application, to waste disposal. The information obtained is then used in properly planning product designs and management of greenhouse gas emission for each stage. This year, PTT launched its carbon footprint assessment of the PTT Performa Super Synthetic API-SN OW-30 lubricant by applying the procedures under TGO (Thailand Greenhouse Gas Management Organization, Public Organization). The findings, in tons of carbon dioxide equivalent, for the life-cycle of the product, are being reviewed by an external verifier before seeking certification in 2012. PTT plans to extend its study to other products.



Efficiency improvement and reliability of SHE document filing and performance reporting

PTT Group jointly upgraded its SHE document filing and performance reporting in the hope of illustrating the efficiency of natural resource consumption and proper, prompt environmental impact mitigation on the same database. In 2011, it has developed information systems into a PTT Group SSHE Performance Database (Web Application) for easier information-recording in uniform formats throughout the Group. Also, it was hoped that the data acquired from the system can be processed and compared with environmental and safety performance with industry peers and with best-in-class performance, as well as the goals to be defined by PTT Group.

This move will bolster confidence in the accuracy and reliability of information for efficient planning and strategic management for the environment and safety so as to prepare PTT for external verification. It will be an impetus for PTT's acceptance and trust by communities and society at large. This year, PTT has assessed the reporting and prepared for processing information on its environmental and safety performance, together with PTT Group's greenhouse gas inventory, to find opportunities for improvement. Information recording and computation are to follow relevant international standards,

encompassing the levels of information collection and reporting from corporate, business units or companies, departments, and facilities.

For details on QSHE management and performance, please read PTT Group's social responsibility report 2011.

Financial Status

and Performance

PTT and its subsidiaries' performance

Unit : Million Baht

	2010	2011	Inc. (Dec.)
Sales and service income	1,898,682	2,428,165	27.9%
EBITDA*	170,330	210,748	23.7%
Share of net income from investment in associates	18,816	29,463	56.6%
Gain (loss) on foreign exchange	6,362	1,266	(80.1%)
Earning before interest and tax (EBIT)	123,625	155,430	25.7%
Income taxes	33,961	43,231	27.3%
Net income	83,992	105,296	25.4%

Note: *Earnings before finance costs, income tax, depreciation and amortization including other non-operating income and expenses

Sales revenue of PTT and its subsidiaries in 2011 was 2,428,165 million baht, increasing from 2010 by 529,483 million baht or 27.9%. This was mainly due to the increase in the sales volume and selling prices in relation to the rise in global market prices (The average Dubai crude oil price increased from 78.0 US\$ per barrel in 2010 to 106.2 US\$ per barrel in 2011). The increase in sales volume, especially in gas business as Ethane Separation Plant (ESP) and Gas separation plant unit 6 (GSP 6) stated their commercial operation in July 2010 and January 2011, respectively, leading to earnings before finance costs, income tax, depreciation and amortization including other non-operating income and expenses (EBITDA) increased from 2010 at 170,330 million baht, by 40,418 million baht or 23.7%, to 210,748 million baht in 2011. In addition, share of net income from investments in associates in 2011 was 29,463 million baht which increased from 2010 by 10,647 million baht or 56.6%, resulting mainly from improved performance of olefin petrochemical associates due to higher sales volume of almost all products from the commercial operation of Ethane Cracker, High Density Polyethylene (HDPE) unit and Low Density Polyethylene (LDPE) unit of PTT Polyethylene Company Limited (PTTPE) (a subsidiary of PTT Global Chemical Public Company Limited) started commercial operation on December 1st, 2010,

January 1st, 2011 and February 1, 2011, respectively. Furthermore, selling prices increased, especially Monoethylene Glycol (MEG) spread margin of which was higher compared with 2010 due to the higher demand in MEG which is a raw material in polyester production and less supply of MEG from fire incident at an ethylene plant in Taiwan. In addition, the performance of aromatics petrochemical associates also improved, especially spread margin of Paraxylene. In the first half of 2011, Paraxylene price increased due to tight supply after Tsunami in Japan, a big Paraxylene producer in the world, as well as planned and unplanned shutdown of Paraxylene plants in the region for scheduled maintenance and fire incident. However, those plants were able to resume their productions in Forth quater. The performance of refining associates in 2011 improved, compared with 2010 as the GRM rose in relation to the increase in oil demand, tightened supply from the political unrests among the oil producing and exporting countries, and Tsunami in Japan. However, in 2011, the gain on foreign exchange of PTT and its subsidiaries was 1,266 million baht, decreased by 5,096 million baht from 2010. As a result, the net income of PTT and its subsidiaries increased by 21,304 million baht or 25.4% from 83,992 million baht (or 29.58 baht per share) in 2010 to 105,296 million baht in 2011 (or 36.91 baht per share).

PTT and its subsidiaries' financial performance comparison by business group

Unit: Million Baht

	2010	2011	Inc. (Dec.)
Sales & Services	1,898,682	2,428,165	27.9%
Exploration & Production	140,656	169,646	20.6%
Natural gas 1/	357,018	412,801	15.6%
• Oil ^{2/}	480,700	558,524	16.2%
 International Trading 3/ 	1,061,694	1,427,552	34.5%
 Petrochemical ^{4/} 	46,459	75,171	61.8%
• Coal ^{5/}	24,652	30,851	25.2%
• Others ^{6/}	2,014	2,909	44.4%
• Elimination	(214,511)	(249,289)	(16.2%)
EBITDA	170,330	210,748	23.7%
 Exploration & Production 	101,839	118,012	15.9%
Natural gas 1/	47,212	62,195	31.7%
• Oil 2	12,126	13,224	9.1%
• International Trading 3/	2,353	3,290	39.8%
 Petrochemical ^{4/} 	1,199	3,778	n.m.
• Coal ^{5/}	5,362	9,275	73.0%
• Others ^{6/}	49	646	n.m.
• Elimination	190	328	72.6%
EBIT	123,625	155,430	25.7%
Exploration & Production	69,536	84,480	21.5%
Natural gas 1/	37,955	46,992	23.8%
• Oil 21	9,717	10,781	10.9%
• International Trading 3/	2,342	3,277	39.9%
• Petrochemical 4/	831	2,894	n.m.
• Coal ^{5/}	3,936	7,204	83.0%
• Others ^{6/}	(884)	(528)	40.3%
• Elimination	192	330	71.9%
Depreciation and amortization	46,705	55,318	18.4%
Finance costs	16,803	18,042	7.4%
Gain (Loss) on foreign exchange	6,362	1,266	(80.1%)
Income taxes	33,961	43,231	27.3%
Net income	83,992	105,296	25.4%
Earnings per share (Baht/share) 7/	29.58	36.91	24.8%

Notes: 1/Including the natural gas business, the consolidation of PTT Natural Gas Distribution Co., Ltd. (PTTNGD) and PTT LNG Co., Ltd. (PTTLNG),

Combined Heat and Power Producing Company Limited (CHPP) and the proportionate consolidation of Trans Thai-Malaysia (Thailand) Co., Ltd.

(TTM (T)), Trans Thai-Malaysia (Malaysia) Sdn. Bhd. (TTM (M)) and District Cooling System and Power Plant Co., Ltd. (DCAP).

^{2/}Including the oil marketing business, the consolidation of PTT (Cambodia) Co., Ltd. (PTTCL), Subic Bay Energy Co., Ltd. (SBECL), PTT Green Energy Pte. Ltd. (PTTGE), and PTT Retail Business Co., Ltd. (PTTRB) and consolidated Thai Lube Blending Company Limited (TLBC) due to the 100% TLBC's shares acquisition by PTTRB and PTT.

- 3/Including the international trading business and the consolidation of PTT International Trading Pte., Ltd. (PTTT).
- 4/Including the consolidation of PTT Polymer Marketing Co., Ltd. (PTTPM), PTT Polymer Logistics Co., Ltd. (PTTPL) and PTT Tank Terminal Co., Ltd. (PTT TANK), PTT Asahi Chemical Co., Ltd. (PTTAC), HMC Polymers Co., Ltd. (HMC) and PTT MCC BioChem Co., Ltd. (PTTMCC) (50% jointly invest with Mitsubishi Chemical Corporation (MCC)).
- 5/Including PTT Asia Pacific Mining Pty Ltd. (PTTAPM) which PTT Mining Limited (PTTML), a subsidiary of PTTI, holds 100% shareholding which increased from 60% shareholding due to additional investing on the acquisition of International Coal Holdings Limited (ICH) which has 40% shareholding in PTTAPM.
- 6/Including the consolidation of Energy Complex Co., Ltd. (EnCo), Business Services Alliance Co., Ltd. (BSA) and PTT International Company Limited (PTTI).
- 7/Basic earnings per share is calculated by dividing net income attributable to ordinary shareholders by the weighted average number of ordinary shares which are held by third parties during the period.

Upstream Business

Petroleum Exploration and Production Business : PTT Exploration and Production Public Co., Ltd. (PTTEP)

In 2011, sales revenue of PTTEP was 169,646 million baht, increasing by 28,990 million baht or 20.6% from 2010, mainly due to:

- 1) The increase in average selling price in US\$ by 23.8% from 44.8 US\$ per BOE in 2010 to 55.5 US\$ per BOE in 2011 owing to rising oil prices in the global market.
- 2) Average sales volume increased from 264,575 BOED in 2010 to 265,047 BOED in 2011. The increase in sales volume was mainly from sales volume of natural gas and condensate from the MTJDA-B17 project, Dilbuted Bitumen (Dilbit) from the Canada Oil Sands KKD project as well as crude oil from the Vietnam 16-1 project. However, natural gas and condensate sales volume from the Arthit project dropped in relation to contracted production plan. Sales volume of crude oil and natural gas from the B8/32 and the 9A projects decreased compared with 2010.

EBITDA in 2011 was 118,012 million baht which increased by 16,173 million baht or 15.9% from 2010 mainly due to the increase in selling price and sales volume as aforementioned. However, the petroleum exploration expenses rose by 3,894 million baht compared with 2010 due to the higher exploratory well write-off costs, mainly from the Indonesia SEMAI II, the PTTEP Australasia, the Myanmar M3, M7, M11 and the Bongkot projects. In 2010, there were the exploratory well write-off costs primarily from the Myanmar Zawtika project and the increase in exploration expenses from the Algeria Hassi Bir Rekaiz, the Canada Oil Sands KKD and the

Indonesia Malunda projects. In 2011, the petroleum royalties and remuneration increased by 3,043 million baht due to higher sales revenue.

EBIT in 2011 was 84,480 million baht which rose by 14,944 million baht or 21.5% mainly due to the increase in EBITDA as aforementioned. However, the depreciation, depletion and amortization expenses rose by 1,129 million baht mainly due to the increase in completed assets of the S1, the Contract 4 and the Arthit projects as well as the Canada Oil Sands KKD and the Vietnam 16-1 projects as these projects started production in 2011.

• Natural Gas Business Unit

Sales revenue in 2011 was 412,801 million baht which increased by 55,783 million baht or 15.6% from 2010 due to the followings:

Natural Gas sales

The average natural gas selling price increase in all customer groups. In addition, average natural gas sales volume increased mainly due to the increase in Gas Separation Plant (GSP) customer especially from GSP 6 started commercial operations in January 2011 which in turn resulted in increasing natural gas demand.

GSPs' product sales

The GSPs' products sales volume increased from 2010 as mentioned. In addition, in 2011, the GSPs' product prices increased in accordance with the increased global petrochemical product prices, being used for GSP's product prices calculation, in relation to the increase in oil price and increased demand.

The details of reference products prices are as follows:

Unit: \$/Ton

	2010	2011	Inc. (Dec.)
LPG 1/	713	850	19.2%
Ethylene ^{2/}	1,074	1,183	10.1%
Propylene ^{2/}	1,130	1,381	22.2%
High Density Polyethylene ^{2/}	1,222	1,368	11.9%
Polypropylene ^{2/}	1,340	1,580	17.9%
Naphtha ^{3/}	660	853	29.2%

Note: 1/Contract Price (CP)

2/ South East Asia Spot Price 3/ MOP Singapore (MOP'S)

EBITDA of natural gas business in 2011 was 62,195 million baht which increased from 2010 by 14,983 million baht or 31.7% mainly due to the higher product margin of GSPs from the increase in product selling prices in relation to reference global petrochemical prices and ESP and GSP 6 started commercial operations in July 2010 and January 2011, respectively. Furthermore, natural gas margin increased due to natural gas selling prices to industrial customers rose in relation to the increase in referenced fuel oil price. However, accumulated losses from selling NGV have continuously increased owing to the higher sales volume. The government approved to compensate 2 Baht per kilogram on NGV's sales, effective from March 6, 2010 to January 15, 2012. As of December 31st, 2011 the government had outstanding compensation payable to PTT in an amount of 5,969 million baht. EBIT in 2011 was 46,992 million baht due to the rise in EBITDA as aforementioned, while depreciation expenses rose mainly from ESP and GSP 6.

Downstream Business

• Oil Business Unit

Sales revenue in 2011 was 558,524 million baht, rising by 77,824 million baht or 16.2% due to the increase in the average oil selling price in relation to the global market price. Moreover, Sales volume also rose mainly due to the increase in sales volume of diesel, LPG and gasoline.

EBITDA in 2011 was 13,224 million baht; rising by 1,098 million baht from 2010, mainly from the increase in fuel oil and gasoline margins. EBIT in this period was 10,781 million baht which increased by 1,064 million baht which was in line with the increase in EBITDA.

• International Trading Business Unit

Sales revenue in 2011 was 1,427,552 million baht, increasing by 365,858 million baht or 34.5% due to the increase in average selling price which rose by 36.1% in relation to the rise in global oil market price while sales volume dropped mainly from the decrease in sales volume of crude oil due to maintenance shutdown of Refineries affiliates.

EBITDA in 2011 was 3,290 million baht which increased by 937 million baht, mainly from the rise in condensate and crude oil margins in relation to the increase in crude oil price in global market.

• Petrochemical Business Group

Sales revenue in 2011 increased from 2010 by 28,712 million baht or 61.8%, mainly resulting from the increase in sales volume of PTT Polymer Marketing Co., Ltd. and an average selling price by 49.9% and 7.7%, respectively, compared with 2010

EBITDA was 3,778 million baht and EBIT was 2,894 million baht. EBITDA rose by 2,579 million baht, while EBIT rose by 2,063 million baht compared with 2010.

• International Investment Business

Coal Business

Sales revenue in 2011 increased by 6,199 million baht or 25.2% from 2010 due to the increase in average selling price. The average selling price increased by 27.6% from 72.8 US\$ per ton in 2010 to 92.9 US\$ per ton in 2011 due to higher quality of coal from the Northern lease area of Sebuku, while sales volume slightly increased.

EBITDA rose by 3,913 million baht from 5,362 million baht in 2010 to 9,275 million baht in 2011. EBIT in 2011 was 7,204 million baht, rising by 3,268 million baht from 2010 due to the increase in EBITDA as aforementioned.

Net income was 105,296 million baht in 2011, increased by 21,304 million baht or 25.4% from 2010.

Net income of PTT and its subsidiaries in 2011 was 105,296 million baht, increasing from 2010 by 21,304 million baht or 25.4%. Besides, the performance of each business group of PTT and PTTEP from the increase in selling prices. In addition, PTT's sales volume increased in almost all products, especially gas business from the commercial operation of ESP and GSP 6 in July 2010 and January 2011, respectively, as well as the performance of subsidiaries and the joint ventures as mentioned, including the following reasons:

- : In 2011, share of net income from investments in associates increased by 10,647 million baht or 56.6% from 18,816 million baht in 2010 to 29,463 million baht in 2011 mainly due to;
- The higher performance of olefins petrochemical associates resulted from the rise in sales volume of almost

all products, following the commercial operation of PTTPE's Ethane Cracker, HDPE unit and LDPE unit on December 1^{st} , 2010, January 1^{st} , 2011, and February 1^{st} , 2011, respectively. Olefins petrochemical spread margin in 2011 increased from 2010, especially in MEG, due to higher demand of feedstock for polyester production, as well as MEG supply shortage caused by the fire incident at the ethylene plant in Taiwan.

- The higher performance of refining business associates resulted from the petroleum product prices rose at the acceleration rate than the increase in the crude oil price, driven by the higher demand in relation to the world economic recovery, resulting to the higher crack spread compared to 2010.
- The performance of aromatics petrochemical business improved from the higher spread margin, from the increase in demand for polyester which is a downstream product of Paraxylene. In addition, there was a shortage in Paraxylene supply caused by the earthquake and tsunami in Japan.
- : In 2011, PTT and its subsidiaries had a gain on foreign exchange of 1,266 million baht, decreased by 5,096 million baht from a gain on foreign exchange of 6,362 million baht in 2010.
- : In 2011, PTT and its subsidiaries' finance costs rose by 1,239 million baht or 7.4% from 16,803 million baht in 2010 to 18,042 million baht in 2011.
- : The corporate income taxes in 2011 was 43,231 million baht, increased by 9,270 million baht from 33,961 million baht in 2010, mainly resulting from the corporate income tax of PTTEP increased due to the rising petroleum net income. Furthermore, there was an increase in deferred tax liabilities from PTTEP's assets (tax calculation base) in US currency, which had appreciated against the. As a result, the future corporate income taxes will increase while the current corporate income taxes decreased by 8,341 million baht.

Details of net income from investments in associates are as follows;

Unit: Million Baht

	2010	2011	Inc. (Dec.)
Refining associates	9,377	13,445	43.4%
Petrochemical associates	9,179	15,794	72.1%
Oil associates	410	507	23.7%

Unit: Million Baht

	2010	2011	Inc. (Dec.)
Gas associates	(115)	(302)	(162.6%)
Other associates	(35)	19	154.3%
Total	18,816	29,463	56.6%

The Analysis of PTT and its subsidiaries' consolidated Financial status as of December 31st, 2011, compared with December 31st, 2010.

Unit: Million Baht

Consolidated financial statements

Assets	Dec 31, 2011	Dec 31, 2010	Inc. (Dec.)
Current assets	381,157	363,933	4.7%
Investments in associates and other long-term investments	241,163	220,833	9.2%
Property, plant and equipment, net	601,341	496,661	21.1%
Non-current assets	178,751	147,682	21.0%
Total assets	1,402,412	1,229,109	14.1%
Liabilities			
Current liabilities	280,537	241,102	16.4%
Long-term loans (including current portion)	392,403	371,029	5.8%
Non-current liabilities	85,524	59,564	43.6%
Total liabilities	758,464	671,695	12.9%
Equity			
Total equity attributable to equity holders of the Company	555,920	480,704	15.6%
Non-controlling interests	88,028	76,710	14.8%
Total shareholders' equity	643,948	557,414	15.5%
Total liabilities and equity	1,402,412	1,229,109	14.1%

Assets

As of December 31 $^{\rm st}$, 2011, PTT and its subsidiaries' total assets were 1,402,412 million baht, increased by 173,303 million baht or 14.1% from the year ended 2010 mainly due to the following:

: Current assets increased by 17,224 million baht or 4.7%, resulting mainly from the increase in trade accounts receivable, other accounts receivable and short-term loans by 31,013 million baht, 13,820 million baht and Bath 4,715 million baht, respectively, while cash and cash equivalents and short-term investments decreased by 30,481 million baht.

: Available-for-sale investments, investments in associates and other long-term investments increased by 20,330 million baht or 9.2%, mainly resulting from the share of net income from investments in associates for 2011 amounting to 29,463 million baht, whereas there was dividend received from associates amounting to 10,922 million baht.

: Property, plant and equipment increased by 104,681 million baht or 21.1% from (1) the increase in net assets for petroleum exploration and production by 89,890 million baht, mainly resulting from the PTTEP's projects: a 40% holding in the Canada

Oil Sands KKD project, (2) the additional constructions of PTT including the platform compression facilities project and the forth transmission pipeline project amounting to 7,829 million baht, (3) The jetty and the LNG receiving terminal project of PTTLNG Company limited amounting to 3,835 million baht.

: Other non-current assets rose by 31,068 million baht or 21.0%, mainly due to the increase in intangible assets and goodwill by 31,902 million baht and 10,155 million baht, respectively, primarily from the PTTEP's purchase of the partnership unit in the Canada Oil Sands KKD project which resulted in additional exploration and evaluation assets amounting to 34,390 million baht.

Liabilities

As of December 31st, 2011, PTT and its subsidiaries' total liabilities were 758,464 million baht, increasing by 86,768 million baht or 12.9% from the year ended 2010, mainly from the rise in current liabilities by 39,435 million baht or 16.4%, due to the rise in trade accounts payable and accrued expenses by 27,079 million baht and 14,474 million baht, respectively.

Long-term loans (including the current portion) were 392,403 million baht, increasing by 21,374 million baht or 5.8% mainly due to the issuance of debentures and long-term loans of PTTEP amounting to 700 million US\$ and 625 million US\$, respectively, or equivalent to 41,701 million baht. However, there was the redemption of PTT's debentures and bonds amounting to 11,357 million baht and 8,000 million baht, respectively. The maturities of loans are as follows:

Unit: Million Baht

Maturity (since December 31, 2011)	РТТ	PTTEP	PTTNGD	EnCo	PTTI	TTM(T)	TTM(M)	DCAP	PTTAC	НМС	PTTPL	total
Within 1 year (December 31 st , 2012)	30,307.60	21,796.32	100.80	450.00		716.22	52.30	58.41	678.12	422.28	200.00	54,782.04
Over 1 year, but not over 2 years	29,128.99	5,033.15	100.80	450.00	1,267.66	716.22	57.05	130.81	678.13	565.21	225.00	38,353.01
Over 2 years but not over 5 years	96,139.99	53,303.62	176.40	1,350.00	6,616.46	1,987.00	110.94	392.44	2,034.37	1,695.62	825.00	164,631.85
Over 5 years	87,576.70	32,612.13		2,300.00		5,589.96	190.18	270.59	2,705.54	2,684.73		133,929.83
Total	243,153.28	112,745.22	378.00	4,550.00	7,884.12	9,009.40	410.47	852.25	6,096.16	5,367.84	1,250.00	391,696.74

Note: Liabilities from finance leases are excluded.

The loans outstanding (including long-term loans, debentures and bonds due within one year and later than one year) as of December 31st, 2011 consisted of loans in Baht currency and foreign currencies, details of which are as follows:

Unit: Million Baht

PTT	PTTEP	PTTNGD	EnCo	PTTI	TTM(T)	TTM(M)	DCAP	PTTAC	НМС	PTTPL	total
170,815.96	49,014.09	378.00	4,550.00				852.25		2,746.07	1,250.00	229,606.38
72,337.32	63,731.13			7,884.12	9,009.40	410.47		6,096.16	2,621.77		162,090.36
243,153.28	112,745.22	378.00	4,550.00	7,884.12	9,009.40	410.47	852.25	6,096.16	5,367.84	1,250.00	391,696.74
29.75%	56.53%	0.00%	0.00%	100.00%	100.00%	100.00%	0.00%	100.00%	48.84%	0.00%	41.38%
	170,815.96 72,337.32 243,153.28	170,815.96 49,014.09 72,337.32 63,731.13 243,153.28 112,745.22	170,815.96 49,014.09 378.00 72,337.32 63,731.13 243,153.28 112,745.22 378.00	170,815.96 49,014.09 378.00 4,550.00 72,337.32 63,731.13 243,153.28 112,745.22 378.00 4,550.00	170,815.96 49,014.09 378.00 4,550.00 72,337.32 63,731.13 7,884.12 243,153.28 112,745.22 378.00 4,550.00 7,884.12	170,815.96 49,014.09 378.00 4,550.00 72,337.32 63,731.13 7,884.12 9,009.40 243,153.28 112,745.22 378.00 4,550.00 7,884.12 9,009.40	170,815.96 49,014.09 378.00 4,550.00 72,337.32 63,731.13 7,884.12 9,009.40 410.47 243,153.28 112,745.22 378.00 4,550.00 7,884.12 9,009.40 410.47	170,815.96 49,014.09 378.00 4,550.00 852.25 72,337.32 63,731.13 7,884.12 9,009.40 410.47 243,153.28 112,745.22 378.00 4,550.00 7,884.12 9,009.40 410.47 852.25	170,815.96 49,014.09 378.00 4,550.00 852.25 72,337.32 63,731.13 7,884.12 9,009.40 410.47 6,096.16 243,153.28 112,745.22 378.00 4,550.00 7,884.12 9,009.40 410.47 852.25 6,096.16	170,815.96 49,014.09 378.00 4,550.00 852.25 2,746.07 72,337.32 63,731.13 7,884.12 9,009.40 410.47 6,096.16 2,621.77 243,153.28 112,745.22 378.00 4,550.00 7,884.12 9,009.40 410.47 852.25 6,096.16 5,367.84	170,815.96 49,014.09 378.00 4,550.00 852.25 2,746.07 1,250.00 72,337.32 63,731.13 7,884.12 9,009.40 410.47 6,096.16 2,621.77 243,153.28 112,745.22 378.00 4,550.00 7,884.12 9,009.40 410.47 852.25 6,096.16 5,367.84 1,250.00

As of December 31st, 2011, the loans amounting to 10,206 million baht were guaranteed by the Ministry of Finance.

Other non-current liabilities increased by 25,960 million baht or 43.6% mainly due to the increase in the deferred tax liabilities by 23,323 million baht resulting from the Canada Oil Sands KKD project of PTTEP.

• Shareholders' Equity

As of December 31st, 2011, PTT and its subsidiaries' total shareholders' equity were 643,948 million baht, increasing from the year ended of 2010 by 86,534 million baht or 15.5%, resulting from the retained earnings which rose by 74,154 million baht in 2011, mainly from the increase in PTT and its subsidiaries' net income by 105,296 million baht, whereas there was dividend paid from operating results in Second half of 2010 and First half of 2011 amounting to 32,793 million baht.

PTT's paid-up capital increased due to the exercise of PTT warrants under ESOP issued to its President, executives

and employees, including the employees of PTT's affiliates holding the permanent office in PTT, in March, June and September. As a result, paid-up capital rose by 72.58 million baht (7,257,600 shares) and premium on ordinary shares increased by 1,625.70 million baht. As at December 31st, 2011, the issued PTT warrants on September 1st, 2005 and September 29, 2006 expired. The non-exercisable warrants were 0.59 and 0.35 million units, respectively.

• Liquidity

For the year ended December 31st, 2011, PTT and its subsidiaries had net decrease in cash and cash equivalents in an amount of 19,669 million baht, while cash and cash equivalents at beginning of period was 135,801 million baht. As a result, cash and cash equivalents at end of period was 116,132 million baht. Details of cash flow by activities are as follows:

	Unit: Million Baht
Net cash provided by operating activities	177,550
Net cash used in investing activities	(160,454)
Net cash provided by financing activities	(45,423)
Effects of exchange rates on cash and cash equivalents	1,489
Currency translation differences	7,169
Net decrease in cash and cash equivalents during the period	(19,669)
Cash and cash equivalents at the beginning of the period	135,801
Cash and cash equivalents at the end of the period	116,132

In summary, PTT and its subsidiaries' financial status are strong as evidenced by liquidities, debt to equity ratios, and returns on equity.

PTT and Its Affiliates

E&P Business Group	F	ercentage
PTT Exploration and Production Plc.	PTTEP	65.29
Gas Business Group	F	ercentage
Trans Thai-Malaysia (Thailand) Co., Ltd.	TTM (T)	50.00
Trans Thai-Malaysia (Malaysia) Sdn. Bhd.	TTM (M)	50.00
PTT Natural Gas Distribution Co., Ltd.	PTTNGD	58.00
PTT Utility Co., Ltd.	PTTUT	40.00
District Cooling System and Power Plant Co., Ltd.	DCAP	35.00
Thaioil Power Co., Ltd.	TP	26.00
Independent Power (Thailand) Co., Ltd.	IPT	20.00
Ratchaburi Power Co., Ltd.	RPCL	15.00
PTT LNG Co., Ltd.	PTTLNG	100.00
Combined Heat and Power Producing Co., Ltd.	CHPP	100.00
B.Grimm BIP Power Ltd.	B.Grimm BIP	23.00
Nava Nakorn Electricity Generating Co., Ltd.	NNEG	30.00
Bangpa-in Cogeneration Co., Ltd.	BIC	25.00
Oil Business Group	F	ercentage
PTT (Cambodia) Co., Ltd.	PTTCL	100.00
Subic Bay Energy Co., Ltd.	SBECL	100.00
PTT Retail Business Co., Ltd.	PTTRB	100.00
Vietnam LPG Co., Ltd.	VLPG	45.00
Thai Lube Blending Co., Ltd.	TLBC	48.95
KELOIL-PTT LPG Sdn.Bhd.	KPL	
Petro Asia (Thailand) Co., Ltd.	PA(Thailand)	35.00
Petro Asia (Huizhou) Co., Ltd.	PA(Huizhou)	25.00
Petro Asia (Maoming) Co., Ltd.	PA(Maoming)	20.00
Petro Asia (Sanshui) Co., Ltd.	PA(Sanshui)	25.00
Thai Petroleum Pipeline Co., Ltd.	THAPPLINE	33.19
Intoplane Services Co., Ltd.	IPS	16.67
Bangkok Aviation Fuel Services Plc.	BAFS	7.06
Fuel Pipeline Transportation Co., Ltd.	FPT	2.76

International Investment		
Business Group	F	Percentage
PTT International Co., Ltd.	PTTI	100.00
PTT Green Energy Pte. Ltd.	PTTGE	100.00
International Trading Business Group	F	Percentage
PTT International Trading Pte. Ltd.	PTTT	100.00
Petrochemical Business Group		
PTT Global Chemical Plc.	PTTGC	48.92
PTT Phenol Co., Ltd.	PPCL	40.00
PTT Polymer Marketing Co., Ltd.	PTTPM	50.00
PTT Asahi Chemical Co., Ltd.	PTTAC	48.50
HMC Polymers Co., Ltd.	НМС	41.44
PTT Polymer Logistics Co., Ltd.	PTTPL	100.00
PTT Maintenance & Engineering Co., Ltd.	PTTME	40.00
PTT Tank Terminal Co., Ltd.	PTT TANK	100.00
PTT MCC Biochem Co., Ltd.	PTTMCC	50.00
Refining Business Group		
Thai Oil Plc.	TOP	49.10
IRPC Plc.	IRPC	38.51
Star Petroleum Refining Co., Ltd.	SPRC	36.00
Bangchak Petroleum Plc.	ВСР	27.22
Other Business Group	F	Percentage
Business Services Alliance Co., Ltd.	BSA	25.00
Energy Complex Co., Ltd.	ENCO	50.00
PTT ICT Solutions Co., Ltd.	PTTICT	20.00
Dhipaya Insurance Plc.	TIP	13.33
PTT Energy Solutions Co., Ltd.	PTTES	40.00

Structure of PTT Revenue and Subsidiaries by Product Line

		% 2009 (Audited Shareholding ————————————————————————————————————			2010 (Revi	sed)	2011 (Audited)	
Product / Se	t / Service Operated by		Million Baht	%	Million Baht	%	Million Baht	%
Natural Ga Products	s PTT Plc. (Gas Business Unit)		285,937.35	17.63	328,457.44	16.96	379,772.34	15.34
	PTT Plc. (Oil Business Unit and International Trading Business Unit)		46,584.41	2.87	68,409.13	3.53	60,085.70	2.43
	PTT Exploration and Production Plc. (PTTEP)	1/	62,539.22	3.86	72,138.38	3.73	74,865.50	3.02
	PTT Natural Gas Distribution Co., Ltd. (PTTNGD)	58.00	4,195.75	0.26	5,739.38	0.30	7,422.83	0.30
	Combined Heat and Power Producing Co., Ltd. (CHPP)	100.00	-	-	149.58	0.01	157.49	0.01
	Less PTTEP's gas revenue paid by PTT Plc.		(58,174.95)	(3.59)	(71,950.15)	(3.71)	(72,778.30)	(2.94)
Total Reven	ue from Natural Gas Products		341,081.78	21.03	402,943.77	20.82	449,525.56	18.18
2. Oil Produc	ts PTT Plc. (Oil Business Unit and International Trading Business Unit)		1,024,379.96	63.15	1,212,017.53	62.58	1,574,696.71	63.61
	PTT Exploration and Production Plc. (PTTEP)	1/	53,008.30	3.27	65,010.06	3.36	91,000.14	3.68
	Less PTTEP's crude revenue paid by PTT Plc.		(39,106.85)	(2.41)	(50,034.25)	(2.58)	(66,586.62)	(2.69)
	PTT International Trading Pte. Ltd. (PTTT)	100.00	51,842.74	3.20	77,084.47	3.98	124,965.17	5.05
	PTT (Cambodia) Co., Ltd. (PTTCL)	100.00	3,079.58	0.19	4,246.83	0.22	6,770.38	0.27
	Retail Business Alliance Co., Ltd. (RBA)	2/	0.28	-	-	-	-	-
	Subic Bay Energy Co.,Ltd. (SBECL)	100.00	16,364.34	1.01	22,853.01	1.17	19,531.81	0.79
	PTT Retail Business Co., Ltd. (PTTRB) 100.00	27,951.25	1.72	32,418.84	1.67	36,527.72	1.47
Total Reven	ue from Oil Products		1,137,519.60	70.13	1,363,596.49	70.40	1,786,905.31	72.18
3. Petrochem Products	ical PTT Plc. (Oil Business Unit and International Trading Business Unit)		43,226.07	2.66	48,674.18	2.51	71,752.67	2.90
	PTT Polymer Marketing Co., Ltd. (PTTPM)	50.00/	26,068.02	1.61	39,295.41	2.03	63,458.11	2.56
	HMC Polymers Co., Ltd. (HMC)	41.44	6,232.21	0.38	6,760.58	0.35	10,417.14	0.42
Total Reven	ue from Petrochemical Products		75,526.30	4.66	94,730.17	4.89	145,627.92	5.88
4. Mining Pro	ducts PTT International Co., Ltd. (PTTI)	100.00	20,200.25	1.25	24,652.15	1.27	30,850.50	1.25
5. Other Prod	lucts PTT Green Energy Pte. Ltd. (PTTGE)	100.00	106.22	0.01	151.28	0.01	356.84	0.01
	Energy Complex Co., Ltd. (ENCO)	50.00	-	-	-	-	1,096.97	0.05
Total Reven	ue from Other Products		106.22	0.01	151.28	0.01	1,453.81	0.06

Dead of Control	o vertelle	% Shareholding	2009 (Aud	ited)	2010 (Revised)		2011 (Audited)		
Product / Servi	ce Operated by	of the company	Million Baht	%	Million Baht	%	Million Baht	%	
6. Utilities Products	District Cooling System and Power Plant Co., Ltd. (DCAP)	35.00	566.85	0.03	586.68	0.03	584.19	0.02	
	Energy Complex Co., Ltd. (ENCO)	50.00	0.59	-	27.35	-	40.47	0.01	
	Combined Heat and Power Producing Co., Ltd. (CHPP)	100.00	114.47	0.01	-	-	-	-	
Total Revenue f	rom Utilities Products		681.91	0.04	614.03	0.03	624.66	0.03	
7. Revenue from Non-Core Business	PTT Plc. (Oil Business Unit and International Trading Business Unit)		1,161.78	0.08	1,490.78	0.08	1,903.30	0.08	
	PTT Retail Business Co., Ltd. (PTTRB)	100.00	3,952.43	0.24	4,125.87	0.21	4,099.25	0.16	
Total Revenue f	rom Non-Core Business		5,114.21	0.32	5,616.65	0.29	6,002.55	0.24	
8. Revenue from Services	PTT Exploration and Production PIc. (PTTEP)	1/	3,762.60	0.23	3,507.29	0.18	3,780.18	0.15	
	Trans Thai-Malaysia (Thailand) Co., Ltd. (TTM (T))	50.00	1,603.74	0.10	1,449.67	0.07	1,638.39	0.07	
	Trans Thai-Malaysia (Malaysia) Sdn. Bhd. (TTM (M))	50.00	88.47	0.01	86.16	-	147.65	0.01	
	PTT Natural Gas Distribution Co., Ltd. (PTTNGD)	58.00	-	_	-	-	-	-	
	PTT Polymer Logistics Co., Ltd. (PTTPL)	100.00	121.65	0.01	399.55	0.02	926.36	0.04	
	Retail Business Alliance Co., Ltd. (RBA)	2/	55.24	-	-	-	-	-	
	Energy Complex Co., Ltd. (ENCO)	50.00	1.53	-	352.58	0.02	-	-	
	Business Services Alliance Co., Ltd. (BSA)	25.00	109.69	0.01	347.17	0.02	107.31	0.01	
	PTT Retail Business Co., Ltd. (PTTRB)	100.00	201.26	0.01	235.21	0.01	213.80	0.01	
	PTT Tank Terminal Co., Ltd (PTT Tank)	100.00	-	-	-	-	360.68	0.01	
Total Revenue f	rom Services		5,944.18	0.37	6,377.63	0.32	7,174.37	0.30	
Total Revenue f	rom Products and Services		1,586,174.45	97.79	1,898,682.17	98.03	2,428,164.68	98.09	
9. Others 9.1 Other			12,454.05	0.77	13,025.89	0.67	16,601.46	0.67	
Revenue 9.2 Gain/loss from Foreign Exchange			4,682.72	0.29	6,361.93	0.33	1,265.81	0.05	
Total Other Rev	enue		17,136.77	1.06	19,387.82	1.00	17,867.27	0.72	
10. Share of net income/loss from investme under equity method	ent		18,766.83	1.16	18,815.96	0.97	29,462.62	1.19	
			1 622 079 0F	100.00	1 926 995 05	100.00	2 475 404 57	100.00	
Grand Total			1,622,078.05	100.00	1,936,885.95	100.00	2,475,494.57	100.00	

Notes: 1/PTT owned 65.43%, 65.34%, and 65.29% equity interest in PTTEP in 2009, 2010, and 2011 respectively.

2/RBA, 49% owned by PTT, filed for dissolution with the Ministry of Commerce, and its liquidation process was completed on November 22, 2011.

3/Since January 1, 2011, PTT has submitted its revised financial statements, including the 2010 restated financial statements, in conformance to the TFRS standard.

ConnectedTransactions

PTT's connected transactions resulted from the following contractual agreements:

Transactions between PTT and state enterprises

Transaction

By the resolution of the Cabinet dated November 26, 2002, government agencies and state enterprises buying 10,000 liters of fuel and more must do so from either PTT Plc or Bangchak Petroleum Plc only. PTT sold fuels to the following state enterprises: Electricity Generating Authority of Thailand, Bangkok Mass Transit Authority, and State Railway of Thailand. Should a state enterprise owe PTT outstanding payments, PTT can levy interests.

Transactions between PTT and subsidiary PTT Exploration and Production Plc. (PTTEP)

Transaction

PTTEP and its subsidiaries produce and sell crude oil, natural gas, condensate, LPG and bitumen. This year PTT was the major buyer of almost all products, accounting for 87% by volume. As for natural gas, the two reached a long-term (25-30-year) deal, stipulating annual minimum contractual quantities. Both companies were engaged in crude oil and condensate agreements, whereas PTT sold jet fuels and high-speed diesel to PTTEP under world market prices-which were identical to those sold to PTT by PTTEP's joint-venture partners or were standard reference, competitive prices under sensible conditions.

Transactions between PTT and refining subsidiaries

• Transaction

PTT signed crude oil supply agreements and refined product offtake agreements with its refining subsidiaries at supply rates corresponding to its own equity interests, summarized below.

• Agreement with Thai Oil Plc (TOP)

PTT secures crude oil and offtake refined products equivalent to 49.99% of TOP's refining capacity at market prices. Through a written notice sent at least 12 months in advance, either party may revoke this agreement from the 13th year from the date of completion of its debt restructuring date of April 19, 2013. Alternatively, either party may revoke the contract if it considers the contract to have been violated. Under the contract, PTT may buy refined products more than 49.99% at market prices.

PTT secures indigenous crude oil for TOP under the Phet crude sales agreement, in effect since 1985, which spans the life of the field, and other crude oil under one-year agreements, with possible annual extensions.

PTT secured natural gas for TOP's use in its refinery as required by the contract between them at regular market prices under an eight-year contract from 2006 to 2013 and a 15-year contract from 2007 to 2021.

• Agreement with Star Petroleum Refining Co., Ltd. (SPRC)

The shareholders of SPRC are required to secure crude oil supply and offtake delivery of refined products from SPRC at no less than 70% of its 126,000-bbl/d capacity or 88,200-bbl/d at domestic market prices. For any surplus volume, PTT and Chevron (Thai) Co., Ltd. - as shareholders - have the first right of refusal to buy at domestic market prices before any sale to a third party.

• Agreement with Bangchak Petroleum Plc (BCP)

PTT secures crude oil supply for BCP under a feedstock supply agreement, effective May 16, 2006, for 12 years from the commercial operation date of the Product Quality Improvement project. PTT secures all the crude oil for BCP at market prices.

PTT concluded a product offtaking agreement with BCP, with effect from May 16, 2006, to 12 years after the commercial operation date of the Product Quality Improvement project, after which PTT is to buy at least 30% of BCP's monthly outputs at market prices.

• Agreement with IRPC Plc (IRPC)

PTT secures crude oil supply at market prices for IRPC under a one-year feedstock supply agreement, effective from January 1, 2009 with annual extension.

PTT entered into contract for refined products with IRPC under market prices, effective January 1, 2012, with possible annual extensions.

PTT also made another agreement for the service of the latter's Chumphon Depot for loading, storage, and distribution of oil, effective January 1, 2012, with possible annual extensions.

PTT entered into a gas sales agreement with IRPC for the consumption of gas in combined-cycle gas turbine engines, effective June 9, 2009, for 10 years at market prices. Delivery commenced on January 14, 2011.

Transactions between PTT and affiliates in the petrochemical business group

Transactions and agreement with PTT Global Chemical Plc (PTTGC)

PTT Global Chemical PIc (PTTGC) was founded on October 19, 2011, through the amalgamation of PTT Chemical PIc (PTTCH) and PTT Aromatics and Refining PIc (PTTAR) under the Public Company Act B.E. 2535 (1992). The new company inherited all the assets, properties, liabilities, rights and obligations of the two companies on December 31, 2011, and continues the operation of the two companies as summarized below.

Petrochemical Business

PTT secures feedstock supply for PTTCH's production processes, namely natural gas, ethane, propane, and LPG under a 15-year agreement, effective from 1995 and extendable for five years.

In 1991, Aromatics (Thailand) Plc (ATC) transferred to PTT its privileges and obligations under a 15-year light naphtha and raffinate supply agreement with PTTCH. PTT later entered into another feedstock supply agreement and a gas sales agreement with PTTCH, effective from 1999, for 12 years (extendable for five years) for the feedstock, and for 20 years (extendable for four years) for the gas.

In 1995, PTT signed a natural gasoline (NGL) supply agreement with PTTCH, effective for 15 years from the plant's start-up.

In 1999, PTT signed a 15-year ethane supply agreement with PTTCH, effective from August 1, 2005 (extendable for five years).

In 2004, PTT amended the NGL supply agreement with PTTCH to increase the supply volume to 380,000-470,000 tons/ year. The agreement will expire on May 31, 2021, (extendable for five years.)

In 2004, PTT concluded an LPG supply agreement with PTTCH, whereby PTT would supply an additional 13,000 tons/month of LPG as feedstock for the olefins capacity expansion project managed by PTTCH, which completed the upgrading in 2007.

In 2006, PTT entered into a 15-year ethane feedstock supply agreement with PTT Polyethylene Co., Ltd., a subsidiary of PTTCH, whereby the price of ethane varies with that of filmgrade HDPE in Southeast Asian markets. The agreement took effect from the plant's start-up in 2010.

In 2008, PTT amended its agreement for supplying ethane, propane, and LPG to PTTCH, with effect from August 1, 2008, and an unchanged contractual period. Under the agreement, the price structure of the ethane feedstock varies with that of film-grade HDPE in Southeast Asian markets - reflecting the entire petrochemical chain and the HDPE market produced by PTTCH since 2004. Similarly, the price structures of propane and LPG vary with that of film-grade PP.

In 2010, PTT extended its LPG supply agreement with PTTCH for 20,000 tons/month, with effect from June 1, 2010, for one year. PTT also made an LPG supply agreement with PTTCH for 28,000 tons/month, with effect from November 25, 2010, for one year (extendable for one year).

PTT signed a gas sales agreement with PTTAR for the consumption of gas in fueling the latter's aromatics processes. The 10-year agreement to supply natural gas to Aromatic Plant unit 1 (AR2) is due to expire in June 2015; the agreement to supply the gas to Aromatic Plant unit 2 (AR3), in June 2018.

PTT concluded long-term supply agreements for all the main products of PTTAR, which directly supplies such products to customers. These agreements are take-or-pay, whereby PTT guarantees minimum sale volumes for the products and obtains marketing fees from PTTAR. While the other is take and pay which specify the offtaking volumes by PTT without guaranteeing distribution for the surplus volumes beyond take-or-pay. PTT has another product distribution agreement with PTTAR, namely that for condensate residue, light naphtha, and LPG, whereby PTTAR would directly supply these to PTT's customers. For the first two products, the agreement covered 15 years, and for LPG, 10 years, effective from 1997 under an evergreen basis after 2007, that is, the agreement would be regarded as automatically extended unless otherwise notified in advance.

PTT supplies condensate for PTTAR's production processes under a 20-year agreement, effective from 1997, whereby the annual volume is 4.6-6.1million tons/year.

Refining business

PTT secures crude oil supply and feed stock for PTTAR under an 18-year feedstock supply agreement with effect from February 1, 2009, to February 1, 2024. Under the agreement, PTT is to secure crude oil and all other feedstock for PTTAR at market prices under the grades and volumes required by PTTAR.

PTT buys refined products from PTTAR at no less than 70% of the latter's refined products at domestic market prices under an 18-year agreement from February 9, 2006, beyond

which the contract is assumed to remain valid unless otherwise notified in advance.

PTT signed a New Complex Product Offtaking Agreement with PTTAR, effective from February 9, 2006, whereby PTT is to buy from PTTAR 100% of the products derived from the Upgrading Complex. At least 50% of these products are to be based on domestic market prices.

PTT signed a gas sales agreement with PTTAR for the consumption of gas in product refining and another one for use in power generation, which is due to expire in 2018.

Transactions and agreement with HMC Polymers Co., Ltd. (HMC)

PTT concluded a feedstock supply agreement with HMC in 2006. A long-term propane feedstock supply agreement spans 15 years from the plant's start-up in 2010, with five-year extension at a time, under which the price of propane varies with that of PP (film grade) in Southeast Asian markets.

Transactions and agreement with PTT Asahi Co., Ltd. (PTTAC)

PTT signed a 15-year propane supply agreement in 2008 with PTTAC for its feedstock. The agreement will take effect from the plant's start-up date with five-year extension each time. The price structure varies with that of film-grade PP in Southeast Asian markets.

Policy on future connected transactions

PTT's future connected transactions will be conducted as part of the normal course of business with no special favors and no transfer of benefits between PTT, its subsidiaries, associated companies, related companies, or shareholders. Pricing will continue to be on an arm's length basis, and the prices of products supplied by PTT's subsidiaries will be market-based. Disclosure of connected transactions will follow the announcement of the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET), and the accounting standard on disclosure of information on related parties or businesses, announced by the Federation of Accounting Professions.

Review of Business Assets



As of December 31, 2011, the core assets used by PTT and its subsidiaries in conducting their businesses had a net value (after accounting for accumulated depreciation and allowance for impairment) of Baht 601,341 million, with Baht 52,164 million in net intangible assets and Baht 33,914 million in net mining properties. For details, please see the notes to the financial statements for PTT and its subsidiaries ended December 31, 2011: item 16 (property, plant, and equipment - net), item 17 (intangible assets - net), and item 18 (mining properties - net).

Risk Factors



Thanks to its continued risk management efforts, PTT managed its risk factors reasonably well in the past year. Emerging risk factors have been identified and managed under the current year's risk management plan. Therefore, PTT continues to refine this Risk Factors section to better reflect risks apparent to investors. Below are the main risk factors.

1. Strategic Risks

1.1 Risks from business strategy implementation

To preserve continuous and sustainable business growth, PTT has set a goal of becoming a Thai premier multinational energy company, as well as its international venture goals. To this end, strategic plans have been defined by each business unit with a focus on preserving its competitiveness, investment expansion to supplement business value, internationalization of business through investment in properties, mergers and acquisitions of entities that are capable of competing but are faced with problems during the ongoing crisis, and investment in new related businesses.

Fierce competition, global and domestic economic recovery still fraught with uncertainty, oil price volatility, investors' expectations, and the diverse needs of its stakeholders are factors that could affect PTT's overall performance and return on investment resulting from the likes of energy demand uncertainty, petroleum and petrochemical product price fluctuation, investment risks resulting from overseas investment and in new businesses, and risks associated with overseas investment.

To cope with this, the Company has initiated a so-called Top Executive Thinking Session (TTS) and a Strategic Thinking Session among senior PTT executives to define and review the vision, directions, and business strategies in line with economic and energy circumstances, and a business plan in the form of scenario planning, in which assumptions are made for different economic growth figures and oil prices and for PTT to have plans for future changes and uncertainty. In addition, monthly performance monitoring is in place, and at least every quarter, senior executives of the Group meet to monitor Group performance and share views on adjusting business plans and short-term strategies to ensure confidence in reaching such goals.

1.2 Risks from improvement of organizational capability to accommodate business operation under economic uncertainty and business growth opportunities

PTT's business diversity, international investment expansion, and investment in new ventures produce considerable complexity for the management and administration of the Group. Compounded by volatile economic circumstances, resulting in demand uncertainty of the markets and prices, this could disrupt its business unless its personnel are adequately prepared to cope with the economic crisis and business base expansion.

To ease such personnel risks, PTT has relied on two career management mechanisms. First, for the management group, the PTT Group format is applied under the care of an executive and management development committee; this committee supports the needs of senior executives in both quantity and quality. Second, for other employees, it takes the form of line management with a similar approach to the first, which is supervised by a career advisory panel; here, a career management consultation committee ensures that, for each career path, a manpower requirement plan is prepared,

in which key positions are stated, and individual development plans are both prepared and implemented. Both of these ensure that PTT will consistently command an adequate supply of quality executives and employees.

2. Business Risks

2.1 Risks from gas supply sourcing

This year PTT kept up its sourcing negotiation efforts for additional gas supply from depleting deposits in the Gulf of Thailand so as to maintain their total productivity, as well as negotiations for supply of LNG (liquefied natural gas) from sellers in various regions to meet the projected gas demand. These contracts are made in advance and incorporate the demand called for by future economic circumstances.

Each gas sales agreement (GSA) specifies a minimum annual contractual quantity to be bought by PTT; otherwise, PTT must pay in advance for the volume not taken during that contract year under the "take-or-pay" condition. However, PTT may take this pre-paid gas in later years as make-up gas if it has already paid the minimum contracted amount for the year in question. Such take-or-pay sums were paid by PTT under the terms of the Yadana and Yetagun GSAs of Myanmar.

As a result of the current economic recovery and oil price volatility, risks emerge from a variety of factors, including current and future gas demand, the completion dates of transmission pipelines, or those of new gas-fired power plants, the inability to take pre-paid gas or to secure enough gas supply to accommodate rising demand, and the volatility of oil price. All these could lower the competitiveness of natural gas against competing fuels. These risks could affect PTT's financial bottom line and performance.

To address these risks, PTT monitors movement of the supply and demand for natural gas while closely coordinating with the sellers and the buyers preparation of efficient gas

supply plans for the long term, and regularly reviews them to identify solutions to possible crises. To date, gas demand has exceeded minimum contract quantities, thus enabling PTT to accumulate volumes for instant use if it cannot take delivery of the "carry forward" gas, specified in certain GSAs. As for the "make up" gas volume from Yadana and Yetagun fields, for which PTT has paid, this portion of gas cost less than the current prices; such price margin has alleviated the resulting interest burdens.

2.2 Risks from PTT's feedstock and product price volatility

The costs of feedstock and products of PTT Group in domestic and foreign markets - including those of crude oil and petroleum products of PTT's International Trading Business Unit- reflect global market prices. However, the recent world prices of natural gas, condensate, crude oil, petroleum products, and petrochemicals have proved extremely volatile because of diverse factors beyond the Company's control, including gross refining margins (GRMs) and cyclical petrochemical prices, thus inevitably affecting PTT Group's business performance.

To lower these risks, PTT Group management has focused on optimizing risk management for feedstock and product prices, including buying and selling prices for crude oil and petroleum products, by appointing the Group's oil price risk management team. Today, to manage price risks, the group is engaged in hedging, including both short-term and long-term derivative contracts with its business partners, with price, volume, and time targets for suitable risk management in line with PTT Group's business plans. Each purchase of such derivatives in the market follows corporate policies; also, risks are assessed and its value tracked. Each transaction is supported by the physical volume of PTT oil products to manage the costs of buying and selling for the Group.

2.3 Risks from government actions creating potential impacts on PTT's business

PTT has retained its state enterprise status, with the Ministry of Finance serving as its major shareholder and the Ministry of Energy as its supervisor. It is also engaged in the energy business under the supervision of the National Energy Policy Council (NEPC) under the National Energy Policy Council Act, B.E. 2535 (1992). Therefore, the public sector can still substantially supervise PTT to ensure alignment with national energy, economic, and social policies. In addition, NEPC, because of the above-mentioned act, can make policy and national energy administration plan recommendations to the cabinet, apart from deciding criteria and conditions for energy pricing in line with such policies and plans. Under an act designed to resolve and prevent fuel shortages of 1973, the prime minister is authorized to issue orders containing measures for the sale of all fuels to resolve and prevent fuel shortages. In short, such policy formulation and energy-related measures of the state may directly impact PTT's business, including the price control of LPG and NGV.

2.4 Risks from PTT's performance being partly subject to PTT Group's performance

PTT has achieved continuous business growth as a result of its investment in assorted companies while focusing on forging interconnection arising from integrated businesses (meaning upstream petroleum to downstream), as well as investment in new related businesses, both domestic and overseas. Besides, to date, PTT Group companies have undergone mergers and acquisitions, joint investment, capacity expansion, and process improvement to add value to products. Such business expansion has inevitably subjected PTT's performance to those of PTT Group companies. However, Group companies are facing risks arising from the nature of business, including volatile product and feedstock

prices, success in petroleum exploration and production, oil and natural gas spills, the down cycles of petrochemical and refining businesses, competitors from the Middle East with lower production costs, and risks from changes in laws and regulations. These could hurt PTT's financial status and performance. To lower these risks, PTT has focused on a Group management approach with good corporate governance on which to base its sustainable business growth and its maximization of value for PTT Group through value addition by the Supply Chain Management Project. PTT has also investigated mergers of similar businesses in search of greater value, lower costs, and greater competitiveness in the world market.

2.5 Risks from overseas investment

PTT's foreign energy investment plan is implemented through PTT Group companies, building on current businesses and enhancing long-term growth prospects. Today, PTT intends to grow its businesses internationally, both existing ones and new ventures. Therefore, risks from overseas investment could arise from several factors, including the economic circumstances of target countries and their trade partners, change in government, investment promotion policies, other laws and regulations on taxes, investment, foreign exchange fluctuation, the capability of companies to engage in new ventures, and greenfield project investments, which usually require long lead time and massive supporting capital.

To ease these risks, PTT has investigated and analyzed details of laws, public policies, and taxes, as well as the above-mentioned risk factors, to assess potential impacts on business. The findings of such assessment are then considered along with the feasibility of investment. After the investment is made, the Company has put in place a system and an internal unit to continually compile its performance and risk factors, as well as accelerating organizational competency and personnel potential to accommodate its overseas business and investment.

3. Operation Risks

3.1 Risks from operations

Hazards are inherent to the exploration for, production, transport, and storage of natural gas, crude oil, petrochemical products, and refined petroleum products. They include fires, explosions, oil spills, well blowouts, gas pipeline leaks, dispersion of hazardous gases, terrorist activities, natural disasters, actions of external parties, and other unforeseeable events. These could prove detrimental to PTT's personnel, assets, environment, business operation, reputation, financial standing, and business opportunities.

PTT therefore values risk management by assessing risks concerning security, safety, health, and the environment (SSHE) both in normal times and otherwise (including emergencies and crises), and then defines systematic measures to control, prevent, and mitigate such risks in line with standards requirements of PTT Group Security, Safety, Health and Environmental Management Standard (PTT Group SSHE MS), first developed and implemented in 2010 especially for the Group. The management standard was based on TIS/OHSAS 18001 and ISO 14001. Today all operating lines and all facilities are still certified with TIS/ OHSAS 18001 and ISO 14001 by MASCI (Management System Certification Institute (Thailand)). They have also developed strategic plans and action plans for business continuity management (BCM) and staged relevant drills to ensure that PTT businesses will continue uninterrupted. Notably, PTT Head Office and supporting units were the first to achieve TIS 22301-2553 certification from MASCI. Also, like other companies in the petroleum and petrochemical industries, PTT has taken out insurance policies to protect its major operating assets against risks and business interruption.

3.2 Risks from environmental and safety regulations

PTT's business operations must conform to relevant laws and regulations concerning impacts on the environment and safety, which are bound to get increasingly tough. If such new laws are promulgated or if changes are made to the policy on their enforcement, they may limit PTT's operation or significantly raise operating costs. Besides, risks could arise in the time required and conditions for the approval of environmental and health impact assessments (EHIAs), including the participation process and community acceptance, which may cause project delays-including community acceptance of PTT's business in all its sites. These could affect its business and future income generation.

To address these risks, PTT monitors and analyzes the impacts of changes in environmental and safety laws and regulations on its operation. It also closely coordinates with government agencies, applies available information to develop work plans and response measures, and ensures ongoing community relations activities in operating areas with a constant focus on community participation.

3.3 Risks from project operation

Key factors supporting PTT's successful business expansion include a continued rise in gas consumption and the ability to expand its gas transmission system and create value to sustain rising gas demand. In addition, PTT's business expansion is limited by the reach of its gas transmission system to customers, its gas separation capacity, and the success in building PTT Group's petrochemical plants. Development of projects could fall behind schedules for various reasons, including delays in identifying contractors, procurement of equipment needing long lead time and transport time, filing for approvals from relevant government agencies, and securing of approvals on EHIAs. So, if projects are delayed, PTT's financial standing and performance are at stake.

PTT values the administration of critical-path matters, including the acceleration of construction contractor hiring, close monitoring of construction equipment purchases, preparation of mitigating measures for environmental impacts, monitoring and analysis of impacts on project execution, institution of community relations units charged with developing people participation plans, and preparation of contingency plans and measures to ease potential implications of delayed project completion.

4. Financial Risks

4.1 Risks from volatility of the Baht

Changes in the exchange rate between the Baht and the US dollar directly and indirectly affect the majority of PTT's revenue, consequently affecting its bottom line. Therefore, the fluctuation of the Baht and the government's economic, financial, and treasury policies affect its consolidated financial and operating performance.

To ease this risk, PTT has balanced its foreign loans in proportion to its revenue from foreign currencies (that is, taking a natural hedge) and leveraged financial derivatives in converting foreign-currency loans, while managing its foreign-currency deposits and purchasing foreign currencies forward to match the quantity of foreign currencies required for foreign-loan repayment and for commercial transactions. PTT has also developed a treasury and credit policy as a common guideline for PTT Group, which includes terms of reference for instituting assorted risk management.

4.2 Risks from financial support to affiliated companies

In the past and during the recent Asian economic crisis, PTT provided financial support to its affiliates under a shareholder support agreement and coordinated with their executives, creditors, and other major shareholders on debt restructuring. It is PTT's policy not to incur new financial burdens unless necessary or for its benefit. In the long term, it will consider extending financial support in the form of loans or commercial credit, or both, to individual affiliates in the belief that such a policy and action would foster sustainable strength for PTT Group.

In extending such financial support to these affiliates, whether in the form of subordinated loans, capital, or commercial credit, PTT cannot guarantee that these companies will repay such loans or credit, or that they will not need financial support from PTT again - all these could harm PTT's performance and financial status. Besides, if PTT or any member of PTT Group becomes a default party under any agreement on shareholder support, some creditors may accelerate debt repayment. Therefore, we cannot guarantee that PTT will not raise its shareholding, raise its shareholding to more than half, or take over such a company if such action is considered more beneficial. If this should happen, the Thai accounting standards require that PTT consolidate the financial statements of the Company in question with those of PTT, effective from the date of such control onward. In short, such consolidation puts PTT's overall financial status at stake.

4.3 Acquisition of funds for plan execution

The businesses of PTT - in particular, petroleum exploration and production, natural gas transmission systems, gas separation plants, and the petrochemical businesses - require massive capital investments that are paid in advance. Although PTT closely monitors and manages business risks, the actual investment capital required may deviate from project plans due to factors beyond its control, thus potentially affecting the success and project capital costs.

Thanks to PTT's business conduct that focuses on fostering long-term growth and good corporate governance, the Company has continuously grown. It plans to invest in prudent business expansion, with due consideration for sources of capital, particularly capital structuring that will enable it to maintain essential financial ratios at suitable levels comparable to companies in the same industry. Continuous monitoring of factors concerning the sourcing of investment capital has assured PTT that it can secure sufficient and suitable funds for future business expansion.



PTT's Securities

Common shares

As of January 4, 2012, PTT's registered capital stood at Baht 28,572,457,250 which was made up of 2,857,245,725 common shares at Baht 10 per share. These consisted of Baht 28,562,996,250 in paid-up capital, or 2,856,299,625 common shares.

Bonds and debentures

As of December 31, 2011, PTT had secured domestic loans of Baht 10,000 million in the form of PTT bonds, guaranteed by the Ministry of Finance, together with bonds and debentures not guaranteed by the ministry, worth Baht 142,804 million, for a total of Baht 152,804 million. Foreign loans were in the form of PTT debentures of US dollar and Yen denominations, not guaranteed by the ministry, equivalent to Baht 48,322 million. These bonds and debentures are summarized below.

Bond and Debenture	Amount (Million Baht)	/	Redemption Date	/	Guarantee
Ministry of Finance-guaranteed PTT bonds Domestic bonds	10,000		2012-2020		None
PTT bonds not guaranteed by the Ministry of Finance					
· Domestic bonds	-		-		-
· Domestic debentures 1/4/	142,804		2012-2110		None
·Foreign debentures 2/ 3/ 4/	48,322		2014, 2017,		None
			2022, 2035		
Total	191,126				
Grand total	201,126				

^{1/} Fitch Rating's national rating of long-term PTT debentures at AAA (tha) with a stable credit outlook

^{2/} Moody's international rating of foreign PTT debentures at Baa1 with a stable credit outlook, from A3 with a stable credit outlook, on February 21, 2011 3/ S&P's international rating of foreign PTT debentures at BBB+ with a stable credit outlook

^{4/} See details of domestic and foreign PTT debentures

Domestic, unsecured, unsubordinated debentures (Unit: Million Baht)

Symbol	Amount (Million Baht)	Annual Interest Rate (%) (Payment Frequency)	Maturity Period (Years)/ Redemption Schedule
PTTC125A	15,000	(Year 1-4) 4.25, (Year 5-8) 5.75 (every six months)	Eight / 2012
PTTC13NA	11,700	(Year 1-5) 4.5, (Year 6-10) 5.75 (every six months)	Ten / 2013
PTTC130A	7,450	(Year 1-3) 5, (Year 4-5) 5.5 (every six months)	Five / 2013
PTTC130B	5,400	(Year 1-3) 5, (Year 4-5) 5.5 (every six months)	Five / 2013
PTTC14DA	2,946	(Year 1-3) 5, (Year 4-7) 5.95 (every six months)	Seven / 2014
PTTC150A	2,550	(Year 1-3) 5, (Year 4-5) 5.5, (Year 6-7) 6 (every six months)	Seven / 2015
PTTC150B	2,600	(Year 1-3) 5, (Year 4-5) 5.5, (Year 6-7) 6 (every six months)	Seven / 2015
PTTC153A	6,000	4.86 (every six months)	Eight / 2015
PTTC156A	4,040	4.75 (every six months)	Ten / 2015
PTTC15NA	5,000	7.40 (every six months)	Ten / 2015
PTTC165A	3,000	(Year 1-6) 5, (Year 7-12) 5.95 (every six months)	Twelve / 2016
PTTC165B	2,970	6.17 (every six months)	Ten / 2016
PTTC160A	8,000	5.79 (every six months)	Ten / 2016
PTTC17DA	1,500	5.87 (every six months)	Ten / 2017
PTTC18DA	500	5.91 (every six months)	Eleven / 2018
PTTC195A	1,000	5.9 (every six months)	Fifteen / 2019
PTTC208A	4,118	5.95 (every six months)	Fifteen / 2020
PTTC215A	1,030	6.53 (every six months)	Fifteen / 2021
PTTC243A	15,000	(Year 1-5) 5, (Year 6-8) 6.2, (Year 9-15) 6.8 (every six months)	Fifteen / 2024 (redeemable after Year 8)
PTTC127A	8,500	3.2 (every six months)	Three / 2012

Symbol	Amount (Million Baht)	Annual Interest Rate (%) (Payment Frequency)	Maturity Period (Years)/ Redemption Schedule
PTTC167A	17,100	(Year 1-5) 4.25, (Year 6-7) 5.25 (every six months)	Seven / 2016
PTTC247A	9,400	(Year 1-5) 4.25, (Year 6-10) 5.5, (Year 11-15) 5.75 (every six months)	Fifteen / 2024 (redeemable after Year 10)
PTTC17DB	4,000	(Year 1-4) 3.2, (Year 5-6) 4.2, (Year 7) 5 (every six months)	7 years and 15 days / 2017
PTTC10DA	4,000	5.9 (every six months)	100 years / 2110 (redeemable after Year 50 and Year 75, and as defined in the terms on rights and duties of the issuers and the holders)

Foreign, unsecured, unsubordinated debentures (Unit: Million Baht)

Symbol	Amount (Million Baht)	Annual Interest Rate (%) (Payment Frequency)	Maturity Period (Years)/ Redemption Schedule
USD bond, 2004	12,695.73	5.75 (every six months)	Ten / 2014
USD bond, 2005	10,829.50	5.875 (every six months)	Thirty / 2035
Samurai bond, 2007	9,247.49 1/	2.71 (every six months)	Ten / 2017
PTTC14DA swapped to USD	2,864.87 2/	4.74 on average (every six months)	Seven / 2014
PTTC14DB swapped to USD	6,317.80 3/	1.375 on average (every six months)	Four / 2014
PTTC172A swapped to USD	2,528.90 4/	LIBOR plus 1.04% (every six months)	Seven / 2017
PTTC222A swapped to USD	3,837.48 5/	LIBOR plus 1.05% (every six months)	Twelve / 2022

^{1/} PTT entered into a cross-currency swap from Yen-denominated debentures worth Yen 36,000 million to dollar-denominated ones worth USD 290.51 million and used financial derivatives to conduct a switchable swap and a cross-currency swap linked to LIBOR as follows: USD 96.84 million at a fixed rate of 4.975% per year, convertible by a derivative into a floating rate at LIBOR + 0.65% per year; another USD 96.84 million at a floating rate of LIBOR + 0.20% per year if LIBOR exceeds 4.25% per year, or 5.5% per year if LIBOR is up to 4.25% per year; and another USD 96.84 million at a fixed rate of 5.37% per year, convertible by a derivative to LIBOR + 0.20% per year.

^{2/} PTT entered into a cross-currency swap from Baht-denominated debentures worth Baht 3,054 million to dollar-denominated ones worth USD 90 million at a fixed interest rate averaging 4.74% per year, thus leaving Baht 2,946 million in Baht-denominated loans

- 3/ PTT entered into a cross-currency swap from Baht-denominated debentures worth Baht 6,000 million to dollar-denominated ones worth USD 198.47 million at a fixed interest rate averaging 1.375% per year.
- 4/ PTT entered into a cross-currency swap from Baht-denominated debentures worth Baht 2,636 million to dollar-denominated ones worth USD 79.45 million at a floating interest rate of 6m LIBOR + 1.04%.
- 5/ PTT entered into a cross-currency swap from Baht-denominated debentures worth Baht 4,000 million to dollar-denominated ones worth USD 120.55 million at a floating interest rate of 6m LIBOR + 1.05%.

PTT Warrants

- 1. On April 12, 2005, the 2005 Annual General Meeting of Shareholders (AGM) acknowledged the issuance and offer of 60,000,000 warrants to the President, the management, PTT employees, and employees of PTT Group companies seconded to PTT. The warrants consisted of two batches:
 - PTT-W1, numbering 40,000,000 units, offered in 2005
 - PTT-W2, numbering 20,000,000 units, offered in 2006.

The AGM approved the issuance and offer of all PTT-W1 units covering the purchase of 40,000,000 common shares. Each warrant contained four portions, each exercisable on the last operating day of a three-month period throughout the life of the warrant. Detailed summary of the allocation is as follows:

Portion	Units	Life (Years)	Value (Baht)	Ratio of Warrants Exercised (Common Shares)	Exercisable Period Details
1	10,000,000	5	183	1:1	• First exercisable date was August 31 st , 2006, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is August 31 st , 2010.
2	10,000,000	5	183	1:1	• First exercisable date was August 31 st , 2007, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is August 31 st ,2010.
3	10,000,000	5	183	1:1	• First exercisable date was August 31 st , 2008, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is August 31 st , 2010.
4	10,000,000	5	183	1:1	• First exercisable date was August 31 st , 2009, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is August 31 st , 2010.

From the issuance date to the last exercise date of PTT-W1 on August 31st, 2010, warrant exercise for PTT-W1 covering 39,407,300 units were recorded.

Note

- The issued warrants, bearing holders' names, were non-transferable except when transferred to a legitimate heir or representative
- Eligible under this scheme were the President, the management, all PTT employees, and employees of PTT Group companies seconded to PTT.

 No other directors of the Board received these warrants.
- 2. On April 11th, 2006, the 2006 AGM approved the issuance and offer of all PTT-W2 units covering the purchase of 20,000,000 common shares for the President, the management, PTT employees, and employees of PTT Group companies seconded to PTT. Each warrant contained four portions, each exercisable on the last operating day of a three-month period throughout the life of the warrant. A detailed summary of the allocation is as follows:

Portion	Units	Life (Years)	Value (Baht)	Ratio of Warrants Exercised (Common Shares)	Exercisable Period Details
1	5,000,000	5	234	1:1	• First exercisable date was September 28 th , 2007, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is September 28 th , 2011.
2	5,000,000	5	234	1:1	• First exercisable date was September 28 th , 2008, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is September 28 th , 2011.
3	5,000,000	5	234	1:1	• First exercisable date was September 28 th , 2009, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is September 28 th , 2011.
4	5,000,000	5	234	1:1	• First exercisable date was September 28 th , 2010, then every last operating date of every three months from the above-mentioned date throughout the life of the warrants. The last exercise date is September 28 th , 2011.

From the issuance date to the last exercise date of September 28th, 2011, warrant exercise for PTT-W2 covering 19,646,600 units were recorded.

Note

- The issued warrants, bearing holders' names, were non-transferable except when transferred to a legitimate heir or representative
- Eligible under this scheme were the President, the management, all PTT employees, and employees of PTT Group companies seconded to PTT.

 No other directors of the Board received these warrants.

Shareholders

PTT's shareholder structure as of September 9th, 2011, the book closing date for 2011 interim dividend payment, was as follows:

ltem	Shares (in million)	Value (Million Baht)	%
Registered Capital	2,857	28,572	-
Paid-Up Capital as of January 4 th , 2012	2,856	28,562	100.000
Ministry of Finance	1,460	14,598	51.145
 Vayupak Fund 1 by MFC Asset Management Plc 	218	2,179	7.634
 Vayupak Fund 1 by Krung Thai Asset Management Plc 	218	2,179	7.634
Institutional and Public Investors	960	9,606	33.587
Unpaid Capital	1	10	

PTT's top 13 shareholders as of September 9th, 2011, were as follows:

Name	Shares	%
Ministry of Finance	1,459,885,575	51.145
Vayupak Fund 1 by MFC Asset Management Plc	217,900,000	7.634
Vayupak Fund 1 by Krung Thai Asset Management Plc	217,900,000	7.634
Thai NVDR Co., Ltd.	88,919,503	3.115
Chase Nominees Limited 42	72,840,201	2.552
HSBC (Singapore) Nominees Pte. Ltd.	57,254,742	2.006
State Street Bank and Trust Company	41,235,271	1.445
Nortrust Nominees Ltd.	31,371,462	1.099
Social Security Office (2 cases)	25,794,700	0.904
State Street Bank Europe Limited	21,065,302	0.738
Government of Singapore Investment Corporation C	16,981,300	0.595
The Bank of New York Mellon	14,965,000	0.524
The Bank of New York Mellon - CGT Taxable	14,409,270	0.505
Total	2,280,522,326	79.896
	Ministry of Finance Vayupak Fund 1 by MFC Asset Management Plc Vayupak Fund 1 by Krung Thai Asset Management Plc Thai NVDR Co., Ltd. Chase Nominees Limited 42 HSBC (Singapore) Nominees Pte. Ltd. State Street Bank and Trust Company Nortrust Nominees Ltd. Social Security Office (2 cases) State Street Bank Europe Limited Government of Singapore Investment Corporation C The Bank of New York Mellon The Bank of New York Mellon — CGT Taxable	Ministry of Finance1,459,885,575Vayupak Fund 1 by MFC Asset Management Plc217,900,000Vayupak Fund 1 by Krung Thai Asset Management Plc217,900,000Thai NVDR Co., Ltd.88,919,503Chase Nominees Limited 4272,840,201HSBC (Singapore) Nominees Pte. Ltd.57,254,742State Street Bank and Trust Company41,235,271Nortrust Nominees Ltd.31,371,462Social Security Office (2 cases)25,794,700State Street Bank Europe Limited21,065,302Government of Singapore Investment Corporation C16,981,300The Bank of New York Mellon14,965,000The Bank of New York Mellon – CGT Taxable14,409,270

Note

- : 1. Numbers 5, 6, and 8 were nominee accounts. PTT's investigation at Thailand Securities Depository Co., Ltd., (TSD) found that the ultimate shareholders' names could not be disclosed. However, the Ministry of Finance remained the single majority shareholder on behalf of the state, which in part dictated PTT's management policy. The ministry nominated directors to the Board for approval by shareholders. Other substantial shareholders, including the three above-mentioned ones, did not exercise any influence over PTT's management policy formulation, for example, nominating directors.
- : 2. Shareholders of Thai NVDR Co., Ltd., who held non-voting depositary receipts in item 4, were ineligible for voting at shareholders' meetings except when exercising their voting rights on delisting the shares from SET.

Dividend policy

PTT's dividend policy

PTT's policy is to pay out dividends at no less than 25% of its net income after deducting all provisional reserves required by law and by PTT. The net income is to be based on the consolidated financial statements. Dividend payment, however, is subject to future investment plans, necessity, and suitability. Once the Board of Directors has decided on the annual dividend payment, it is to seek approval from the meeting of the shareholders. An exception is for interim dividend payment, in which case the Board is authorized to approve such payment and report to the next meeting of the shareholders.

Subsidiaries' dividend policy

As for the dividend policy for subsidiaries, it is up to each subsidiary to decide dividend payment by taking into account its remaining cash flow in relation to the investment capital. If the cash flow is substantial enough after legal provisions, the subsidiary may proceed with the payment on a case-by-case basis.

PTTEP Plc's dividend policy

Barring other necessity, the Board's policy is to propose to the meeting of the shareholders dividend payments at no less than 30% of PTTEP's net income after deducting its annual income tax each year, with occasional interim dividend payment. PTTEP's policy allows no subsidiary to pay dividends.



In conducting business, PTT constantly recognizes that all shareholders own this company. What gives the shareholders trust and confidence in their investment with PTT is the Company's policy and operation that preserves the basic, lawful rights of the shareholders, or more, in addition to suitable, efficient, and most effective management that is consistently acceptable to investors and relevant parties.

Ever since the privatization into PTT Plc. and distribution of Company's shares on the Stock Exchange of Thailand (SET) in late 2001, it has valued corporate governance as its guiding principles. PTT regulations state: "The Company must have and implement a policy on its business ethics, including the ethics of its Board of Directors, the senior management, the administration and employees in compliance with good corporate governance practices as its code of conduct for the proper conduct of the organization with high standard."

So, PTT subsequently issued its rules on good corporate governance in 2001 and published them as the handbook for each director, the management, and the









1. Rights of Shareholders

As the owners, the shareholders are entitled to dictate the Company's direction or decide on matters of significant impacts on the Company. Shareholders' meetings therefore serve as their key forums for the expression of views, asking of questions, and voting, apart from election of directors to supervise Company operation on behalf of the shareholders. Shareholders are entitled to attend shareholders' meetings, take adequate deliberation time, and acknowledge meeting minutes.



1.1 Shareholders' Meetings

As a rule, PTT schedules an annual general meeting of shareholders (AGM) within four months of the annual closing date of its accounting books. For urgent matters that affect or involve the shareholders' interests or involve conditions, regulations and laws that require the shareholders' approval, it calls an extraordinary meeting of the shareholders. In 2011, the AGM fell on April 20 with the venue being Queen Sirikit National Convention Center (Plenary Halls 1-3) in Bangkok. No extraordinary meeting was held this year.

1.2 Delivering Meeting Notices

When the Board decides on calling a shareholders' meeting, it will disclose its decision, meeting date, and meeting agendas in details ahead of time by announcing on SET's website to alert the shareholders before sending meeting notices.

PTT assigned Thailand Securities Depository Co., Ltd. (TSD), its securities registrar, to mail meeting notices together with details of the agenda and accompanying documents, supplementary and supporting information for decision-making, opinions of the Board, complete minutes of the past meeting, the annual report, meeting documents, proxy forms with complete instruction, to the shareholders more than 14 days ahead of each meeting date. Similarly, at least three days ahead of each meeting, the invitation was announced through one Thai and one English newspaper, each for three days, to allow the shareholders enough time to prepare themselves for the meeting. The AGM meeting notices were made available at PTT's website (http://www.pttplc.com) at least 30 days ahead of the meeting date.

1.3 On the Meeting Date

Before each meeting, the chairman introduces directors, management team members, the external auditor and the legal adviser who acts as a moderator. After explaining the Company's rules on voting and vote counting for individual agenda items, the chairman of the meeting must clearly address how to vote on each agenda item. Once information has been provided for each item, the chairman gives the floor to all attendants to express opinions or recommendations and ask questions, giving adequate time for debate. The chairman and the management are to address and answer all questions clearly and precisely, treating all questions with due respect. For the election of directors, individual votes are required.

The chairman ensures that the meeting proceeds according to the order of the agenda and does not add an item without notifying shareholders in advance. If the meeting decided to change the order of the agenda, it would need at least two-thirds of the vote of the shareholders in attendance. Alternatively, the shareholders with at least one-third of



all the sold shares may ask the meeting to consider other matters not mentioned in the meeting notice. At the 2011 AGM, the order of the agenda was not changed and there was no request to consider any other matter.

The minutes of the meeting must be completely and

accurately recorded. Voting completes each applicable agenda item. As a rule, shareholders' meetings last 3-4 hours. The AGM of 2011 began at 9.30 a.m., with registration beginning at 7.30 a.m., and was adjourned at 1.33 p.m., with the following attendees:

Board of Directors

1. Mr. Naris Chaiyasoot	Acting Chairman
2. Dr. Norkun Sitthiphong	Director
3. Mr. Chaikasem Nitisiri	Independent director / Acting Chairman, Audit Committee,
	Chairman, Corporate Governance Committee
4. Mr. Watcharakiti Watcharothai	Independent director / Acting Chairman, Nominating Committee,
	Member, Corporate Governance Committee
5. Mr. Nontigorn Kanchanachitra	Independent director / Chairman, Remuneration Committee
6. Mr. Krairit Nilkuha	Director/ Member, Remuneration Committee
7. Dr. Surapon Nitikraipot	Independent director / Member, Corporate Governance Committee
8. Mr. Anuwat Maytheewibulwut	Independent director
9. Mr. Bhusana Premanode	Independent director
10. Mr. Sommai Khowkachaporn	Independent director
11. Mr. Pichai Chunhavajira	Director
12. Ms. Benja Louichareon	Director
13. Mr. Prasert Bunsumpun	Director & Secretary to the Board/ President & CEO

Executives

1. Mr. Tevin Vongvanich	CFO
2. Dr. Prajya Phinyawat	COO, Downstream Petroleum Business Group

Also in attendance were several senior executive vice presidents and executive vice presidents of business units to address queries.

External Auditors

1. Ms. Mayuree Chanthamart	Office of the Auditor-General
2. Ms. Phissamai Chalamket	Office of the Auditor-General
3. Ms. Angkana Thechawongsakorn	Office of the Auditor-General

Legal Advisers (to proctor balloting in case of disputes during the meeting)

1. Ms. Pheangphanaw Boonklam	Weerawong, Shinawatra & Pheangphanaw Co., Ltd.
2. Mr. Akraphol Phichedvanitchok	Allen & Overy (Thailand) Co., Ltd
3. Ms. Manunya Thitinunthawan	Allen & Overy (Thailand) Co., Ltd.
4. Mr. Sarayut Jitprasertngam	Allen & Overy (Thailand) Co., Ltd.

Number of Shareholders (at meeting's end)

6,785 shareholders registered, of whom 3,071 were shareholders and 3,714 were proxy holders, holding a total of 2,162,521,091 shares, accounting for 75.90% of the total issued and outstanding shares.

1.4 Practical Guidelines for Reporting Conflicts of Interest

As specified by the Corporate Governance Handbook, all directors, management team members, and the employees must prepare reports on conflicts of interest - consisting of annual reporting forms and a new annual format in case of changes during the year. At a given meeting, people with vested interests or conflicts of interest with PTT must inform the meeting to excuse themselves and abstain from voting on each connected matter.

Similarly, at shareholders' meetings, directors are supposed to behave likewise in case they are connected with any agenda item.

1.5 Disclosure of Shareholders' Meeting Outcomes

After each meeting, PTT duly submits the minutes, with voting records and every question raised by shareholders to SET and the SET board within one day after the meeting. It also duly submits the report of the shareholders' meeting with minutes, voting records and every question raised by shareholders to SET and the SET board within 14 days after the meeting. Meeting information, videotapes and audiotapes are accessible through PTT's website.

2. Equitable Treatment of Shareholders

Different shareholding proportions and thus different voting proportions do not necessarily mean different treatment of shareholders. PTT treats all shareholders fairly without regard for their gender, age, origin, nationality, religious belief, physical impairment, or political inclinations. Should shareholders be unable to take part in their meetings, they always have their proxy rights.

2.1 Proposing Additional Meeting Agenda **Items and Nominating Directors**

To enable minor shareholders to earnestly take part in business operation and auditing, PTT has defined criteria for entitling them to propose meeting agenda items and/or nominate directors in advance to deliberate agenda items that could be useful to PTT, including the selection of qualified directors to perform their duties efficiently in the best interests of PTT and all stakeholders alike. In practice, shareholders with a combined holding of at least 100,000 shares could propose agenda items or nominate qualified directors before the AGM during the last quarter of the previous year.

For the AGM held in 2011, PTT posted such criteria on its website from October 28, 2010, to December 31, 2010, and posted an announcement on the website of SET. For the AGM held in 1012, PTT posted such criteria on its website and the website of SET from October 31 to December 31, 2011. However, it attracted no recommendation of such agenda items and no nomination of directors.

2.2 Facilitating Shareholders at the Meeting

At shareholders' meetings, PTT facilitates all shareholders by manning officers to welcome and take care of them, and provides adequate convenience. Meeting venues are well chosen to facilitate the elderly and those on wheelchairs. Back-up meeting rooms are in place, as is a signal relay system between meeting rooms. Security precautions and emergency contingency plans are in hand. Examination of registration credentials one day ahead of the meeting is possible. Officers provide photocopying services and verify

documents. On the meeting day, registration opens two hours ahead of the meeting and extends until the period before the last meeting agenda. A barcode system quickens registration. Finally, the shareholders have access to a reception.

Since most of the shareholders attending the AGM are Thais, the meetings are conducted in Thai. However, for the benefit of foreign shareholders, PTT has commissioned the translation of shareholders' meeting supplementary documents and other relevant documents in English. Its website is also bilingual. It also provides officers skilled in English on hand at meetings to facilitate foreign shareholders. If shareholders cannot communicate in Thai but want to pose queries or discuss in the meetings, PTT arranges for suitable communication and provides translation into Thai for both the queries and the answers for other shareholders in order to preserve their interests and ease communication needs for foreign shareholders.

2.3 Appointing Proxies

To maintain the rights of those shareholders who cannot attend in person, they can appoint proxies or delegate their votes to any PTT's independent director in attendance. To this end, PTT has specified these independent directors' names in proxy forms defined by the Ministry of Commerce for voting on behalf of shareholders without conditions. PTT treats proxies as if they were shareholders. Thirty days ahead of each meeting, PTT discloses the proxy form which is attached along with details and procedures on its website. Shareholders may inquire about this by phone or other channels.

3. Roles toward Stakeholder

PTT accounts for stakeholders' rights and interests by establishing guidelines for addressing the needs of each group inside and outside the Company, as well as its own responsibility to society and the environment. These spell out PTT Group's missions for each of the six following groups:

To the country Ensuring long-term energy security by providing sufficient high-quality energy supply at fair prices to support economic growth.

For community and society

Maintaining a good standing corporate status in Thai society by exercising environmental stewardship of internationally accepted standards and helping to improve the quality of life for community and society.

To shareholders Operating profitable business that lead to sustainable growth while generating optimum returns.

To customers

Ensuring customers' satisfaction and loyalty by delivering world-class quality products and services at fair prices.

To business partners

Conducting fair practice with all partners while promoting trust, relationship, and cooperation to extend business capability and increase efficiency in long-term business partnership.

To employees

Promoting capability building professionally and ensuring employees' well-being is on the level with other leading companies in order to embolden organization/ employee bond

3.1 Treatment of Six Main Stakeholder Groups 3.1.1 Thailand

As a state enterprise serving as the national energy company, PTT secures natural resources to address the needs of the country while accommodating public policy on research, development, production, and distribution of alternative energy and clean energy to lower import dependence. Also, PTT generates income for the public sector (which is its major shareholder) for use in national development and is the leader in alternative energy.

PTT's businesses consist of procurement and supply, transportation, distribution, gas processing, and investment in NGV service stations, in addition to businesses that exploit and add value to natural gas through PTT Group companies. To achieve this, it secures gas supply from indigenous sources, imports from neighboring countries, and imports LNG

in the future to satisfy demand. PTT secures more natural gas from indigenous sources to sustain demand posed by the power sector, industrial sector, and transportation sector. Efficiency of gas separation plants has been improved to raise the total capacity for gas processing into assorted products for value addition and for downstream applications.

PTT distributes its petroleum products (fuels, LPG, lubricating oil, and other products) through two main channels. First, retail marketing, conducted through PTT service stations, now developed into sophisticated and integrated 'life stations'. Second, commercial marketing, conducted through government agencies, state enterprises, industries, airliners, cargo ships, fishing boats, gas-bottling plants, LPG outlets, and exports. PTT also constantly promoted bio-fuelsnamely gasohol to replace gasoline, and biodiesel to replace diesel.

In addition, PTT invests in the exploration and production business, the oil refinery business, and the petrochemical business through its affiliates to enhance energy security. It is also a way to maximize the benefit of natural resources, a vital element of national economic development.

3.1.2 Society, Communities

PTT strictly obeys laws and regulations enforced by regulatory agencies; institutes professional petroleum management; makes the best use of natural resources; commands emergency response and crisis management systems; applies international quality, safety, health, and environmental standards to its management; and promotes the quality of life for community residents under sustainable development principles. Responsible units have been clearly designated, and PTT Group companies have been encouraged to strictly conform.

The Company has appointed a PTT Group steering committee on social responsibility, chaired by the executive vice president, corporate communications and social responsibility, and the corporate social responsibility department is the responsible agency. The Company has also appointed a PTT Group quality, safety, health, and environmental steering committee, chaired by the senior executive vice president, corporate management, and the security, safety, health, and environmental department is the responsible agency. These committees define action plans in unison throughout PTT Group.

PTT has prepared an approach for executing PTT Group's social responsibility and implemented it in pilot volunteering areas, and then assessed the alignment of actual execution against the CSR framework, the so-called Gap Assessment. The findings serve as data for the preparation of enterprise action plans. And to illustrate its responsibility to stakeholders and society in tandem with business efficiency and growth, apart from getting ready to move into international standards, PTT and PTT Group of companies certified under the Standard for Corporate Social Responsibility–Department of Industrial Works (CSR-DIW) from 2009 onward are PTT Plc.: Rayong Gas Separation Plant (GSP) and Khanom GSP; PTT Chemical Plc.: petrochemical plants; Thai Oil Plc.: refinery; Star Petroleum Refining Co., Ltd.: refinery; Thai Lube Base Plc; IRPC Plc.: polypropylene plant and polyethylene plant; Thai Paraxylene Co., Ltd.; PTT Aromatics and Refining Plc.: AR1 and AR2 complexes; PTT Phenol Co., Ltd.; and HMC Polymers Co., Ltd. These companies joined CSR-DIW Network to promote CSR activities of the industrial companies which received the certification and establish close cooperation between the private and public sectors as well as among the private sectors themselves.

This year the Department of Industrial Works organized a ceremony where plaques and certificates were handed out for CSR-DIW for 2011 by the permanent secretary of industry and the director-general of the Department of Industrial Works. Such awards consisted of:

- 1. CSR-DIW Awards 2011: 117 awardees, with three coming from PTT Group, namely IRPC (HDPE plant), IRPC (BTX plant), and PTT Polymer Logistics.
- 2. CSR-DIW Continuous Awards 2011: 139 awardees, with 11 coming from PTT Group, namely PTT PIc. (Rayong and Khanom GSPs), IRPC PIc. (polypropylene plant and ethylene plant), PTT Chemical PIc., Thai Oil PIc., Thai Lube Base

Plc., Thai Paraxylene Co., Ltd., Independent Power (Thailand) Co., Ltd., PTT Phenol Co., Ltd., and HMC Polymers Co., Ltd.

3. CSR-DIW Network Awards 2011: 34 awardees, with one coming from PTT Group, namely HMC Polymers Co., Ltd.

In addition, PTT has appointed a PTT Group steering committee for CSR and communication in Rayong, consisting of senior PTT Group management in Rayong from 11 companies to ensure that such work of the Group in Rayong is uniformly executed.

PTT remains committed to continually proceeding with social and community development work, encompassing educational, social, environmental, arts and cultural, and sports aspects with a focus on participation of all stakeholders to bring about understanding and joint thinking for "Power for Sustainable Future".

For details of 2011 activities, please refer to the "Power for Sustainable Future" and the "corporate citizenship" in coporate sustainability report 2011.

3.1.3 Shareholders

The Sustainable Growth Strategy finds application in PTT management to achieve a high-performance organization (HPO) that is based on corporate governance in tandem with corporate social responsibility to ensure investors that PTT provides sound investment returns and is sustainable, apart from being a part of Thai society in years to come.

Investors' Activities

PTT has continually arranged trips for minor investors to visit our operations, update information and meet the management as well as participating in PTT's CSR activities in Rayong areas since 2006. This year the trip was planned for November 15-17. However, due to the Great Floods, the trip was postponed to February 14-16 to visit Rayong GSP and the HRH Princess Maha Chakri Sirindhorn Herb Garden for 480 shareholders in three groups, each of 160 persons.

PTT mailed invitations and reply letters to the shareholders whose names appeared on the roster at the registration book closing for interim dividend of 2011 on



September 9, 2011. With an overwhelming response from more than 3,000 investors, PTT management drew lots to decide the actual visitors' names on October 26 and announced the results on its website. In addition, PTT officers phoned the winners to confirm their interest.

Those interested in visiting PTT's operations can follow project updates and details on PTT's website. PTT reserves the rights to invite only those that have never taken part in this activity.

Activities for Debunture Holders

Relations activities with debenture holders for 2011 included the Everlasting Concert at the Impact Arena, Muang Thong Thani for about 14,500 debenture holders and their company. CSR activities held at the concert consisted of PTT's booth on 'Open Heart for Sustainable Happiness' in honor of His Majesty the King on the 84th birthday and other fun booths. Proceeds from the activities were donated to the families of the soldiers lost in helicopters crashes at the Kaeng Krachan National Park, Phetchaburi. Other activities held to keep good contact and faith with our debenture holders who invested in our debentures included sermon activities with Wor Wachiramethi (a respected Thai monk and philosopher), the film Somdej Phra Naresuan Maharaj, Episode 3 and 4, and a seminar on 'Investment Happiness Style'.

Activities for Institutional Investors

In 2011, PTT organized regular Company visits and meetings with its executives for institutional investors and securities analysts in January and organized a visit to Rayong GSP Unit 6. There such visitors learned about PTT's business direction from executives first-hand and had an opportunity to be involved in PTT's social responsibility activities.

3.1.4 Customers

PTT takes customers' satisfaction seriously, since they buy our products and services. It offers fair prices, quality, and accountability to customers and consumers, and is committed to consistently developing its products and provides safe, integrated, prompt, and quality services in response to their needs.

PTT has implemented quality, security, safety, occupational health, and environmental management systems (QSHE) in its operations to focus on quality management through efficient work processes to deliver products and services that please customers. At the heart of its operation is the continual implementation of assorted systems, including ISO 9001, TIS 18001, and ISO 14001.

PTT's retail oil business is based on free competition under market mechanisms and the public sector's supervision.

Retail fuel price differences are the key to consumers'

decisions, which is why prices among operators have been very close, since no one wants to lose market shares. Yet, PTT is always the last company that raises domestic retail prices so as to ease consumers' burdens.

PTT takes consumers' demand seriously by providing diverse services and amenities at service stations, including convenience stores, Café Amazon coffee shops, food outlets, lubricating oil services, car wash services, and banking services under the "PTT Life Station" concept to cater to consumers' diverse needs. New products were introduced, including PTT Blue Innovation products of novel formulas, which offer complete combustion, and four new grades of lubricating oil.

PTT has instituted a call center system for diverse channels of taking in views, comments, and complaints from customers and consumers. Complaints are promptly addressed in an efficient manner. Comments are solicited after service uses to improve services; opinion surveys are also taken.

3.1.5 Business Partners

PTT values its business partners because they are the key to business success through mutual support. PTT treats business partners fairly and on the basis of fair competition and mutual respect and in good cooperation. PTT values procurement processes, as they are vital to the determination of expenses and the quality of PTT products and services. For transparency, a clear procedure is therefore essential for openness to scrutiny and maximum benefits.

PTT requires price bidders to strictly conform to the rules about work safety and handling of tools, as well as other regulations, particularly in the type of work affecting health and surroundings. PTT visits business partners' operations to assess their capabilities, particularly on the QSHE side. In addition, business partners' employees must undergo the do's and don'ts in PTT's operated areas in addition to conforming to the requirements for entering sites to work, as described for each site.

PTT implemented the Total Cost of Ownership (TCO), a method to calculate the costs of delivering materials and communication convenience, as the criterion in selecting business partners to enable those with production bases and offices in Thailand to have greater chances. This is our support of locally produced materials, resulting in a higher number of domestic business partners for certain materials where they have no procurement limitations.



3.1.6 Employees

All PTT employees are the most crucial components of our business success. All employees - wherever they work - must be treated without prejudice. Unity, trust, impartiality, polite manners, and respect for human dignity are stressed. A good and safe work environment, with suitable compensation, welfare, and innovations, is essential. Sexual harassment is not tolerated. Besides, PTT promotes the exercising of wage earners' rights under laws governing labor unions and state enterprise relations.

Convinced that the quality of its people is the key to its high performance, PTT is committed to the development of human resource management systems compatible with technological advancement and international standards. It not only promotes both conscientious merit and business competence for its employees, but also encourages them to actively take part in public service activities. It is indeed through employees that PTT focuses on its development toward a high-performance organization to increase competitiveness and respond to the changes in the organization.

Headcount of Personnel and Compensation

As of December 31 this year, the PTT employee headcount (including those who were seconded to PTT's affiliates) stood at 4,046. PTT has continued to set its manpower plan to align with its operation under uncertain economic conditions, with the focus on allocating resources where significant value

supplementation is likely or where continuing investment is needed. PTT formulates human resource plans and earnestly develop the potential of its employees at all levels, as well as streamlining its business procedures to enhance work efficiency.

The headcounts for each business unit from 2008 to 2011 are as follows:

	2	008	/ 2	009	/ 2	010	/ 2	Unit: Persons
Business Unit	PTT	PTT Group	PTT	PTT Group	PTT	PTT Group	PTT	PTT Group
1. Gas	1,162	-	1,196	-	1,206	-	1,270	-
2. Oil	1,234	-	1,199	-	1,182	-	1,387	-
3. Petrochemicals and Refining	70	-	72	-	61	-	68	-
Support staff/ secondees to PTT affiliates	8991/	271 ^{2/}	9381/	276 ^{2/}	1,077 ^{1/}	274 ^{2/}	1,045/	276 ^{2/}
5. Subsidiaries and jointly- controlled entities	-	7,718	-	7,676	-	8,743	-	17,964
Total	3,365	7,989	3,405	7,952	3,526	9,015	3,770	18,240

Notes

: 1/ Excludes PTT secondees

2/ PTT secondees

Compensation for Personnel (excluding the President & CEO and Senior Management)

		1	,	Unit: Baht
Compensation	2008	2009	2010	2011
Salary	2,775,721,471	2,900,872,989	2,976,806,620	3,044,018,589
Bonus	1,258,216,945	1,336,855,751	1,482,437,324	1,465,345,881
Provident fund contribution	274,276,975	280,726,154	284,638,508	293,871,121
Others (if applicable)	1,376,170,707	1,346,214,160	1,592,691,853	2,076,671,038
Total	5,684,386,099	5,864,669,055	6,336,574,305	6,879,906,629

Other Compensation

PTT has instituted employee welfare and other compensation apart from salary, bonus, and provident fund contribution for management and all employees in keeping with economic conditions, cost of living and other standards for peer companies, such as housing allowance, upcountry allowance, and overtime payment. In 2005 and 2006, PTT approved two tranches of 60 million units of warrants for the President, the management, employees and employees from affiliated companies serving PTT to boost motivation and at the same time reward the management and employees for their total and consistent dedication. This incentive was designed to create a sense of ownership and encourage participation in the management and development of PTT, benefiting its performance and business operations. Details were reported under "PTT's Warrants".

Implementing Learning Organization Mechanism for Sustainable Organization

PTT evolved its knowledge management system for essential, relevant information while encouraging the management and all to do the same and update this regularly. It made this system available to all to facilitate learning and efficient problem-solving while actively promoting employees' own development of their potential, since this is a cornerstone to a high-performance organization, that is "To become a Learning Organization, we rely on human intelligence. Learning is an ongoing, lifelong process".

PTT provided training and development programs to its management and employees from their recruitment to retirement to enable them and enhance their competence toward corporate directions and needs.



Human Resource System Development and Improvement

To become a high-performance organization, PTT has improved the process and mechanism for human resource management to ensure higher efficiency and realize the full potential of its employees. PTT employees are able to fully demonstrate their competence, advance in their career, and continue to grow with PTT. The elements of PTT's success included:

Building Competent and Righteous Members of PTT

and Society

Besides a human resource management system focusing on making employees both smart and responsive to the Company's expectations, PTT valued its role of turning out conscientious people ready to participate in Corporate Social Responsibility (CSR) while observing corporate governance principles. PTT is convinced that achievement of competence and righteousness will foster steady and sustainable growth for itself.

Participating in Decision-making on Corporate Goals and Directions

PTT has focused on participation across the board in designing business plans to suit its direction and targets, since this will efficiently align all components of the Company. To this end, it has instituted a process whereby the senior management of PTT and its affiliates along with support staff jointly define a vision and directions before propagating the agreed items for other units to use in defining business strategies and business plans and to come up with budget plans in broad alignment.

This year all PTT employees defined individual objectives and Key Performance Indicators (KPIs) cascaded through the ranks from the corporate, department, to the individual level. Such objectives and indicators defined by employees then serve as framework for performance and performance assessment standards. PTT improved the assessment of the employees' performance through the competency system, including the topics and the assessment methods. PTT also set up and reviewed the COACH assessment system, a program used to assess the employees' potential. It also improved its handbook and introduced various systems to increase efficiency in human resource management, such as the competency assessment system for employees, the Career Management System, a career path system for employees, and the Employee Self Service System, an individual management system on the Company's computer network.

Developing Employees' Career Paths in Line with Corporate Business

Career management is a management tool to prepare and promote the management and all employees to be equipped with skills and knowledge to fit the model designed by PTT in coping with the missions and creating values for the organization.

PTT has applied the career management in developing its employees for greater efficiency by dividing employees into two professional groups with clear and efficient interconnected (senior management and staff) with a system on recruitment, assessment and individual development plan in place.

- Senior management (equivalent to vice presidents upward) are subject to staff development in the form of Group Leader Development, which sustains the needs of high-level executives in both quantity and quality. Management of this group is supervised by a panel of CEO's in PTT Group called the PTT Group Management Committee (PTTGMC) with the responsibilities to define directions and the policy on development plan for senior management, and a PTT career-counseling team called PTT Group Executive Counseling Team (ECT) with the responsibilities to support the designing the development plans for senior management.
- Staff (Division Manager or equivalent downward): This internal management is specific to PTT or a PTT Group company in developing employees to suit operation needs. The Corporate Human Resources Committee (HRC) is established to promote and monitor the development plan of each individual staff member. A Career Counseling Teams (CCT) for 14 professional groups is appointed to take charge of defining and developing individuals, and providing counseling and guidance to them. The development plan is a tool for employees to set their goals and development of their career paths and put value in their work in line with PTT's direction and goals. Such staff development can be done through proper training by competency and success profiles or through job rotation in line with their career path, which will enable them to develop skills in their new positions, as do suitable appointments and promotions for their responsibilities and potential. Finally, development of staff to suit their competency and needs of both staff and the organization would in time lead PTT to its goals.



Fostering Positive Relations between the Management and Staff in Search of the Same Goal

Communication between the management and staff at PTT comes in various forms. Needing to be aware of corporate business, obstacles, and potential repercussions, all employees should be allowed to share their views and take part in business efficiency improvement. This year, besides the monthly labor relations committee meetings, PTT held joint consultation committee (JCC) meetings between its management team and staff of regional offices nationwide. In addition, the President & CEO not only continually held regular meetings with employees and attended meetings among management and staff (both in and outside PTT), but also surveyed employees' satisfaction for views and suggestions for improvement. PTT is convinced that proper communication and information exchange among all will spur the smooth relationship cooperation, thus moving the organization forward to its goals. Moreover, PTT surveyed the basic human resource needs of the management and staff through the operation of numerous committees, such as the human resource management committee, PTT labor relations committee, and career path management committee. The survey of staff opinions was undertaken once by an external human resource management adviser. There was also cooperation with PTT Group to jointly develop a database of the management as well as development plans of the senior management.

• PTT Group Core Values

PTT's management and employees believe that the PTT Group Core Values known as SPIRIT will assist PTT group and the executives and staff in creating a common working path, direction, belief that align with the vision of PTT Group to be a sustainable high-performance organization. These core values serve as guidelines in formulating ideas and beliefs which influence work practice and behavior. Thus, SPIRIT is a key element to strengthen PTT cultures, decision-making and sense of belonging and inspire the employees to be both smart and conscientious. **SPIRIT** consists of:

S = Synergy

P = Performance excellence

I = Innovation

R = Responsibility for society

I = Integrity & ethics

T = Trust & respect.



Succession Planning

Because PTT is a state enterprise, the nomination and appointment of the President & CEO must follow the Standard Qualifications of Directors and State Enterprise Officer Act. Directors must have the qualifications as specified in Article 8 ter and the nominating procedures as specified in Article 8 guarter. The Board is to appoint a Nominating Committee with five members and be legitimately qualified to nominate persons with appropriate knowledge, capability, and experience to fill the positions of PTT management. They must be legitimately qualified and cannot be PTT directors except for the management who are directors by title. They must not be older than 58 years old on the day they submitted the application form. When the Nominating Committee selects appropriate candidates, it submits the results to the authorized person to consider the appointment. The appointment must be done within one year from the day the previous management team member vacated the position. Each employment contract had a timeframe of up to four years for each term. If the Board wishes to hire a previous management team member after the completion of his term as specified in the hiring contract, it does not have to go through the nominating process, but it cannot hire such person for more than two consecutive terms.

This year, the Board recruited a new President & CEO to replace Mr. Prasert Bunsumpun, who completed his term

under his employment contract on September 9, 2011. A New President & CEO Selection Committee was appointed under the Standard Qualifications of Directors and State Enterprise Act. A total of four candidates, three from PTT executives and one non-PTT person applied for the position. The selection process was conducted transparently under the guidelines on senior executive position selection under section 8, paragraph 3 of the Standard Qualifications of Directors and State Enterprise Act (No. 6) B.E. 2550 (2007).

This committee proposed a candidate, Mr. Pailin Chuchottaworn, to the Board for consideration. The Board, on May 27, 2011, approved Mr. Chuchottaworn as the new President & CEO, replacing the outgoing Mr. Prasert Bunsumpun, with effect from September 2011 for a four-year term.

PTT has continually taken steps to nominate the next President & CEO and to prepare for the retirement of senior management team members in 2012-2017 under succession planning under PTT Group's policy/guidelines. A management pool has been developed, consisting of 312 management executives, and another potential pool for key areas.

In 2009 and 2010, PTT assigned the formulation of a Group Leader Development Project (GLDP) to lay down a succession plan for personnel when the time comes for assuming higher positions that become vacant, namely:

- President
- Senior Executive Vice President (SEVP) or equivalent
- Executive Vice President (EVP) or equivalent
- · Vice President (VP) or equivalent.

Core responsible management parties and units are as follows:

- PTT Group Management Committee (PTTGMC)
- PTT Group Executive Counseling Team (ECT)
- Corporate Human Resources Committee (HRC)
- SEVP, Corporate Management or equivalent in PTT Group
- EVP, Corporate Human Resources
- Human Resource Strategy and Policy Department
- Executive and Personnel Capability Management
 Department
- Human Resource Management Department of each business group
- Knowledge Development and Promotion Department.

Systems and policies have been defined for guidance, including these aspects:

- Principles and rationales
- Performance measurement
- Approaches
- Roles and duties of involved parties
- · System processes.

Main Procedures

- Defining for each position the business driver and success profiles
- 2. Selection of pool members
- Individual assessment of potential against the profiles of promoted positions, resulting in aspects needing development
- Individual development planning and implementation, with a mentoring system designed to enable the plans to achieve targets.

Performance in 2011

- Selecti on of SEVP pool members from EVPs
 - 73 pool members (as of December 31, 2011)
 - 12 pool members already promoted (2007-2011)
- Selection of EVP pool members from VPs
 - 107 pool members (as of December 31, 2011)
 - 13 pool members already promoted (2008-2011)
- Selection of VP pool members from PTT division managers
 - 132 pool members (as of December 31, 2011)
 - 26 pool members already promoted (2009- 2011)
- Prepared an SEVP Career Path for PTT Group.

3.2 Respect for International Human Rights Principles

PTT requires that all its directors, the management, and employees observe laws, customs, and culture which differ in each country that PTT invests in and strictly respect international human rights principles under the Universal Declaration of Human Rights, and nor does it condone its violation. Details on its 2011 actions on this matter appear in the Corporate Sustainability Report 2011.

3.3 Significant Disputes with Stakeholders

Details appear under 'Legal Dispute'.

4. Disclosure of Information and Transparency

Disclosure of information is a key index of transparency, an important factor to create confidence among investors and stakeholders. PTT values correct, accurate disclosure of information and creates numerous channels of disclosure of information so that all stakeholders can gain easy access to information. PTT promotes awareness among directors, the management team and employees of the importance of good corporate governance and transparency in their work, and creates appropriate mechanism to receive complaints and fair treatment both for those who file the complaints and those who have been complained against.

4.1 Financial and Non-financial Reports

PTT filled out the annual information disclosure form (Form 56-1) and the annual report form (form 56-2) to report on its performance for the year, financial and non-financial. The information disclosed is, at a minimum, what the Capital Market Supervisory Board requires. Such information is delivered to the shareholders along with the AGM meeting notice.

PTT has prepared the Corporate Sustainability Report 2011 to communicate its policy, management approach, and outcomes of its economic, social, and environmental performance by relying on the Global Reporting Initiative (GRI) approach, with completeness assessed at the A level. In addition, to show its transparency of information disclosure and its accountability to benefit stakeholders by receiving suitable information, PTT has commissioned an external party for the certification of the report's quality and assessment of its completeness.

This report, containing economic, social, and environmental information for the year, will be delivered along with the annual report to the shareholders and will be accessible to those interested via www.pttplc.com.

4.2 Investor Relations

Ever since PTT's privatization and share trading on SET in October 2001, the Investor Relations Department has been established as a clearing house for disclosing essential information to investors and financial reporting,



which includes performance reports, financial statements, and information reported to SET, together with quarterly Management Discussion and Analysis (MD&A) reports with updated performance and corporate directions. These are disclosed to domestic and international shareholders fairly, regularly, and thoroughly. A quarterly investors' magazine under the name "happiness" has also been prepared to communicate business information and data, as well as PTT's performance, aimed at debenture holders. Investors may contact the department directly or through the PTT website, which is regularly updated, for information in Thai and English, which includes:

- Annual report/Form 56-1
- Major investment project information
- Procurement and hiring
- Policy statements by the management
- Implementation of government policies
- Key plans
- · Corporate governance policies and promotional activities
- Financial performance
- Non-financial performances
- · Highlights of social responsibility activities.

Through the years, PTT has valued the disclosure of information that is accurate, complete, transparent, and comprehensive, as well as direct and indirect presentation of performance and keeping investors, shareholders, and relevant parties informed of its information. A summary of our activities appears below:



• **Direct**: PTT regularly presents information to analysts, investors, and employees at analysts' meetings, roadshows, conference calls and conferences. PTT also holds joint activities with SET to meet minor investors. Analysts, investors and interested parties also join company visits to meet our management and inquire about our updates at all times.

In 2010 and 2011, these key activities took place:

Activity	2010 (times)	2011 (times)
International roadshows	13	11
Domestic roadshows	4	4
Analyst meetings	4	4
Credit rating reviews	5	3
Company visits / conference calls	178	148
E-mail /phone calls	6-8 times daily	8-10 times daily
Joint activities with SET and other agencies to meet investors	3	2
Trip for institutional investors to visit and meet management team members	1	2
Trip for minor investors to visit and meet management team members	1 (3 trips)	The planned visit (three batches) in November 2011 was moved to February 2012 because of the Great Floods
Relations activities with debenture holders	3	15

• Indirect: Information about the Company, its performance, financial statements, and reports filed with SET are found at www.set.or.th, the Company's website, and the "happiness" magazine for debenture holders.

Investors and interested parties can also post inquiries to the Investor Relations Department at Tel. 0 2537 3518-9 or through e-mail at ir@pttplc.com, or through PTT website at www.pttplc.com.

In addition, PTT has constantly publicized news, business activities, and project updates, apart from addressing questions and facilitating contacts for the media and the public. The activities this year appear below:

Activities	2009	2010	2011
E-mails	165	224	216
News/photo releases	165	224	216
Press conferences	36	51	55
Media visits to operations (domestic and international)	6 per year	8 per year	8 per year
Welcoming and information provision to visiting agencies for assorted purposes	121 groups, 5,753 persons	37 groups, 2,284 persons*	49 groups 2,181 persons*

^{*} Fewer because of construction work at PTT Head Office

4.3 Complaint-Filing and Access to Information

All groups of stakeholders have equal access to its public information, including reporting of news and leads, whether inside the Company through the intranet web board or outside the Company through its website, by phone, letter, or e-mail. Please contact Investor Relations, Office of the President and Corporate Secretary, Corporate Communications, or the Ordering & Customer Relations Center through these channels:

- Telephone: Call Center 1365, 0 2537 2000
- Website: http://www.pttplc.com
 - Ordering & Customer Relations Center : orc@pttplc.com
 - Corporate Communication Department : corporate@pttplc.com
- Office of the President and Corporate Secretary : corporatesecretary@pttplc.com
- Investor Relations: ir@pttplc.com

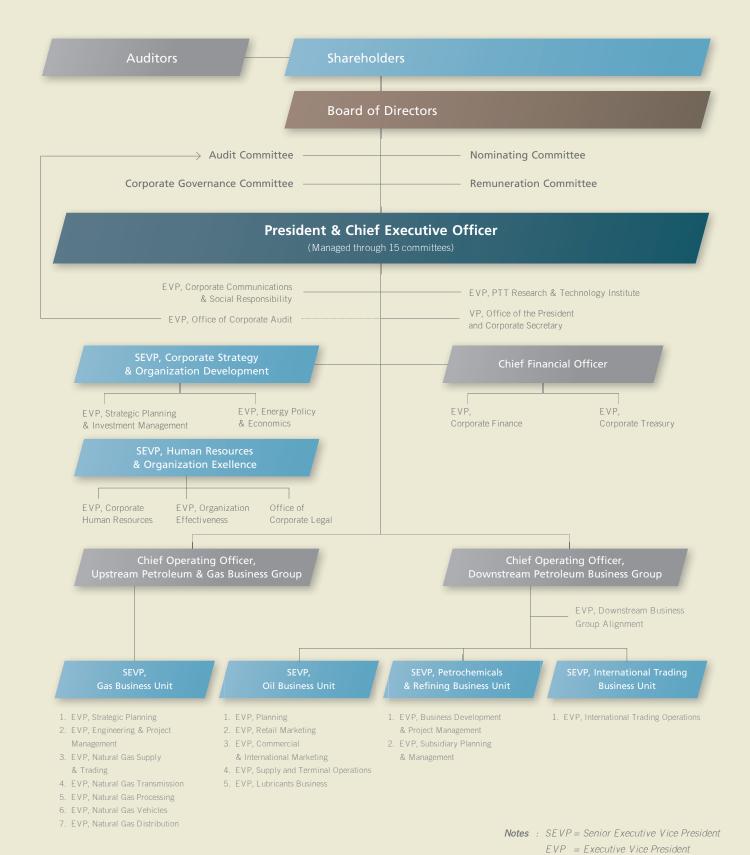
The queries, comments and recommendations will be forwarded to relevant agencies to address these, take corrective

steps, come up with proper responses to all, and report back. Follow-up on the action is done through e-mail every three days. If the action is not completed, a notification will be sent to another level of supervisors for action. When completed, responsible units will notify the contact person(s), with another follow-up to find out about their satisfaction with the services of the call center officers, which will help improve information system management. The management tracks all information every month to detect trends and apply them as an approach for refinement of processes, products, and services to respond to all stakeholders.

PTT offers opportunities for the public to file complaints on improper behavior of directors, the management, and staff or their violations of PTT's business ethics to the Office of Corporate Audit, Office of the President and the Corporate Secretary, and Human Resources Department. PTT treats all complaints on the basis of equality, transparency, and fairness to all concerned. An appropriate timeframe to consider the complaints is set and the secrecy and the protection of those who file the complaints will be observed.

5. Responsibility of the Board of Directors

The organization structure of PTT Plc as of December 31, 2011:



VP = Vice President

5.1 Composition of the Board of Directors

According to PTT Plc. regulations, the Board consists of:

- At least five, and not more than 15 persons
- A minimum of three independent directors
 (PTT's Good Corporate Governance requires that independent directors account for no less than half of the Board.)

 At least one director must be knowledgeable in accounting and finance.

Today the Board of PTT Plc, according to the certification of the Ministry of Commerce, dated January 4, 2012, consists of 15 directors:

- 14 non-executive directors (ten of whom are independent directors, which exceeded half of the Board)
- One executive director.

As of February 1, 2012, the Board of Directors consisted of:

No.	Name	Position	Appointed date
1.	Dr. Norkun Sitthiphong	Chairman (from January 18, 2008, to December 24, 2010, and from April 29, 2011-present)	April 10, 2009
2.	Mr. Surapon Nitikraipot	Independent Director	April 10, 2009
3.	Mr. Watcharakiti Watcharothai	Independent Director	April 10, 2009
4.	Mr. Chulasingh Vasantasingh	Independent Director	April 20, 2011
5.	Mr. Krairit Nilkuha	Director	April 9, 2010
6.	Mrs. Benja Louichareon	Director	April 9, 2010
7.	Mr. Arkhom Termpittayapaisith	Independent Director	October 11, 2011
8.	Mr. Waroonthep Watcharaporn	Independent Director	October 11, 2011
9.	Mr. Krairit Euchukanonchai	Independent Director	October 11, 2011
10.	Dr. Chitrapongse Kwangsukstith	Director	October 25, 2011
11.	Mr. Montri Sotangkur	Independent Director	November 4, 2011
12.	Gen. Warawat Indradat	Independent Director	November 4, 2011
13.	Gen. Prin Suwannathat	Independent Director	November 25, 2011
14.	Mr. Sihasak Phuangketkeow	Independent Director	December 23, 2011
15.	Dr. Pailin Chuchottaworn	Director and Secretary (President & CEO)	September 10, 2011

Note: No. 7 replaced Mr. Surachai Phuprasert, who resigned on March 24th, 2011

No. 8 replaced Mr. Pichai Chunhavajira, who resigned of October 4th, 2011

No. 9 replaced Mr. Nontigorn Kanchanachitra, who resigned on October 10th, 2011

No. 10 replaced Dr. Naris Chaiyasoot, who resigned on October 10th, 2011

No. 11 replaced Dr. Bhusana Premanode, who resigned on November 1st, 2011

No. 12 replaced Mr. Anuwat Mayteewibulwut, who resigned on November 3rd, 2011

No. 13 replaced Mr. Sommai Khowkachaporn, who resigned on November 21st, 2011

No. 14 replaced Mr. Surapit Kiratibutr, who resigned on December 1^{st} , 2011

No. 15 replaced Mr. Prasert Bunsumpun, whose term ended on September 9^{th} , 2011



5.2 Authority and Responsibilities of the Board

Authority of the Board

- The Board is authorized to supervise and manage the Company under applicable laws, objectives, regulations and resolutions of shareholders' meetings.
- The Board is to elect one Director to serve as Chairman.

 If suitable, one Vice Chairman or more may be elected.
- The Board is to elect one Director to serve as President and Secretary to the Board, if suitable.

Duties and Responsibilities of the Board

- Carry out its duties under PTT's regulations, including ensuring management of the Company under applicable laws, objectives, regulations and resolutions of shareholders' meetings.
 - Define the Company's vision, directions, and strategies.
- Endorse the Company's major strategies and policies, including objectives, financial targets and operating plans, budget; monitor and ensure plan implementation and budgeting.
- Institute systems for corporate accounting, financial reporting, and financial auditing; institute efficient and effective internal control and internal audit systems.
- Supervise and remedy problems arising from conflicts of interest and connected transactions.
- Define comprehensive risk management guidelines and ensure an efficient risk management system or process.

- Ensure a suitable compensation system or mechanism for senior management to induce short-term and long-term motivation.
- Assess the performance of the President and decide suitable compensation.
- Ensure suitable communicating channels with each group of shareholders and stakeholders.
- Ensure accurate, clear, transparent, reliable and highquality disclosure of information.
 - Show leadership and lead by example.

5.3 Directors Authorized to Sign and Bind for the Company

According to the Company's regulations, the Directors whose signatures are recognized as binding PTT consist of either (1) Mr. Pailin Chuchottaworn, President & CEO, authorized to sign and affix the Company's seal, or (2) Mr. Norkun Sittiphong, Mr. Surapon Nitikraipot, Mr. Krairit Nilkuha, Mr. Chitrapongse Kwangsukstith, Mr. Watcharakiti Watcharothai. Two of these five Directors are authorized to jointly sign and affix the Company's seal.

5.4 Appointment and Dismissal of Directors

- 1. The Board consists of at least five, and not more than 15 persons, elected at shareholders' meetings. It consists of a minimum of three Independent Directors, and at least half of the Directors are to reside in the Kingdom, and at least one must be qualified in accounting and finance. All Directors must be qualified by the Company's law and regulations. Since 2004, the Board decided that Independent Directors are to make up at least half of the Board, a requirement which remains in effect today. As of January 4, 2012, it had 10 Independent Directors, all of whom were domiciled in Thailand. Six Directors are experts in accounting and finance: Mrs. Benja Louichareon, Mr. Arkhom Termpittayapaisith, Mr. Krairit Euchukanonchai, Mr. Montri Sotangkur, Mr. Chulasingh Vasantasingh, and Mr. Pailin Chuchottaworn.
- 2. The shareholders' meetings are to elect qualified directors who have previously been nominated by the Nominating Committee under the following criteria:-

- (1) Each shareholder has one vote per share held.
- (2) Each shareholder exercises all votes applicable under (1) in electing one or more persons as Directors but cannot allocate only part of the votes to any candidate.
- (3) Candidates with the most votes are to be appointed Directors up to the number open at a given meeting.
- (4) If more candidates receive equal votes than the number of Directors required, the Chairman of the meeting must cast a deciding vote.
- 3. At every AGM, one-third of the Directors, or if this number is not a multiple of three, then the number nearest to one-third, must retire. The names of the Directors to retire during the first and second year after PTT was listed are to be drawn by lots. For subsequent years, those with the longest terms must retire.
- 4. If a post is vacated because of reasons other than term completion, the Board may elect a qualified person according to PTT's regulation to fill the post at the next Board meeting, except when the vacated director position has less than two months left. A new director must get at least three-quarters of the votes by the remaining directors and must remain in office for only as long as the remaining term.
- 5. Any Director wishing to resign may submit a resignation letter to PTT. The resignation is to be effective on the date that PTT receives the letter.
- 6. In voting for the dismissal of Directors from office before the expiry of their terms, a three-quarter vote of eligible shareholders present at the meeting is required, provided that the number of shares represented by the three-quarter votes is at least half of the total number of shares represented by the total number of eligible shareholders present at the meeting.

5.5 Qualifications of Directors

All directors are qualified and have no disqualifying characteristics under the Public Company Limited Act and the Standard Qualifications for Directors and State Enterprise Officers Act (No. 6) of 2007, as well as relevant Cabinet resolutions, including:

• Age up to 65

- Maximum of three state enterprise directorships, including appointments due to their positions and those due to acting assignments
- Independent directors must be qualified under the announcement of SET governing the characteristics and scope of operation of audit committees
- Have never received a jail sentence, except for violations of the law by negligence or petty crimes
- Do not hold a political position, except for a director position required by law
 - Do not belong to a political party or work for one
- Have never been expelled, dismissed, or made to leave a position because of malfeasance
- Do not hold shares of the state enterprise in question or a shareholder of a juristic person where the state enterprise in question holds shares. Exceptions apply to directors of state enterprises who are not government officials, government employees, or wage earners with positions or position salaries for centralized governments, provincial governments, local governments or other government units. Also, such state-enterprise directors hold no more than 0.5% of the paid-up capital of the state enterprise in which they serve as directors or juristic persons where the state enterprise in question holds shares
- Are not position holders in the juristic person where the state enterprise in question holds shares. Exceptions apply when the board of directors of that state enterprise appoints them as directors or other positions in the juristic person
- Are not directors, management team members or authorized managers or hold vested interests in a juristic person that serves as a concessionaire, a joint venture or ones with vested interests in the affairs of the state enterprise in question. Exceptions apply for the board chairman, director, or manager assigned by that state enterprise.

5.6 Qualifications of Independent Directors

As recommended by the Corporate Governance Committee, the Board defined the independence of its independent directors in line with, and more stringent than, the criteria of SEC and SET as follows:

- Hold up to 0.5% of the voting shares of PTT, its subsidiaries, associates, or related companies (including the shares held by connected parties under Section 258 of Securities and Exchange laws)
- Have not been involved in the management or employees, wage earners including audit advisors, legal or other advisors on the payroll of PTT, or have control over PTT, its subsidiaries, associates or juristic persons that could pose conflicts of interest for the past two years
- Have absolutely no vested interests in the finances and management of PTT, its subsidiaries, associates or related companies, or juristic persons with possible conflicts of interest hampering independent exercise of discretion including customers, business partners, trade or lenders / debtors
- Are not close relatives or have other relations that could deprive independence with the management, major shareholders of PTT, PTT Group companies, associated companies or juristic persons that could pose conflicts of interest; this includes not being appointed as an agent to preserve the interests of directors or major shareholders.

5.7 Segregation of the Chairman and the President & CEO Positions

To segregate policy-making duties from those of day-to-day management and to enable directors to oversee, look after, and assess performance effectively, PTT has required that the Chairman and the President & CEO are always two distinct persons. This is because the Chairman needs to oversee the management's performance, guide and assist, but not to take part in or interfere with day-to-day management, which is the duty of the President & CEO under the frame of authority delegated by the Board.

In addition, the Chairman must exercise leadership and ensure that directors do not fall under the influence of the management, partly by chairing Board meetings and shareholders' meetings fairly and efficiently, while encouraging participants to exercise their voting rights and strictly comply with good corporate governance principles.

5.8 Independence of the Chairman

PTT highly values the independence of the Board; however, since it is a listed company on SET while remaining a state enterprise under the Ministry of Energy, with the Ministry of Finance serving as the major shareholder, most of the elected Chairmen to date have come from the management of either ministry. Yet, they have consistently displayed strong independence.

5.9 Corporate Secretary

To comply with the good corporate governance principles of listed companies under the category of directors' responsibility and the terms of the Securities and Exchange Act, PTT has appointed Mrs. Sumon Rungkasiri as Corporate Secretary to provide the Board with legal advice and remind them of assorted regulations that they need to know and comply with; hold meetings; supervise assorted Board activities to enable them to perform efficiently and effectively for the maximum benefit to PTT; prepare and maintain critical documents including Directors' registration, Board meeting notices and minutes, annual reports; shareholders' meeting notices and minutes and keep reports on connected transactions reported by Directors or the management.

5.10 Committees

The Board values corporate governance by initially appointing three committees: the Audit Committee, the Nominating Committee, and the Remuneration Committee. For a period, the Audit Committee also looked after corporate governance and risk management for the Board.

In 2004, the Board set up the Corporate Governance Committee, charged with promotion and screening of corporate governance and promotion of excellence in such areas. PTT today therefore has four committees investigating critical matters under the corporate governance principles to create maximum benefit for shareholders, taking into account stakeholders' concerns and interests, business ethics, transparency and accountability. Each of these committees consists of qualified, non-executive directors as required by SET, with clearly written roles and responsibilities in a charter.

Since 2009, the duties of the Corporate Governance Committee have been expanded to cover additional policy, implementation and monitoring of the operations on the responsibilities toward society, community, and the environment, so that the Committee may be responsible for the stakeholders in a more comprehensive and efficient way.

5.10.1 The Audit Committee

Each quarter, together with Accounting unit(s) and the Office of the Auditor-General, the Audit Committee reviews PTT's financial reports and presents its findings to the Board. The Board is accountable for PTT Group's consolidated financial statements, as well as other financial information

('Report on the Board's Responsibility to Financial Reports') presented in the annual report. The financial statements are prepared under generally accepted accounting principles, and are audited and certified by the Office of the Auditor-General. Essential information, financial and otherwise, is completely and consistently disclosed.

The Board approved the appointment of the Audit Committee on October 1, 2001, which consisted of Directors with the qualifications specified by securities and exchange laws and the SET. The Committee must consist of at least three Members. As of December 31, 2011, it consisted of three Independent Directors as follows:

Name	Position	Remarks
1. Mr. Chulasingh Vasantasingh	Chairman	Independent Director
2. Mr. Krairit Euchukanonchai	Member	Independent Director
3. Mr. Arkhom Termpittayapaisith	Member	Independent Director

The Executive Vice President, Office of Corporate Audit, served as the Committee's Secretary.

Duties and Responsibilities of the Audit Committee (effective January 1, 2012)

- Ensure the suitability and effectiveness of the internal control and internal audit procedures and consider the adequacy of the budget and personnel, as well as the independence of the Office of Corporate Audit.
- Review PTT's financial reporting process to ensure accuracy and adequacy.
- Consider connected transactions or transactions of potential conflicts of interest, and ensure compliance with SET's laws and regulations.
- Review compliance with securities and exchange laws, SET regulations, policies, regulations, rules, stipulations, cabinet resolutions, and laws relevant to PTT's business.
- Review roles of business ethics and code of conduct by ensuring that the management has a mechanism to receive

complaints and supervise the system of complaints.

- Select, nominate, and recommend fees for the external auditor.
- Scrutinize accurate and complete disclosure of PTT's information for connected transactions or potential conflicts of interest.
- Regularly review PTT's risk management system and recommend improvements.
- Ensure accuracy and effectiveness of the Information Technology concerning the report on financial and internal controls.
- Promote development of the system of financial reporting on a par with international standards.
- Review evidence if in doubt about the action that may seriously affect PTT's operation or conflicts of interest that may affect PTT's operation.

- Prepare a performance report as set by the criteria.
- When deemed necessary to provide its opinions on PTT's assorted operations, may seek independent opinions from or hire advisers or specialists, to be paid for by PTT, provided that reasonable fees are paid as applicable.
- The Chairman or members of the Audit Committee must attend the meetings of shareholders.
- Attend meetings with the external auditor in the absence of the management at least once a year.
- Hold a formal meeting with the management at least once a year.

- Review the Audit Committee's charter every year.
- Perform other Board-assigned tasks within the duties and responsibilities of the Committee.

This year the Committee held 14 meetings and duly reported its findings to the Board. In addition, it participated in quarterly financial audits along with the external auditor and Accounting unit(s).

5.10.2 The Nominating Committee

The Board appointed the Nominating Committee on October 1, 2011, made up of three of its Directors. As of December 31, 2011, it consisted of three Directors as follows:

Name	Position	Remarks
1. Mr. Watcharakit Watcharothai	Chairman	Independent Director
2. Mr. Krairit Nilkuha	Member	Director
3. Dr. Pailin Chuchottaworn	Member	Director & Secretary to the Board

Duties and Responsibilities of the Nominating Committee

- Select qualified candidates for Directors or the President
- Define the recruitment procedures and criteria for Directors or the President to ensure transparency.

The recruitment procedure for Directors is as follows:

1. The Committee defines the qualifications needed for the replacement to ensure that the new Directors meet the criteria and qualifications as required by related laws and regulations and defines the procedures for nominating qualified candidates.

- 2. The Committee summarizes its recruitment results and presents to the Board a short-list of qualified candidates along with supporting rationale.
- 3. The Board appoints the qualified candidates from the list prepared by the Committee and submits their names to the shareholders' meeting for approval.

This year the Committee held six meetings.

5.10.3 The Remuneration Committee

The Board appointed the Remuneration Committee on October 1, 2011, by appointing three Directors. As of December 31, 2011, it consisted of three directors as follows:

Name	Position	Remarks
1. Mr. Arkhom Termpittayapaisith	Chairman	Independent Director
2. Mr. Krairit Nilkuha	Member	Director
3. Mrs. Benja Louichareon	Member	Director

Duties and Responsibilities of the Remuneration Committee

- Define compensation guidelines for Directors and the President
- Define procedures and criteria for fair and sensible compensation paid to Directors and the President for approval at the Board's or shareholders' meetings.

This year the Committee held one meeting.

5.10.4 The Corporate Governance Committee

The Board appointed the Corporate Governance Committee on June 24, 2004, consisting of three Directors. As of December 31, 2011, the names of these Independent Directors were as follows:

Name	Position	Remarks
1. Dr. Surapon Nitikraipot	Chairman	Independent Director
2. Mr. Watcharakiti Watcharothai	Member	Independent Director
3. Mr. Waroonthep Watcharaporn	Member	Independent Director

The Vice President, Office of the President and Corporate Secretary, served as the Secretary to the Committee.



Duties and responsibilities of the Corporate Governance Committee

- Propose corporate governance guidelines to the Board.
- Advise the Board on corporate governance matters.
- Ensure that the duties and responsibilities of Directors and the management conform to corporate governance principles.
- Revise guidelines for PTT's corporate governance against those of international organizations and present its recommendations to the Board.
- Delegate corporate governance policies to the Corporate Governance Task Force.
- Delegate policy and guidelines to implement Corporate Social Responsibility (CSR)
- Monitor the implementation of CSR and report its findings to the Board.

This year the Committee held two meetings.

5.11Board Meetings

Board meetings are planned for the entire year-this year, the fourth Friday of each month-with additional meetings called to discuss special agenda items as necessary. Seven days ahead of the meeting, the Office of the President and Corporate Secretary issues a meeting notice along with the meeting agenda and relevant supplementary documents contained in a compact disc (CD) to each director. Since April 2004, Board meetings have been made electronic (paperless) to provide speed and convenience in information access and management, while considerably reducing accompanying documents.

At each meeting, directors openly and freely express their views. Particularly in connected cases or potential conflicts of interest with PTT, they are required to abstain or refrain from attending that portion of the meeting. The minutes of each meeting are properly documented and, after adoption from the Board is given, are filed for auditing purposes and reference by directors and related persons. By and large, each Board meeting lasts three hours. Details about directors' meetings are summarized below.

Summary of PTT Board of Meeting Attendance (2011)

	1/2554	Special 1/2554	Special 2/2554	2/2554	Special 3/2554	3/2554	4/2554	5/2554	6/2554	7/2554	Special 4/2554	8/2554	Special 5/2554	9/2554	Special 6/2554	10/2554	11/2554	12/2554
1. Dr. Norkun Sittiphong	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2. Dr. Naris Chaiyasoot	/	/	/	/	/	/	/	/	/	/	/	/	/	Х	Resig	gned, C	ct. 10	, 2011
3. Dr. Surapon Nitikraipot	/	/	/	Х	Х	/	/	/	/	/	/	/	/	/	/	/	/	/
4. Mr. Watcharakiti Watcharothai	/	/	/	/	/	/	/	/	/	/	/	/	/	/	Х	/	/	/
5. Mr. Surachai Phuprasert	/	/	/	/	/					Resig	gned,	Mar	. 24,	2011				
6. Mr. Nontigorn Kanchanachitra	/	/	/	/	/	/	/	/	/	/	/	/	/	/	Resig	gned, C	ct. 10	, 2011
7. Mr. Piyawat Niyomrerks							R	esign	ned, .	Jan. 1	, 201	1						
8. Mr. Sommai Khowkachaporn		poin 14, 2		/	/	/	/	/	/	/	/	/	Х	Х	/	Х		gned, 7. 21, 011
9. Mr. Anuwat Maytheewibulwut	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		esigne 7. 3, 2	
10. Mr. Chaikasem Nitisiri	/	/	/	/	/	/				Retir	ed, A	pr. 20	0, 20	11 (A	GM)		
11. Mr. Chulasingh Vasantasingh	Ap	poin	ted A	pr. 2	0, 20	11	/	Х	/	/	/	/	/	/	/	/	/	/
12. Dr. Ampon Kittiampon	/	/ / / / / Resigned, Mar. 29, 2011																
13. Mr. Surapit Kiratibutr	Αŗ	poin	ted A	.pr. 2	0, 20	11	Х	/	/	/	/	/	Х	/	/	Х	/	Re- signed, Dec. 21, 2011
14. Dr. Bhusana Premanode	Х	/	/	/	/	/	/	/	/	/	/	Х	Х	/	Х		Resigned, Nov. 1, 2011	
15. Mr. Krairit Nilkuha	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16. Mrs. Benja Louichareon	/	/	Х	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17. Mr. Pichai Chunhavajira	Х	/	/	/	/	/	/	/	/	/	/	/	Х	/	Resi	gned, (Oct. 4,	2011
18. Mr. Prasert Bunsumpun	/	/	/	/	/	/	/	/	/	/	/	/	/				conti	
19. Mr. Arkhom Termpittayapaisith				Ap	poin	ted, ()ct. 1	1, 20	11							/	/	Х
20. Mr. Waroonthep Watcharaporn				Ap	poin	ted, (oct. 1	1, 20)11							/	/	/
21. Mr. Krairit Euchukanonchai				Ap	poin	ted, (oct. 1	1, 20)11							/	/	/
22. Dr. Chitrapongse Kwangsukstith				Ap	poin	ted 0	ct. 2	5, 20	11							/	/	/
23. Mr. Montri Sotangkur				Ap	poin	ted N	lov. 4	, 201	1								/	/
24. Gen. Warawat Indradat				Ap	poin	ted N	lov. 4	, 201	.1								/	/
25. Gen. Prin Suvanadat				Ap	poin	ted N	lov. 2	25, 20)11									/
26. Mr. Sihasak Phuangketkeow				Ap	poin	ted D	ec. 2	3, 20	11 (f	irst m	neetin	ng at i	meeti	ing N	o. 1/2	2555))	
27. Dr. Pailin Chuchottaworn				Ap	poin	ted S	ер. 10	0, 20	11					/	/	/	/	/
Total attendance	12	14	13	14	14	14	13	13	14	14	14	13	10	12	9	11	14	13
		14	14	15	15	14	14	14	14	14	14	14	14	14		13	14	14

Attendance Record of the Board and the Committee Meetings (2011)

Unit: Times

Meeting Attendance in 2011

Name	Board of Directors (Total 18)	Audit Comm. (Total 14)	Corporate Governance Comm. (Total 2)	Nominating Comm. (Total 6)	Remunera- tion Comm. (Total 1)	Appointment during the Year
1. Dr. Norkun Sittiphong	18/18	_	_	3/3	_	_
2. Dr. Surapon Nitikraipot	16/18	_	2/2	-	-	-
3. Mr. Watcharakiti Watcharothai	17/18	-	2/2	5/6	-	-
4. Mrs. Benja Louichareon	17/18	_	_	_	_	-
5. Mr. Krairit Nilkuha	18/18	-	_	1/1	1/1	_
6. Mr. Chulasingh Vasantasingh	11/12	11/11	_	_	_	Appointed Apr. 20 (replacing Mr. Chaikasem Nitisiri)
7. Mr. Arkhom Termpittayapaisith	2/3	1/2	-	-	-	Appointed, Oct. 11 (replacing Mr. Surachai Phuprasert)
8. Mr. Waroonthep Watcharaporn	3/3	-	1/1	-	-	Appointed, Oct. 11 (replacing Mr. Pichai Chunhavajira)
9. Mr. Krairit Euchukanonchai	3/3	4/4	-	-	-	Appointed, Oct. 11 (replacing Mr. Nontigorn Kanchanachitra)
10. Dr. Chitrapongse K wangsukstith	3/3	-	-	-	-	Appointed Oct. 25 (replacing Mr. Naris Chaiyasoot)
11. Mr. Montri Sotangkur	2/2	-	_	_	_	Appointed Nov. 4 (replacing Mr. Bhusana Premanode)
12. Gen. Warawat Indradat	2/2	_	_	-	-	Appointed Nov. 4 (replacing Mr. Anuwat Mayteewibulwut)
13. Gen. Prin Suvanadat	1/1	-	-	-	-	Appointed Nov. 25 (replacing Mr. Sommai Khowkachaporn)
14. Mr. Sihasak Phuangketkeow	New	-	-	-	-	Appointed Dec. 23 (replacing Mr. Surapit Kiratibutr)
15. Dr. Pailin Chuchottaworn	5/5	-	-	2/2	-	Appointed Sep. 10 (replacing Mr. Prasert Bunsumpun)

Twelve Directors who completed their terms or resigned (2011)

Meeting Attendance in 2011

Name	Board of Di- rectors (Total 18)	Audit Committee (Total 14)	CG Committee (Total 2)	Nominating Committee (Total 6)	Remuneration Committee (Total 1)	Movement during the Year
1. Mr. Piyawat Niyomrerks	0/0	-	_	_	_	Resigned on January 1
2. Mr. Surachai Phuprasert	5/5	2/3	_	1/1	1/1	Resigned on March 24
3. Dr. Ampon Kittiampon	6/6	3/3	_	1/1	-	Resigned on March 29
4. Mr. Chaikasem Nitisiri	6/6	3/3	-	_	-	Completed his term on April 20
5. Mr. Prasert Bunsumpun	13/13	-	-	-	-	Employment contract expired on September 9
6. Mr. Pichai Chunhavajira	12/14	_	-	_	-	Resigned on October 4
7. Dr. Naris Chaiyasoot	13/14	_	_	_	_	Resigned on October 10
8. Mr. Nontigorn Kanchanachitra	14/14	-	-	_	1/1	Resigned on October 10
9. Dr. Bhusana Premanode	11/15	5/7	_	_	-	Resigned on November 1
10. Mr. Anuwat Mayteewibulwut	15/15	-	1/1	-	-	Resigned on November 3
11. Mr. Sommai Khowkachaporr	10/13	7/8	_	_	_	Resigned on November 21
12. Mr. Surapit Kiratibutr	8/11	_	_	3/4	-	Resigned on December 1

Note: A total of 18 Board of Directors meetings took place during the year: 12 regular meetings and 6 extraordinary meetings.

5.12 Self-assessment of the Board

By the resolution of Board meeting No. 10/2011 of October 28, 2011, the Board approved the self-assessment forms used last year for use again this year. The form is aligned with PTT's good corporate governance principles.

The form was to be used to conduct self-assessment of the Board's performance, and serves as a vital tool for improving Board performance and providing reference data for the corporate governance rating. Three types of self-assessments were applied, whereby the percentages corresponded to the following levels of performance achieved in each of the areas detailed below. These are the assessment criteria for the entire board, individual self-assessment forms, and cross self-assessments:

Over 85% = Excellent

Over 75% = Very good

Over 65% = Good

Over 50% = Fair

Below 50% = Needs improvement

The findings from the self-assessments were as follows:

1. Self-assessment of the Board consisted of four categories: Board policy, composition, practices, and meetings.

The results indicated excellent/most suitable overall performance, with an average score of 93.4%.

2. Self-assessment of Individual Directors consisted of six categories: accountability for decisions and actions; responsibility in performing the job with full ability and efficiency; equitable treatment of all stakeholders; transparency in job performance and information disclosure; vision to create long-term value; and business ethics.

Overall results were excellent for most directors, with an average score at 95.34%.

3. Individual Assessment of Other Directors (Crossassessments) consisted of six identical categories as listed above for direct comparison.

Cross-assessment results in these six categories indicated excellent conformance by most Directors, with an average score of 96.83%.

5.13 Corporate Management

5.13.1 Duties and Responsibilities of the President & CEO (President)

Under PTT's regulations, the President & CEO has the authority and rersponsibility to manage the Company's business as assigned by the Board. The business is to be managed strictly, prudently, and with integrity under the plans or budget approved by the Board, and must be in the best interests of PTT and its shareholders. The President & CEO's authority and responsibility include the following duties:

- Operate and/or manage the day-to-day business.
- Hire, appoint, remove, transfer, promote, demote, reduce the salary or wages, take disciplinary action against employees and contractors as well as dismissing employees or contractors under the Board's regulations.
- Ensure the preparation and submission of business policies, including operating plans and budget estimates, to the Board for approval, and report performance against them to the Board every three months.

• Ensure the implementation of the policies, plans and budget approved by the Board.

The Board authorizes the President & CEO to manage the Company's business under the following scope of authority:

- Manage business under all objectives, regulations, policies, rules, specifications, directives, and resolutions of the Board or shareholders' meetings, or both.
- Order, contact, command, implement and sign juristic acts, agreement, orders, announcements or any correspondence with government agencies, state enterprises, or other parties and engage in any necessary and suitable action to facilitate this duty.
- Command all employees and contractors including hiring, appointing, removing, promoting, demoting, cutting the salary or wages, taking disciplinary action, and dismissing any employee or contractor under the rules, regulations and directives of the Board. For employees or contractors serving as advisers, senior executive vice presidents or equivalent upward, prior approval of the Board is required. The President & CEO is also authorized to specify the employment conditions for employees and contractors and issue rules governing the Company's operation, provided that they do not conflict with the rules, regulations and directives of the Board.
- Assign the power of attorney or delegate specific tasks, or both, to other persons, provided that the action complies with the document concerning the power of attorney or rules, regulations or directives of the Board and/or the Company, or both.

The authority and duties of the President & CEO are invalid in case of conflicts of interest with PTT in any form resulting from the President & CEO's exercise of the authority.

5.13.2 The Management Committee

The Management Committee was appointed on October 1, 2001, with the duties of operating PTT's business. As of year-end 2011, it consisted of 10 members as follows:

Name	Position
1. President & CEO	Chairman
2. Chief Financial Officer	Member
3. Chief Operating Officer, Upstream Petroleum & Gas Business Group	Member
4. Chief Operating Officer, Downstream Petroleum Business Group	Member
5. Senior Executive Vice President, Corporate Management	Member
6. Senior Executive Vice President, Gas Business Unit	Member
7. Senior Executive Vice President, Oil Business Unit	Member
8. Senior Executive Vice President, Petrochemicals and Refining Business Unit	Member
9. Senior Executive Vice President, International Trading Business Unit	Member
10. Senior Executive Vice President, Corporate Strategy and Organization Development	Member and Secretary

The Vice President, Office of the President & Corporate Secretary, served as the Assistant Secretary.

The Management Committee meets at least once a month. This year there were altogether 28 meetings.

Duties and Responsibilities of the Management Committee

- Provide advice and recommendations to the President & CEO on significant issues on corporate strategy and business directions, investment plans, budgets, allocation of resources to PTT and its affiliates and ensure that the operation of the PTT affiliates is uniform.
- Rank decisions made by the Board to ensure effective implementation.
- Screen meeting agendas before presentation to the Board.
- Rank significant matters about the allocation of human and financial resources of PTT and its affiliates.
- Jointly resolve significant issues about PTT affiliates before the meeting of the Board of each affiliated company.

- Establish standards for the systems of business administration, human resources and information, as well as the organizational structure of PTT and its affiliates.
 - Establish a policy on human resource management.

In addition, the Company appointed 14 committees to oversee specific internal areas of work for accurate, suitable, efficient, and effective implementation as follows:

- 1. Enterprise Plan Committee
- 2. Corporate Finance and Accounting Committee
- 3. PTT Plc Credit Committee
- 4. Risk Management & Internal Control Committee
- 5. Corporate Human Resource Committee
- 6. Quality, Security, Safety, Health, and Environment Committee
- 7. Corporate Social Responsibility Committee
- 8. Petroleum Procurement Committee
- Upstream Petroleum and Gas Business Group Synergy Management Committee

Position

10. Downstream Petroleum Business Group Synergy Management Committee

- 11. Oil Business Strategic Plan Committee
- 12. Gas Business Strategic Plan Committee

Namo

 $13.\ Petrochemicals\ and\ Refining\ Strategic\ Plan\ Committee$

14. International Trading Business Unit Risk Management

5.13.3 Current Management Team Members

	Name	Position
1.	Dr. Pailin Chuchottaworn ¹	President & CEO
2.	Mr. Tevin Vongvanich	Chief Financial Officer
3.	Mr. Vichai Pornkeratiwat ²	Chief Operating Officer, Upstream Petroleum & Gas Business Unit
4.	Mr. Nuttachat Charuchinda ²	Chief Operating Officer, Downstream Petroleum Business Group
5.	Mr. Supattanapong Punmeechao ²	Senior Executive Vice President, Corporate Strategy
6.	Mr. Pitipan Tepartimargorn*	Senior Executive Vice President, Human Resources & Organization Excellence
7.	Mr. Peerapong Achariyacheevin ²	Senior Executive Vice President, Gas Business Unit
8.	Mr. Sarun Rungkasiri ³	Senior Executive Vice President, Oil Business Unit
9.	Mr. Sukrit Surabotsopon	Senior Executive Vice President, Petrochemicals & Refining Business Unit
10.	Mr. Sarakorn Kulatham	Senior Executive Vice President, International Trading Business Unit
11.	Mr. Anon Sirisaengtaksin	Senior Executive Vice President, seconded to President & CEO, PTT Exploration and Production Plc
12.	Mr. Veerasak Kositpaisal ⁴	Senior Executive Vice President, seconded to CEO, PTT Global Chemical Plc
13.	Mr. Bowon Vongsinudom ⁴	Senior Executive Vice President, seconded to President, PTT Global Chemical Plc
14.	Mr. Surong Bulakul	Senior Executive Vice President, seconded to CEO, Thai Oil Plc
15.	Mr. Suwanunt Chatiudompunth ³	Senior Executive Vice President, seconded to President, PTT Phenol Co., Ltd.
16.	Mr. Atikom Terbsiri	Senior Executive Vice President, seconded to President, IRPC Plc
17.	Mr. Wirat Uanarumit ⁵	Executive Vice President, Corporate Finance
18.	Mrs. Prisana Prahankhasuek	Executive Vice President, Corporate Accounting

Committee

Note: 1 Appointed on September 10, 2011, replacing Mr. Prasert Bunsumpun, who completed his employment contract.

² Appointed on October 1, 2011.

³ Appointed on May 16, 2011.

⁴ Appointed on October 19, 2011.

⁵ Appointed on November 1, 2011, replacing Mr. Chatchawal Eimsiri, who was seconded to PTT International Co., Ltd.

5.14Compensation Paid to Directors and the Management

With the oversight of the Remuneration Committee, PTT fairly and sensibly specifies the compensation paid to directors, taking into account each director's responsibility, its financial performance, and compatibility with industry peers. Compensation consists of meeting allowances and bonuses. Directors appointed to specific committees receive additional allowances for additional responsibilities. Directors' compensation rates have been approved by shareholders as follows:

5.14.1 Directors' Compensation

Meeting Allowances

The following compensation structure for the Board was approved at the AGM of April 20, 2011:

Board Meeting compensation remained the same as in 2010, and consisted of:

- Retainer allowance of 30,000 baht per month
- Meeting allowance of 20,000 baht for each meeting (for

those in attendance only).

Compensation for meetings of Committees consisted of:

Audit Committee

- Monthly allowance of 15,000 baht each
- Meeting allowance of 15,000 baht for each meeting (for those in attendance only), and the Secretary received a monthly allowance of 7,500 baht.

Compensation for the Nominating, Remuneration, and Corporate Governance Committees consisted of:

 Meeting allowance of 24,000 baht for each meeting (for those in attendance only).

Compensation for the Chairman of each committee was 25% higher than for others.

• Directors' Bonuses in 2011 (no change from 2010): Bonus payouts to each director, at 0.05% of the net income for 2010, corresponded to PTT's performance and net income and up to 2,000,000 baht per person were completed. The bonus was prorated to each director's term, with the Chairman receiving 25% more than individual Directors.

Compensation Paid to Individual Directors (2011)

Unit : Baht

No.	Name	Days of Service	Bonus	Board Meeting Allowance	Committee Meeting Allowance	Total Meeting Allowance	Total Compensation
1.	Dr. Norkun Sittiphong	365	2,223,287.67	439,919.35	90,000.00	529,919.35	2,753,207.02
2.	Dr. Surapon Nitikraipot	365	2,000,000.00	680,000.00	54,000.00	734,000.00	2,734,000.00
3.	Mr. Watcharakiti Watcharothai	365	2,000,000.00	700,000.00	186,000.00	886,000.00	2,886,000.00
4.	Mrs. Benja Louichareon	365	2,000,000.00	700,000.00	_	700,000.00	2,700,000.00
5.	Mr. Krairit Nilkuha	365	2,000,000.00	720,000.00	57,500.00	777,500.00	2,777,500.00
6.	Mr. Chulasingh Vasantasingh	256	1,402,739.73	621,000.00	206,250.00	827,250.00	2,229,989.73
7.	Mr. Arkhom Termpittayapaisith	82	449,315.07	135,322.58	15,000.00	150,322.58	599,637.65
8.	Mr. Waroonthep Watcharaporn	82	449,315.07	140,322.58	24,000.00	164,322.58	613,637.65
9.	Mr. Krairit Euchukanonchai	82	449,315.07	170,322.58	60,000.00	230,322.58	679,637.65

Unit : Baht

No.	Name	Days of Service	Bonus	Board Meeting Allowance	Committee Meeting Allowance	Meeting	Total Compensation
10.	Dr. Chitrapongse Kwangsukstith	68	372,602.74	126,774.19	_	126,774.19	499,376.93
11.	Mr. Montri Sotangkur	58	317,808.22	97,000.00	_	97,000.00	414,808.22
12.	Gen. Warawat Indradat	58	317,808.22	97,000.00	_	97,000.00	414,808.22
13.	Gen. Prin Suvanadat	37	202,739.72	56,000.00	_	56,000.00	258,739.72
14.	Mr. Sihasak Phuangketkeow	9	49,315.07	8,709.68	_	8,709.68	58,024.75
15.	Dr. Pailin Chuchottaworn	113	619,178.08	211,000.00	48,000.00	259,000.00	878,178.08
	Total		14,853,424.66	4,903,370.96	740,750.00	5,644,120.96	20,497,545.62

Note: No. 1: The Chairman has been in his position from July 22, 2011 (no meeting allowance was received from January to June 2011).

No. 6: Appointed on April 20, 2011.

No. 7-9: Appointed on October 11, 2011.

No. 10: Appointed on October 25, 2011.

No. 11-12: Appointed on November 4, 2011.

No. 13: Appointed on November 25, 2011.

No. 14: Appointed on December 23, 2011.

No. 14: Appointed on September 10, 2011, replacing Mr. Prasert Bunsumpun, who completed his employment contract.

Retired and Resigned Directors (2011)

Unit : Baht

No.	Name	Days of Service	Bonus	Board Meeting Allowance	Committee Meeting Allowance	Total Meeting Allowance	Total Compensation
1.	Mr. Piyawat Niyomrerks	0	-		-	-	-
2.	Mr. Surachai Phuprasert	83	454,794.52	223,387.09	78,000.00	301,387.09	756,181.61
3.	Dr. Ampon Kittiampon	88	482,191.78	261,532.25	86,250.00	347,782.25	829,974.03
4.	Mr. Chaikasem Nitisiri	110	602,739.73	293,750.00	45,000.00	338,750.00	941,489.73
5.	Mr. Pichai Chunhavajira	277	1,517,808.22	512,903.23	-	512,903.23	2,030,711.45
6.	Dr. Naris Chaiyasoot	283	1,828,767.12	639,032.26	6,000.00	645,032.26	2,473,799.38
7.	Mr. Nontigorn Kanchanachitra	283	1,550,684.93	558,709.68	38,500.00	597,209.68	2,147,894.61
8.	Dr. Bhusana Premanode	305	1,671,232.88	610,000.00	75,000.00	685,000.00	2,356,232.88
9.	Mr. Anuwat Mayteewibulwut	307	1,682,191.78	602,000.00	36,000.00	638,000.00	2,320,191.78
10.	Mr. Sommai Khowkachaporn	281	1,539,726.03	578,214.29	105,000.00	683,214.29	2,222,940.32

Unit : Baht

No.	Name	Days of Service	Bonus	Board Meeting Allowance	Committee Meeting Allowance	Total Meeting Allowance	Total Compensation
11.	Mr. Surapit Kiratibutr	226	1,238,356.16	381,000.00	72,000.00	453,000.00	1,691,356.16
12.	Mr. Prasert Bunsumpun	252	1,380,821.92	509,000.00	-	509,000.00	1,889,821.92
	Total		13,949,315.07	5,169,528.80	541,750.00	5,711,278.80	19,660,593.87

Note: No. 1 resigned on January 1, 2011.

No. 2 resigned on March 24, 2011.

No. 3 resigned on March 29, 2011.

No. 4 completed his term on April 20, 2011.

No. 5 resigned on October 4, 2011.

No. 6 served as Chairman from December 24, 2010, to July 22, 2011, and resigned on October 10, 2011.

No. 7 resigned on October 10, 2011.

No. 8 resigned on November 1, 2011.

No. 9 resigned on November 3, 2011.

No. 10 resigned on November 21, 2011.

No. 11 resigned on December 1, 2011.

No. 12 resigned on September 9, 2011, because of employment contract completion

Compensation to Independent Directors Serving as an Independent Director in Subsidiaries

This year the PTT Board of Directors has four independent directors on the board of PTT Exploration and Production PIc (PTTEP), a PTT subsidiary company. They received compensation for their services to that company for this year as follows:

No.	Name	Service on PTTEP Board	Total compensation (Baht)	Remarks
1.	Dr. Bhusana Premanode	Independent Director and Corporate Governance Committee member	525,000	Resigned from the Board on November 1, 2011.
2.	Mr. Sommai Khowkachaporn	Independent Director, Chairman of Nominating Committee, and Risk Management Committee member	743,750	Resigned from the Board on November 21, 2011.
3.	Dr. Ampon Kittiampon	Independent Director, Chairman of Audit Committee	875,000	Resigned from the Board on March 29, 2011.
4.	Mr. Chaikasem Nitisiri	Independent Director, Audit Committee member, and Nominating Committee member	840,000	Resigned from the Board on April 20, 2011.

Directors' Compensation Profile of 2008-2011

		2008	/	2009	/	2010	/	Unit: Baht 2011
Compensation	Persons	Baht	Persons	Baht	Persons	Baht	Persons	Baht
Meeting Allowance	15	10,470,258.07	15	10,863,879.03	15	11,398,213.71	15	11,355,399.76
Total Bonus	15	25,852,400.09	15	29,173,972.62	15	29,657,534.24	15	28,802,739.73
Total		36,322,658.16		40,037,851.65		41,055,747.95		40,158,139.49

5.14.2 Compensation Paid to the Management

PTT's compensation paid to the management team members conforms to the policies and principles of the Board and is connected to PTT's performance according to the Performance Agreement (PA) of state enterprises as defined by the Ministry of Finance. The President & CEO and his management team jointly define Key Performance Indicators (KPI) for framing PTT's business each year and the performance of the President & CEO and his team is assessed. Each person's compensation is measured against their performance management and the performance of

leading industry peers' according to their practices and standards. The Remuneration Committee then proposes the compensation, along with compensation guidelines to the Board for consideration and approval.

The President & CEO and his management team members, eight persons in all, received compensation from PTT (excluding the senior executives seconded to and paid by PTT affiliates and obtained compensation where such companies were responsible for paying the compensation as well as the senior executives of PTT's affiliates who worked for PTT), as detailed below:

Total Compensation Paid to the Management

Unit: Baht

Compensation		2008		2009		2010		2011
Compensation	Persons Baht		Persons	Baht	Persons	Baht	Persons	Baht
Salary	8	53,415,360	8	52,677,119	7	50,470,620	10	62,091,720.00
Bonus	8	24,624,681	8	24,143,679	7	22,183,379	6	24,581,820.00
Total		78,040,041		76,820,798		72,653,999		86,673,540.90

Provident Fund Contribution to the Management

Unit: Baht

Compensation		2008		2009		2010		2011
Compensation	Persons	Baht	Persons	Baht	Persons	Baht	Persons	Baht
Provident Fund	7	3,629,844	7	3,384,852	7	2,925,340	8	3,980,468.00

Additional Information on the Board and the Management Records have shown no violation of the law within the past 10 years regarding:

- 1) Being sentenced for criminal charges except for violation of traffic law, minor charges, or similar charges.
- 2) Being sentenced to bankruptcy or having assets controlled.
- 3) Serving as an executive or a person with authority in a company or partnership sentenced to bankruptcy or whose assets are controlled.

5.15 Policy on Serving as Directors of Other Companies

PTT has 49 affiliated companies, seven of which are listed on the SET in which it invested and held shares. About 60% of its current net income is derived from these companies. Thus, PTT has adopted the PTT group management structure for synergy and alignment of policies. To achieve this, it appoints directors or management team members to serve as directors in these companies to supervise policies and business management which align with PTT's policies for the benefit and value addition for all stakeholders. The objectives for such appointments are as follows:

- 1) To ensure that the management of a given company aligns with the policy of PTT Group companies; to monitor its overall business performance to align with PTT's policy and institute comparable standards.
- 2) To forge synergy for the business of PTT Group companies and supplement value to all related parties, including Thailand as a whole.
- 3) To apply specific expertise in support of business, including financial know-how to improve accounting and financial processes to enable a given company to grow robustly. This includes assistance to companies outside the PTT group and the resulting application of the knowledge and expertise gained from serving in such leading companies will enhance the benefits to PTT and foster cordial relations and business alliances for PTT.
- 4) This is part and parcel of the responsibility of directors and the management of PTT.

PTT ensures its consideration of executives or outsiders from the Ministry of Finance's Director's Pool for appointment within the PTT Group, which are state enterprises according to an act on standard qualifications of directors and state enterprise officials. Chosen directors from the pool must make up no less than one-third of other Directors of a given state enterprise. It also ensures that PTT executives and such outsiders who serve as Directors in PTT affiliates serve on no more than three companies that are PTT's affiliates or other state enterprise affiliates. This is designed to lower the risks of conflicts of interest and ensure conformance to applicable laws.

In conformance to a Cabinet resolution of January 24, 2011, concerning fraud prevention measures at state enterprises, entitled "The appointment of senior government officials or persons as directors on multiple state enterprises", as proposed by the National Anti-Corruption Commission, PTT will table the appointment of directors to serve in more than three boards of directors or juristic persons where PTT holds shares on the date the Cabinet decides on their serving on more than three such boards of directors.

5.16 Directors' Development

The Board and the management value regular participation in development training relevant to their performance, as seen in each of their profiles. Most of the directors have undergone training with the Thai Institute of Directors (IOD) Association. PTT supports and encourages Directors to undergo such training with IOD as well as other institutions in all relevant courses throughout the year. In addition, it stages study trips to other agencies and organizations as seen appropriate to promote helpful initiatives for application to PTT's business. This year, the following directors underwent training and seminars.

Name	Course
1. Mr. Surapit Kiratibutr	Successful Formulation & Execution of Strategy (SFE), Class 13/2011, IOD
2. Mr. Nontigorn Kanchanachitra	"How state enterprises must adjust in the ASEAN Economic Community" and
	"Personnel readiness to accommodate AEC" seminars under an education project
	for state-enterprise board of directors, representatives of the Ministry of Finance on
	state-enterprise boards, or entities where the public sector holds less than 50% shares,
	and those in the Director's Pool

PTT's policy is to organize periodic visits and study trips to actual work sites, both domestic and overseas, for Directors to foster their understanding of the business and apply their expertise and experience to their consideration of matters related to energy concerning PTT and Thailand. To this end, this year PTT organized the following overseas trips:

- 1. A study visit of PTT's investment in Australia, where the PTT Group (through PTTEP) has long been engaged in petroleum exploration and where the Group had initiated the coal business through PTT International
- 2. A study visit to Kenya and South Africa, populous countries rich in natural resources, with an interesting format of energy management. They are also very attractive areas where leading energy companies worldwide have been investigating possible investments in assorted forms of energy.

The policy is to promote directors' education about various countries' energy usage and directions so that the Board may compare practices with Thailand's energy policy formulation, while enabling directors to monitor data and progress in the energy business and directly share views with experts in world-class energy companies. This broadens their views on PTT Group's overseas investment expansion, which is in line with future Group business directions. The data, knowledge, and first-hand experience derived will certainly contribute to knowledge and understanding of the global energy business and help in the deliberation of suitable businesses for PTT and Thailand. This year the Corporate Governance Committee also visited a Korean university's operation to use the information in establishing a university by PTT Group in Rayong.

5.17 Directors' Orientation

For new directors, PTT arranges an orientation program to inform them of its business policies, capital structure, shareholding structure, business performance, information systems, as well as related laws and regulations. Moreover, each director receives a Director's Handbook, which includes the following topics:

Director's Handbook

- 1. The Public Company Act
- 2. Securities and Exchange Act
- Standard Qualifications of Directors and State Enterprise Officer Act
- 4. Company Registration Certificate
- 5. Company Certificate
- 6. Company Objectives
- 7. Company Regulations
- 8. Company Rules (14 Rules)
- 9. PTT Good Corporate Governance Handbook
- 10. Guidelines for Directors of Listed Companies.

Information kit for the directors

- Overview business presentation of PTT by the President
 & CEO
- 2. List of directors, subcommittees, and management structure
- 3. Information on the roles of the Board
- 4. PTT Plc Company Profile (short version)
- Annual Report and Financial Report (Thai Version) in hard copy and CD
- 6. Annual Sustainability Report
- 7. "PTT: The S-Curve Story"

- 8. Director Fiduciary Duty Check List
- Good corporate governance principles for listed companies
- 10. Connected transactions of listed companies
- 11. Guidance on providing information for listed company management
- 12. Governance
- 13. PTT Spirit publication.

The President & CEO presents information about PTT in his briefing to the new directors about the policy and relevant information so that they may have an overview of the business operation and performance. At the same time, the above-mentioned documents and handbook for new directors are handed over.

5.18 Succession Planning

Because PTT is a state enterprise, the nomination and appointment of the President & CEO must follow the Standard Qualifications of Directors and State Enterprise Officer Act. The directors must have the qualifications as specified in Article 8 ter and the nominating procedures as specified in Article 8 quarter. The Board is to appoint a Nominating Committee with five members and be legitimately qualified to nominate persons with appropriate knowledge, capability and experience to fill the positions of PTT management. They must be legitimately qualified and cannot be PTT directors except for the management who are directors by title. They must not be older than 58 years old on the day they submitted the application form. When the Nominating Committee selects appropriate candidates, it submits the results to the authorized person to consider the appointment. The appointment must be done within one year from the day the previous management team member left the position. The hiring contract has a timeframe of up to four years for each term. If the Board wishes to hire the previous management team member after the completion of his term as specified in the hiring contract, it does not have to go through the nominating process, but it cannot hire such a person for more than two consecutive terms.

5.19 Internal Control System

PTT consistently values the internal control system, particularly a system that is comprehensive in scope of activities and dimensions, as well as adequate and suitable for its businesses. Adding efficiency and effectiveness to business, resource utilization, and stewardship of properties, this system consists of an accurate and reliable accounting system and financial reporting. In addition, it calls for strict conformance to laws and regulations related to PTT's business. The Board has assigned the Audit Committee to review the Company's findings of the audit of internal controls every year.

Besides such assessment by the Audit Committee, the President & CEO in recognition of the value of internal controls, has authorized the Risk Management Committee to define work procedures under the Company's internal control standards, together with assessing the outcomes and reporting the overview of PTT's internal control. Also, the Office of Corporate Audit is directly responsible for internal control work.

PTT has conducted an internal control assessment by the rule of the Office of the Auditor-General governing the formulation of internal control standards, B.E. 2544 (2001). The Audit Committee reviews the findings of such an internal control assessment, annually conducted by the management and the Office of Corporate Audit, as highlighted below.

5.19.1 Control Environment

PTT commands a sound overall control environment that is adequate for business efficiency and effectiveness.

- Leadership: Executives possess a work philosophy and style characterized by good attitudes and support of a corporate culture, with a focus on integrity and ethics. They are role models and support performance in accounting, information management and human resource management systems, monitoring and assessment, internal audits, and external audits, apart from risk management for key business operation and internal and external audits.

- PTT Group has defined a policy and procedures in writing on integrity and a code of conduct. The Corporate Governance Committee defines a corporate governance policy in line with international standards. Disclosures are made about conflicts of interest to ward off activities of such conflicts, illegal, and inappropriate activities. The policy and handbook are revised each year. Each director, management team member, and employee signs on it to acknowledge and conform to such policy and handbook as part of their work, illustrating the commitment to apply the good corporate governance policy and code of conduct to bring tangible results, as detailed below:

Corporate Governance Policy

PTT duly reviewed its policy and handbook for good corporate governance to suit prevailing economic and social circumstances and requires all Directors, management, and employees to acknowledge in writing and observe all policies at work to illustrate the commitment to concrete application of such policy and business code of conduct to their jobs. The Board's policy on corporate governance is as follows:

- 1. The Board, management, and all employees are committed to the elements of corporate governance: Accountability, Responsibility, Equitable Treatment, Transparency, Vision to Create Long-Term Value, and Ethics. An organization structure fairly balances the roles of the Board, the management, and the shareholders.
- 2. Directors must perform their duties independently with full commitment, responsibility and independence. There is a clear division of responsibilities between the Chairman and the President & CEO.
- 3. Playing a key role in the formulation of corporate vision, strategies, policies and critical plans with due regard for risk factors and suitable risk management, the Board must also ensure the credibility of the accounting system, financial statements and accounting audits.
- 4. Leading the rest of the Company on ethics and corporate governance, the Board must supervise the management and solution to any conflict of interest or connected transactions.

- 5. The Board may appoint committees to help it screen and scrutinize critical issues.
- 6. The Board must undergo annual self-assessment to obtain a framework for its performance assessment.
- 7. The Board must establish a code of conduct for itself, the management, employees and all contract employees to observe in addition to PTT's rules and regulations.
- 8. Disclosure of financial and non-financial information must be carried out adequately, credibly, promptly, and fairly for all shareholders and stakeholders. To investors and the general public, the Investor Relations Department is responsible for such disclosure.
- 9. For fair treatment, PTT shareholders have the right to access information through suitable communication channels with PTT.
- 10. A proper selection procedure must be in place for the appointment of key management personnel under a fair and transparent nomination process.

Code of Conduct

PTT's written policy and a code of conduct are in place for integrity and ethics. In the handbook, the Corporate Governance has defined the code of conduct based on international standards. Violators of the code of conduct are subject to disciplinary action.

The essential aspects of the code are included below:

- 1. Respect the law and the Universal Declaration of Human Rights principles
- 2. Stay politically neutral
- 3. Stay free of vested interests and conflicts of interest
- 4. Maintain confidentiality and refrain from using inside information for self-gains
- 5. Respond to customers' needs and show responsibility to consumers
- 6. Compete freely and fairly
- 7. Use a transparent procurement system and treat business partners fairly
- 8. Show responsibility to communities and society

- Support employees' rights and forge employee engagement
- 10. Have an efficient internal control system and an internal audit system
- 11. Have a guideline for accepting and giving gifts, assets, or other benefits
- 12. Maintain safety, promote health, and preserve the environment
- 13. Respect intellectual property and properly apply information technology.

• Conflicts of Interest

PTT requires information disclosure to prevent conflicts of interest and illegal, improper activities. Under the Board's policy on conflicts of interest, business decisions made by the management and employees must be solely for PTT's best interests. All staff must not only avoid engaging in financial and other relationships with external parties that would lead to financial losses for PTT or a conflict in loyalty or interest, but also must not compromise the efficiency of business operation. Those staff with interests or related businesses which may require PTT's review and decisions must report their relationships and connection with a possible conflict of interest. PTT is to disallow such connected persons from exercising their authority for and involvement in such transactions.

Reporting Connected Transactions with PTT

PTT has required directors, the management, and all employees to disclose potential conflicts of interest through a disclosure form. In addition, any approval of such items must not contain special conditions or specifications that are out of the ordinary, a part of PTT's internal controls. PTT's Office of Corporate Audit and the Audit Committee have been entrusted with the monitoring and resolution of issues related to conflicts of interest. This year, however, no such cases have arisen.

Reporting Vested Interests of Directors, the Management and Related Parties

In the first quarter of each year, PTT requires the reporting of the vested interests of directors, the management, and related parties as basic information to manage vested interests at the levels of directors and the senior management. The directors and the management are to report such matters every year and whenever there is any change. The Corporate Secretary is to keep, compile, and submit the copy to the Chairman of the Board and the Chairman of the Audit Committee to check and manage the conflicts of interest.

• Reporting Changes in Share Ownerships (Portfolios)

As part of the oversight of inside-information measures, all PTT directors and management, including their spouses and children not yet of legal age, must report any changes in their PTT share ownership to the SEC under Article 59 of the Securities and Exchange Act B.E. 2535 (1992) within three days from the date of sale, purchase, disposal or receipt of such shares, including at the end of each quarter and each year. The Office of the President and Corporate Secretary issues a letter forbidding directors, executives, or internal units with inside information to disclose such information to external parties or unrelated parties, and to buy or sell PTT shares within 45 days of the last effective date of the financial statements to the notification date of the financial statements to SET, ahead of the public dissemination of the statements-to prevent abuse of such inside information. During the past year, all directors and management have strictly observed this policy.

PTT has instituted an organizational structure that decentralizes power to allow business flexibility and alignment with prevailing circumstances, as well as clear and suitable lines of command. Duties and responsibilities are defined in writing, with definition of Key Performance Indicators (KPIs) early in the year as guidelines for employee performance, and performance is regularly monitored against goals and measured at the year-end. Goals are revised each year. All employees are aware of their roles, authority, duties, and responsibility.

PTT constantly revises and amends its values and corporate culture to suit and align with its vision and context of business. Senior leaders show their commitment to the values and communicate with all staff across the Company through assorted channels. They also define promotional plans and activities for such values and culture, together with indicators used in monitoring and tangible assessment to lend effectiveness to internal communication, personnel skill sharing, and innovation in the workplace.

PTT has defined its policy and management procedures for human resources in writing, including selection, training, promotion, and compensation procedures. A policy is in place to constantly develop competencies so that employees' capability matches business needs and accommodates work expansion.

PTT has set up a complaint management center, with Corporate Communications as the main responsible unit, charged with management of external complaints and responses to queries, together with internal complaints. Suitable periods have been defined for these purposes. Issues are compiled and managed, and then regularly submitted to the management for comprehensive improvement and development of the corporation.

Report on Directors' Securities Portfolios (as of year-end 2011)

No.	Name	Sha	ares	Change - during	Remarks
NO.	Name	Dec. 31, 2010	Dec. 31, 2011	the Year	remarks
1.	Dr. Norkun Sittiphong	_	_	_	
2.	Dr. Surapon Nitikraipot	_	_	_	
3.	Mr. Watcharakiti Watcharothai	_	_	_	
4.	Mr. Chulasingh Vasantasingh	_	_	_	
5.	Mr. Krairit Nilkuha	_	_	_	
6.	Mrs. Benja Louichareon	_	_	_	
7.	Mr. Arkhom Termpittayapaisith	N/A	_	_	Appointed, Oct. 11, 2011
8.	Mr. Waroonthep Watcharaporn	N/A	_	_	Appointed, Oct. 11, 2011
9.	Mr. Krairit Euchukanonchai & spouse	N/A	80,000	N/A	Appointed, Oct. 11, 2011
10.	Dr. Chitrapongse K wangsukstith & spouse	N/A	258,690	N/A	Appointed Oct. 25, 2011
11.	Mr. Montri Sotangkur	N/A	_	-	Appointed Nov. 4, 2011
12.	Gen. Warawat Indradat	N/A	_	-	Appointed Nov. 4, 2011
13.	Gen. Prin Suvanadat	N/A	-	-	Appointed Nov. 25, 2011
14.	Mr. Sihasak Phuangketkeow	Sihasak Phuangketkeow N/A –		-	Appointed Dec. 23, 2011
15.	Mr. Pailin Chuchottaworn	-	_	-	A report appears in the management section

Securities Portfolio for Directors Who Completed Their Terms and Resigned during the year (as of year-end 2011)

No.	Name	Sha	ares	Change during	Remarks
NO.	Name	Dec. 31, 2010	Dec. 31, 2011	the Year	Remarks
1.	Mr. Piyawat Niyomrerks	_	_	_	Resigned on January 1
2.	Mr. Surachai Phuprasert	_	_	_	Resigned on March 24
3.	Dr. Ampon Kittiampon	-	_	_	Resigned on March 29
4.	Mr. Chaikasem Nitisiri	_	_	_	Completed his term on April 20
5.	Mr. Pichai Chunhavajira	34,400	N/A	N/A	Resigned on October 4
6.	Dr. Naris Chaiyasoot	_	_	_	Resigned on October 10
7.	Mr. Nontigorn Kanchanachitra	_	_	_	Resigned on October 10
8.	Dr. Bhusana Premanode	_	_	_	Resigned on November 1
9.	Mr. Anuwat Mayteewibulwut	_	_	_	Resigned on November 3
10.	Mr. Sommai Khowkachaporn	-	_	_	Resigned on November 21
11.	Mr. Surapit Kiratibutr	-	_	_	Resigned on December 1
12.	Mr. Prasert Bunsumpun	121,500	N/A	N/A	Employment contract expired on September 9, 2011

Management's Ownership of Shares (as of year-end 2011)

			Warra	nt # 1	nt # 2				
1. 2. 3. 4. 5. 6.	Name	Dec. 31, Dec. 31 2010 2011		Change during the year	Allocated in 2005	Remaining	Allocated in 2006	Remaining	Remarks
1.	Dr. Pailin Chuchottaworn & spouse	41,300	62,000	20,700	52,600	0	27,600	0	
2.	Mr. Tevin Vongvanich	40,200	56,000	15,800	40,300	0	21,000	0	
3.	Mr. Nuttachat Charuchinda	28,863	17,563	(11,300)	60,800	0	31,800	0	
4.	Mr. Pitipan Tepartimargorn	13,334	8,334	(5,000)	38,500	0	20,400	0	
5.	Mr. Vichai Pornkeratiwat	46,659	55,559	8,900	46,900	0	25,200	0	
6.	Mr. Sarun Rungkasiri & spouse	N/A	43,579	N/A	56,900	0	30,000	0	Appointed on May 16 this year

			Shares		Warra	nt # 1	Warra	ant # 2	
7. N. 8. N. 8 9. N. 10. N. 11. N. 12. N. C. 14. N. A. 15. N. P.	Name	Dec. 31, 2010	Dec. 31, 2011	Change during the year	Allocated in 2005	Remaining	Allocated in 2006	Remaining	Remarks
7.	Mr. Sukrit Surabotsopon	2,000	2,000	0	0	0	0	0	
8.	Mr. Sarakorn Kulatham & spouse	60,800	63,900	3,100	54,200	0	28,300	0	
9.	Mr. Anon Sirisaengtaksin	125,200	141,700	16,500	79,800	0	41,900	0	
10.	Mr. Veerasak Kositpaisal	31,400	31,400	0	0	0	26,400	0	
11.	Mr. Bowon Vongsinudom	0	12,100	0	0	0	12,100	0	
12.	Mr. Surong Bulakul	77,683	118,183	40,500	63,300	0	33,000	0	
13.	Mr. Suwanunt Chatiudompunth	N/A	22,900	N/A	60,300	0	31,600	0	Seconded to PTT Phenol on May 16, 2011
14.	Mr. Peerapong Achariyacheevin	N/A	107,363	0	40,300	0	21,200	0	Appointed on October 1, 2011
15.	Mr. Supattanapong Punmeechao	N/A	0	(10,000)	_	_	-	_	Appointed on October 1, 2011
16.	Mr. Atikom Terbsiri	N/A	0	0	-	_	-	-	Appointed on October 19, 2011
17.	Mr. Wirat Uanarumit	N/A	25,500	0	_	-	-	-	Appointed on November 1, 2011
18.	Mrs. Prisana Prahankhasuek	78,263	82,863	4,600	35,100	0	18,400	0	-

Note: No. 17 Replaced Mr. Chatchawal Eimsiri, effective from November 1, 2011.

Note: No. 1 resigned on January 1, 2011.

Securities Portfolios of Executives Transferred, Resigned, and Retired (2011)

			Shares		Warra	ant # 1	Warra	ant # 2	
No.	Name	Dec. 31, 2010	Dec. 31, 2011	Change during the year	Allocated in 2005	Remaining	Allocated in 2006	Remaining	Remarks
1.	Mr. Prasert Bunsumpun	121,500	N/A	N/A	243,000	0	119,000	0	Employment contract expired on September 9, 2011
2.	Dr. Prajya Phinyawat	107,980	N/A	N/A	88,300	0	45,900	0	Retired on September 30, 2011
3.	Mr. Chatchawal Eimsiri	N/A	10,000	N/A	-	-	-	-	Seconded to PTT International on November 1, 2011
4.	Mr. Penchun Jarikasem	12,000	N/A	N/A	34,000	0	18,300	0	Seconded to PTTEP on February 1,2011

Reporting List of Assets and Debts to the Office of the National Anti-Corruption Commission (NACC)

Under Article 39 of the Anti-Corruption Act B.E. 2542 (1999), PTT's directors and senior management, including directors and senior management in the companies that PTT holds more than 50% of shares, are required to submit a list of their own assets and debts, including that of their spouses and children not yet of legal age, to the NACC Board every time they take up a position, and every three years during their terms, and when they no longer hold their positions.

Declaring Vested Interests at Meetings

At every Board of Directors meeting, the Chairman reminds Directors to conform to the policy on conflicts of interest on all agenda items, which requires that Directors with vested interests must declare such interests to the meeting to abstain from voting or giving any views.

Review of Connected Transactions

The Audit Committee presents these transactions to the Board along with items of conflicts of interest, which have been scrutinized for conformance to SET's criteria. Such transactions are strictly disclosed in the reports and disclosed every quarter of the year.

• Corporate Governance Promotional Activities

The Corporate Governance Committee is assigned to promote and screen corporate governance matters so that the Company may actively campaign for compliance with corporate governance principles. A working group on corporate governance, headed by an Executive Vice President, has implemented assorted matters under the policy and conducted campaigns to cultivate awareness in directors, the management, and employees as follows:

- Periodic promotional campaigns were conducted through various media within the Company, including exhibitions, a CG Website packed with information, and two-way communication channels. Internal news broadcast, video shows, a CG column in the "PTT Spirit" magazine, and a CG-Digest via email-newsletters are among the publicity and awareness tools, with positive responses from all. In addition, the Corporate Governance Committee distributed the Thai and English versions of the Good Corporate Governance Handbook (2nd Revision) to investors, international interested parties and stakeholders for their reference. This will also be posted on PTT's website.
- Examples of the self-conduct of Directors, executives, and employees have been transformed into articles, radio scripts, and video scripts to cultivate discretion or sound judgment in their decision-making to ensure prudence and righteousness. For instance, one can examine one's own action by asking whether it is the right thing to do, whether it is well-accepted and can be disclosed to the public, and whether it discredits PTT as an organization of ethics. Continuous monitoring of such conformance is to be conducted.
- In addition, PTT focused on corporate governance among PTT Group to align with PTT's corporate governance management standards. To this end, they agreed to jointly study and develop corporate governance guidelines based on international best practices to establish a standard suitable for the PTT Group as a step toward future ranking. Implementation plans and proactive promotional strategies for corporate governance were also established as follows:

R-E-A-C-T

R = Responsibility

E = Equitable Treatment

A = Accountability

C = Creation of Long Term Value

T = Transparency

- Some of the activities in promotion of corporate governance for the PTT Group are listed below:
 - Establishing a committee to oversee corporate governance policies for PTT Group
 - Organizing seminars to foster awareness of corporate governance and social, community, and environment responsibilities, with experts as guest speakers, to encourage the sharing of experience. The target audience was the staff of PTT and PTT Group with corporate governance roles.
 - Organizing the 'PTT CG Group Day' to disseminate PTT Group's corporate governance activities. In 2010, the 'PTT Group CG Day 2010' was held at the Energy Complex, Vibhavadi Rangsit Road, Bangkok. Each company set up its own exhibition and presented its own principles of good corporate governance and business ethics under the theme "CG: The Code to Growth" and organized a seminar among the senior management of PTT Group. Outside honorary guests were also invited, including over 1,000 guests from SET, SEC, Thai Listed Companies Association, State Enterprise Policy Committee, PTT executives, employees, the mass media, and honorable guests. (This event had been scheduled this year for December 15, but due to the Great Floods in Thailand, it has been moved to the middle of 2012.)

- Coordinating to jointly deliberate, consult, and share views within the PTT Group on each company's CG handbook against international standards.
- PTT has instituted a clear and suitable organizational structure and lines of command. Delegation of authority and responsibilities is done in writing. Key Performance Indicators (KPIs) are set at the beginning of the year as a working guideline for employees and assessed at the end of the year. Annual targets are also reviewed. All employees recognize their roles, authority, duties and responsibility.
- PTT has defined the policy and procedures for human resource management in writing, including recruitment, training, promotion and compensation procedures.
- PTT has put in place channels for filing complaints and assigned the Corporate Communications Department as the main unit responsible. The Department acts as a focal point to respond to complaints within a suitable period. Issues are regularly compiled, managed, and presented to the management for organizational improvement and future development in all areas.

5.19.2 Risk Management

Corporate risk management is vital to business execution, a fact PTT has always recognized as a priority by implementing the approach of The Committee of Sponsoring Organizations (COSO) and ISO 31000, an international standard recognized by organizations worldwide.

Cultivating risk management as a corporate culture, PTT has instituted a corporate risk management policy, with a Risk Management and Control Committee-consisting of executive vice presidents and vice presidents from all business units-overseeing and framing risk management and internal controls for the Company for maximum efficiency as a whole. Corporate risks are managed systematically through various management committees of PTT, and are reported to the PTT Management Committee and the Audit Committee every quarter. Operation risks fall under the oversight of respective

operations, and are the responsibility of all units to manage and control at manageable levels, as is clearly stated in the functional job descriptions of all units.

The risk management process at PTT is linked to the strategic planning processes. A Strategic Thinking Session (STS) gathers ideas from top management to define the corporate direction, goals, and strategies. External and internal factors are assessed for potential impacts on the success of the Company's goals. Also, risks of losing opportunities for creating value added are assessed. Corporate risks are ranked in a corporate risk profile for each year. Responsible risk managers are assigned under the risk management process, with the Committee monitoring resolution to applicable risk areas, together with event risks for the year that affect PTT.

This year key corporate risks consisted of the management of procurement and competition in the natural gas business, LPG and NGV price control, management of the refinery business during the petrochemical business down-cycle, operation risks of the Oil Business Unit and Gas Business Unit, international business expansion, and management of personnel in PTT Group. PTT ensured that these risks were manageable. The Audit Committee reviewed risk management actions every quarter to ensure alignment with PTT's policy. Details about risk management appear under "Risk Factors".

5.19.3 Control Activities

PTT requires that the Management Committee is authorized to review reports, financial and otherwise, of all business groups and corporate overviews, and regularly review all reports to ensure conformance to regulations and job manuals.

PTT has defined policies and procedures in writing for the sake of controlling key risks, including financial transactions, procurement, and general management. To ensure confidence in the existence of inspection systems and checks and balances, a systematic separation of duties is in place for groups of personnel for authorization, data processing, recording of

items or accounting entries, cash receipts and disbursement, review of inspection, and stewardship of properties. This includes operation on parts with key risks and definition of control mechanisms to prevent and minimize errors. Executives regularly review outcomes of such performance. Also, performance indices are required for all employees to lend management activity control suitability and adequacy.

If PTT enters into transactions with major shareholders, directors, the management or related persons, PTT uses strict measures to ensure that the transaction goes through the required approval procedures every time and for every item. The stakeholders will not take part in the approval of such an item. PTT also closely monitors any subsequent actions.

The Board looks after, monitors, and provides policies and recommendations on QSHE standards applied as part of the control activities through the Management Committee headed by the President & CEO, together with the PTT Group QSHE Policy Committee and PTT's own QSHE Committee. The responsible corporate units are the QSHE and Corporate Quality Management Departments.

PTT has laid a firm foundation for assorted aspects of operation, including QSHE management by applying international basic management systems (ISO 9001, ISO 14001, ISO/IEC 17025, and TIS/OHSAS 18001) in all operating sites and core business processes under the framework of the PTT Group QSHE policy. PTT also subscribes to the PTT Group SSHE Management Standard (PTT Group SSHE MS), designed to serve as operating guidelines specifically for the PTT Group to firm up its strong foundation. This year PTT focused on extending management of assorted aspects for greater clarity to raise operating efficiency and effectiveness and links to its own sustainability goal. The following actions are significant in this regard:

• Revised the policies and defined area strategies, resulting in amendment of policies for more specific ones, thus illustrating more clearly PTT's commitment, particularly that of product responsibility with a focus on green products.

PTT also added a framework for implementation of key aspects of the oil and gas industry, including biodiversity and greenhouse gas emission management. PTT still focused on total quality management by leveraging quality management tools and efficient business processes.

- Investigated and formulated environmental management strategies through the Petrochemical and Refining Business Unit in conjunction with QSHE units of PTT Group companies with plants located in Map Ta Phut and in Rayong province, a total of nine companies, to cover issue management about environmental and social impacts on Map Ta Phut.
- Extended its Quality Management System (QMS) to all office units by integrating Thailand Quality Award (TQA) criteria with QMS management from the beginning.
- Extended and accelerated the application of PTT Group SSHE MS in supporting units and all business units. PTT also developed key standards and work procedures, trained personnel, and communicated to relevant PTT Group executives and employees to make them aware of the various methods and channels for extending the basic management system to a specific issue.
- Elevated its basic management system to a specialized management system, namely the business continuity management (BCM) system. This year PTT Head Office and supporting units were the first to achieve BCM certification (TIS 22301-2553) from MASCI (Management System Certification (Thailand)) in Thailand, as well as the energy management system (ISO 50001). Rayong GSP has applied this system and has successfully been verified in Stage 1; certification is expected in 2012. This year PTT began assessment of its carbon footprint in a pilot product, namely PTT Performa Super Synthetic API-SN OW-30, and plans to extend its investigation to other PTT products.
- Improved the efficiency and reliability of SHE operation data storage and reporting system by working on an information system to improve the PTT Group SSHE Performance Database (Web Application) for convenience in data recording using a uniform format throughout the

Group. Another benefit is that each worker can export data for compilation and benchmarking with QSHE performance of business peers within a given business unit. Finally, we can benchmark our operation with best-in-class performance and goals to be jointly defined within PTT and PTT Group.

5.19.4 Information & Communication

Thanks to the vision of the Board, PTT and its group companies have jointly established PTT ICT Solutions Co., Ltd. (PTTICT), to centralize IT services for the PTT Group, a cost-saving idea that reduces infrastructural spending and IT redundancies for each company, while adding bargaining power for the PTT Group. To date, PTTICT has performed its role consistently well and has become the PTT Group's major force in IT operations.

Through the Audit Committee, the Board gave priority to IT system security and the safety of electronic information storage. The management information systems and internal controls were constantly reviewed. This year, computer systems vital to PTT's business have achieved the ISO 27001, an international standard universally accepted worldwide. PTT was the first entity in Thailand to have garnered such distinction.

PTT has consistently implemented and developed ICT systems in its business execution by developing an information master plan that addresses business needs while supporting executive decisions. This year PTT improved its enterprise resource planning (ERP) and business intelligence (BI), due for completion in 2012, to support preparation of key business reports, meeting the needs of executives for business operation, performance monitoring, and business outlook projections.

As for performance measurement and comparison of performance against goals, PTT has improved its information system to accommodate future policies and organization structures-including the COACH, the Balanced Scorecard, and KPIs to promote the progress towards becoming a

leading business organization with the Thailand Quality Award (TQA) throughout the Company.

5.19.5 Monitoring & Evaluation Internal Audit System

The Office of Corporate Audit is an independent unit of the Company, which directly reports to the Audit Committee. It fosters assurance and provides consultation to ensure that business processes are properly equipped with good corporate governance, risk management, and sound internal controls to support PTT's objectives.

The office audits annual operating plans and long-term advanced audit plans of three years in line with business strategic directions and the so-called risk-based approach (key corporate risks), encompassing PTT Group's businesses. It reports findings to the Audit Committee for consideration and reporting to the Board for acknowledgment every quarter. Regular monitoring is undertaken for actions in response to the office's recommendations. In its work, the office freely expresses its opinions. No conflicts have arisen between auditee units and the office that cannot be resolved.

• Control Self-Assessment (CSA)

In addition, PTT monitors internal controls and assesses them at least annually by defining this task as a part of the routine procedures of executives, supervisors, and relevant parties. It also instituted Control Self-Assessment (CSA) within the Company in a blended mode:

- Questionnaires for internal controls at corporate and departmental levels
- Control Self-Assessment Workshops to assess internal controls at the activity level, with a focus on process control, assessment outcomes and plans to improve internal controls which must have the buy-in of work processes.

The Risk Management Department compiles data and summarizes the analyses of those data in reports of self-assessment covering the entire company for the Risk



Management Committee to screen, provides their views, and issues approaches for responsible units to proceed with corrective actions every year. In addition, the Office of Corporate Audit conducts reviews to ensure that the existing internal controls are adequate for handling risk management and are consistently conformed to. The Audit Committee reviews the findings of the internal audit annually. If any areas needing improvement are found, PTT has instituted procedures to ensure that such areas receive due attention and immediate corrective actions. As for internal control assessment of accounting and finance, the audit and review is usually undertaken by the Office of the Auditor-General, the assigned external auditor, with the findings submitted to the Audit Committee for consideration quarterly and annually.

In monitoring and assessing internal controls, PTT conforms to the guidelines for report preparation issued by the Auditing Commission Regulation (Clause 6). It was concluded that the latest assessment was at a 'good' level. All business groups also report their performance every month and have their performance regularly measured against KPIs.

The regular review of the assessment outcomes conducted by executives and the Office of Corporate Audit and the Audit Committee for this year indicated no significant problems or defects, a view shared by the external auditor. In other words, PTT's internal control system is adequate and effective in line with its objectives.

PTT

Board of Directors



Dr. Norkun SittiphongChairman

Age 58

(%) Share Possession / None

Educations

- B.Eng. (Mechanical Engineering), Chulalongkorn University, Thailand
- M.Sc. (Mechanical Engineering), Oregon State University, U.S.A.
- Ph.D. (Mechanical Engineering), Oregon State University, U.S.A.

Certifications

- The National Defense Course, National Defense College, (Class of 47th), Thailand
- Capital Market Academy Leadership Program, (Class of 4th), Thailand
- Thai Institute of Directors Association (IOD), RCP 21/2009

Work Experiences

1998 - 2000 : Vice President, Research and Assets Affairs, Chiang Mai University

2001 - 2003 : Vice President, Academic Affairs, Chiang Mai University

2003 - 2010 : Deputy Permanent Secretary, Ministry of Energy

2010 - Present: Permanent Secretary, Ministry of Energy

Relevant Important Positions

- Chairman, PTT Exploration and Production Public Company Limited
- Director, Thaioil Public Company Limited



Mr. Chulasingh Vasantasingh Independent Director, Chairman of the Audit Committee

Age 61

(%) Share Possession / None

Educations

- Bachelor of Laws (LLB.) (Hons.), Chulalongkorn University, Thailand
- Master of Comparative Law (MCL.), University of Illinois, U.S.A.
- Barrister at Law, The Institution of Legal Education, Thailand
- Honorary Doctorate Degree in Laws, Ramkhamhaeng University, Thailand
- Honorary Doctorate Degree in Laws, Chulalongkorn University, Thailand
- Honorary Doctorate Degree in Laws, Yonok University, Thailand

Certifications

- The National Defense Course, National Defense College, (Class of 388th), Thailand
- Politics and Governance in Democratic Systems for Executives Course, Thailand
- Capital Market Academy Leadership Program, (Class of 5th), Thailand
- Thai Institute of Directors Association (IOD), DCP 35/2003, FND 7/2003, UFS 1/2006, ACP 17/2007, Refresher Course DCP 1/2008

Work Experiences

2005 - 2009 : Deputy Attorney General, The Office of the Attoney General 2009 - Present : Attorney General, The Office of the Attoney General

Relevant Important Position / None



Mr. Watcharakiti Watcharothai
Independent Director,
Chairman of the Nominating
Committee,
Member of the Corporate
Governance Committee

(%) Share Possession / None

Educations

- Bechelor of Arts (Political Science), Kasetsart University, Thailand
- M.P.A., Roosevelt University, IL, U.S.A.

Certifications

- The State-Private & Political Sector Course, National Defense College, (Class of 4th),
 Thailand
- Capital Market Academy Leadership Program, (Class of 9th), Thailand
- Public Director Certification Program, Public Director Institute (PDI), (Class of 5th),
 Thailand
- Senior Executives on Justice Administration Batch, National Justice Academy (Class of 15th), Thailand
- Thai Institute of Directors Association (IOD), DCP 121/2009

Work Experiences

2001 - 2007 : Assistant Lord Chamberlain 2007 - Present : Grand Chamberlain

Relevant Important Position

• Director, IRPC Public Company Limited



Mr. Arkhom Tempittayapaisith
Independent Director,
Chairman of the Remuneration
Committee,
Member of the Audit Committee

(%) Share Possession / None

Educations

- B.A. Economics, Thammasat University, Thailand
- M.A. Development Economics, Williams College, U.S.A.

Certifications

- Senior Executive, Civil Servant Commission, (Class of 35th), Thailand
- The National Defense Course, National Defense College, (Class of 46th), Thailand
- Thai Institute of Directors Association (IOD), DAP 51/2006, DCP 97/2007, ACP 22/2008

Work Experiences

2000 - 2003 : Assistant Secretary-General, NESDB
2003 - 2004 : Senior Adviser in Policy and Plan, NESDB
2004 - 2010 : Deputy Secretary-General, NESDB
2010 - Present : Secretary-General, NESDB

Relevant Important Position / None



Dr. Surapon NitikraipotIndependent Director,
Chairman of the Corporate
Governance Committee

(%) Share Possession / None

Educations

- Bachelor of Laws (Second Class Hons.), Thammasat University, Thailand
- Barrister at Law, (Class of 35th), Institute of Legal Training of the Bar Association of Thailand
- Diplôme d'études approfondies (D.E.A.) de droit public (Strasbourg III), France
- Doctorat de l' Université Robert Schuman de Strasbourg (mention trèshonorable), France

Certifications

- Certificate in Decentralisation and Local Government, International Institute of Public Administration, Paris, France
- The Joint State Private Sector Course, National Defense College, (Class of 23rd), Thailand
- Thai Institute of Directors Association (IOD), DCP 102/2008, RCP 25/2011

Work Experiences

1999 - 2001 : Head of the Public Law Department, Faculty of Law,

Thammasat University

2001 - 2004 : Dean of the Public Law Department, Faculty of Law,

Thammasat University

2006 - 2008 : Member of National Legistration Assembly

2004 - 2010 : Rector of Thammasat University

2010 - Present: Lecturer, Faculty of Law, Thammasat University

Relevant Important Positions / None



Mr. Krairit Euchukanonchai Independent Director, Member of the Audit Committee

Age 56

(%) Share Possession / None

Educations

- Bachelor of Science, Chulalongkorn University, Thailand
- M.B.A. (Banking and Finance), North Texas State University, U.S.A.

Certifications

• Thai Institute of Directors Association (IOD), DCP 59/2005, RCP 16/2007

Work Experiences

2003 - 2005 : Director, Provincial Waterworks Authority

2004 - 2005 : Director, Eastern Water Resources Development and Management

Public Company Limited

2005 - 2006 : Director, CAT Telecom Public Company Limited

2005 - 2011 : Director, Siam Commercial New York Life Insurance

Public Company Limited

2008 - 2011 : Director, Small and Medium Enterprises Promotion Committee

Present : Chairman of the Board, V.Group Honda Cars Company Limited

and Related Affiliates

Relevant Important Position / None



Mrs. Benja LouichareonDirector, Member of the Remuneration Committee

(%) Share Possession / None

Educations

- B.A. (Accounting), Thammasat University, Thailand
- · LL.B., Thammasat University, Thailand
- M.P.A., Chulalongkorn University, Thailand

Certifications

- Middle Management Professional Development, Revenue Canada
- EDI Taxation Technology for Middle Management, Revenue Department (Australia and New Zealand)
- Strategic Thinking and Executive Action, Kellogg School of Management, U.S.A.
- The Joint State Private Sector Course, National Defense College, (Class of 4616), Thailand
- Certificate of Public Director Certification Program, Public Director Institute (PDI), Thailand
- Capital Market Academy Leadership Program, (Class of 8th), Thailand
- Thai Institute of Directors Association (IOD), DCP 75/2006, ACP 27/2009, SFE 7/2010 and RCP 23/2010

Work Experiences

2003 - 2004 : Deputy Director-General, Revenue Department

2004 - 2005 : Principal Advisor on Tax Base Management, Revenue Department 2005 - 2008 : Inspector General, Office of Permanent Secretary for Finance

2008 - 2011 : Deputy Permanent Secretary of Ministry of Finance
2011 - Present : Director General, Excise Department, Ministry of Finance

Relevant Important Positions / None



Mr. Krairit Nilkuha
Director, Member of the
Remuneration Committee,
Member of the
Nominating Committee

Age 60

(%) Share Possession / None

Educations

- B.Sc. in Mechanics Engineering, Kasetsart University, Thailand
- M.Sc. (Petroleum Engineering), New Mexico Institute of Mining and Technology, U.S.A.

Certifications

- $\bullet\,$ The National Defense Course, National Defense College, (Class of 48^{th}), Thailand
- Capital Market Academy Leadership Program, (Class of 8th), Thailand
- Thai Institute of Directors Association (IOD), UFS 6/2006, DAP 53/2006, ACP 24/2008 and R-SS 1/2009

Work Experiences

2003 - 2005 : Deputy Director - General, Department of Mineral Fuels

2005 - 2008 : Director - General, Department of Mineral Fuels 2008 - 2009 : Deputy Permanent Secretary, Ministry of Energy

2009 - Present : Director General Department of Alternative Energy Development and

Efficiency, Ministry of Energy

Relevant Important Positions

Chairman, Bangchak Petroleum Public Company Limited



Mr. Waroonthep Watcharaporn Independent Director,

Member of the Corporate Governance Committee

Age 43

(%) Share Possession / None

Educations

- Bachelor Degree in Business Administration, Major in Marketing, The University Thai Chamber of Commerce, Thailand
- Master of Science in Information System (MIS), Engineering School, George Washington University, U.S.A.

Certifications

None

Work Experiences

2006 - 2007 : Assistant Vice President, Marketing One-2-Call,

Advanced Info Service Plc.

2007 - 2008 : Managing Director, Advanced mPAY Company Limited

2008 - 2010 : Assistant Vice President, Corporate Business, Advanced Info Service Plc.

2010 - 2011 : Vice President, Corporate Sales, Advanced Info Service Plc. 2011 - Present: Vice President, Vice Chairman of the Board Executive Office, Advanced Info Service Plc.

Relevant Important Positions / None



Mr. Montri Sotangkur Independent Director

Age 49

(%) Share Possession / None

- B.A., (Faculty of Commerce and Accountancy) Chulalongkorn University, Thailand
- M.B.A., Northrop University, Los Angeles, California, U.S.A.

Certifications

• Capital Market Academy Leadership Program, (Class of 9th), Thailand

Work Experiences

2008 - 2009 : Director, GISTDA-Geo-Informatics and Space Technology Development

Agency (Public Organization)

2008 - 2010 : Director, National Innovation Agency

2008 - 2011 : Director, Provincial Waterworks Authority

2008 - 2011 : Director, National Housing Authority

2009 - Present : Director, M Picture Entertainment Public Company Limited

2011 - Present : Director, CAT Telecom Public Company Limited

1992 - Present : Managing Director, Prestige Direct Marketing Company Limited

Relevant Important Positions / None



Gen.Warawat Indradat Independent Director

(%) Share Possession / None

Educations

- Bachelor of Science (Army), Chulachomklao Royal Military Academy, Thailand
- M.B.A., The Civil Military MBA Program, Kasetsart University, Thailand

Certifications

- Command and General Staff Officer Course (Ft.Leavenworth), U.S.A.
- Defense Resource Management Course Naval Post-graduate School (Monteley, California, U.S.A.)

Work Experiences

2002 : Staff Officer to the Ministry of Defense

2004 : Deputy Commanding General, Chulachomklao Royal Military Academy

2005 : Assistant Chief of the General Staff, Ministry of Defense

2008 : Senior Expert, Royal Thai Army2008 : Secretary to the Ministry of Defense

Relevant Important Positions / None



Gen.Prin Suwannathat Independent Director

Age 59

(%) Share Possession / None

Educations

• Bachelor of Science (Army), Chulachomklao Royal Military Academy, Thailand

Certifications

- The National Defense Course, National Defense College, (2004), Thailand
- Thai Institute of Directors Association (IOD), DCP 110/2008

Work Experiences

2000 - 2001 : Commander of 1st Infantry Regiment King's Guard
 2002 - 2004 : Commanding General of 11st Military Circle
 2004 - 2006 : Commanding General of 1st Division King's Guard
 Present : Chief of Staff Officers to The Minister of Defence

Relevant Important Positions / None



Dr. Chitrapongse KwangsukstithDirector

(%) Share Possession / 0.000906

Educations

- B.Eng. (Mechanical), Chulalongkorn University, Thailand
- M.Eng. (Industrial Engineering), Lamar University, Texas, U.S.A.
- Doctor of Engineering Industrial, Lamar University, Texas, U.S.A.

Certifications

- Stanford Executive Program, Stanford University, U.S.A.
- The National Defense Course, National Defense College, (Class of 4212), Thailand
- Thai Institute of Directors Association (IOD), DCP 42/2004, FND 9/2004, RCC 10/2010

Work Experiences

2000 - 2003 : Senior Executive Vice President, PTT, Working as President,

PTT Exploration & Production Public Company Limited

2003 - 2007 : Senior Executive Vice President, Gas Business Unit, PTT

2008 - 2009 : Chief Operating Officer, Upstream Petroleum and Gas Business Group,

PTT

Present : Chairman of the Board PTT International Company Limited

Relevant Important Positions

• Chairman, PTT International Company Limited



Mr. Sihasak Phuangketkeow Independent Director

Age 54

(%) Share Possession / None

Educations

- Bachelor of Political Science (International Relations), Chulalongkorn University, Thailand
- Master of Arts (International Public Policy), Johns Hopkins University, U.S.A.

Certifications

• None

Work Experiences

 $2002 \hspace{1.5cm} : \hspace{.1cm} \textit{Director General, Department of Information and Spokesman of the} \\$

Ministry of Foreign Affairs

2006 : Deputy Permanent Secretary, Ministry of Foreign Affairs
2007 : Ambassador, Permanent Representative of Thailand to the

United Nations Office and Other International Organizations in Geneva

2011 - Present : Permanent Secretary, Ministry of Foreign Affairs

Relevant Important Positions / None



Dr. Pailin Chuchottaworn Director, Secretary to the Board

(%) Share Possession / 0.000217

Educations

- B. Eng. (Chemical Engineering) (Hons.), Chulalongkorn University, Thailand
- Master of Engineering in Chemical Engineering, Tokyo Institution of Technology, Japan
- Doctor of Engineering in Chemical Engineering, Tokyo Institution of Technology, Japan

Certifications

- PTT Executive Leadership Program / GE Crotonville, U.S.A.
- NIDA-Wharton Executive Leadership Program, The Wharton School, University of Pennsylvania, U.S.A.
- Industrial Liaison Program (ILP) 2005 / Massachusetts Institute Technology, U.S.A.
- The Joint State Private Sector Course, National Defense College, (Class of 22nd),
 Thailand
- Thai Institute of Directors Association (IOD), DAP 24/2004, DCP 51/2004, FND 14/2004

Work Experiences

2006 - 2008 : Executive Vice President, Petrochemicals & Refining Business Unit,

PTT, working as President of PTT Asahi

Chemical Company Limited

2008 - 2009 : Senior Executive Vice President, Petrochemicals & Refining Business

Unit, PTT, working as President of PTT Polymer Marketing Company

Limited, PTT Asahi Chemical Company Limited

2009 - Jun, 2011 : Senior Executive Vice President, PTT, working as President,

IRPC Public Company Limited

Jun, 2011 - Sep, 2011 : Chief Operating Office, Upstream Petroleum and Gas Business

Group, PTT

Sep, 2011 - Present : President & Chief Executive Officer, PTT

Relevant Important Positions

Director, IRPC Public Company Limited

Director, PTT Exploration and Production Public Company Limited

PTT Executives



Mr. Prasert BunsumpunPresident & Chief Executive Officer

His term ended on September 9, 2011

Age 59

(%) Share Possession / 0.000426

Educations

- B.Eng. (Civil Engineering), Chulalongkorn University, Thailand
- M.B.A. Utah State University, U.S.A.
- Honorary Doctor of Engineering, Chulalongkorn University, Thailand
- Honorary Doctor of Management, National Institute of Development Administration (NIDA), Thailand
- Honorary Doctor of Management Science, Petchaburi Rajabhat University, Thailand
- Honorary Doctor of Management, Mahasarakham University, Thailand
- Honorary Doctor of Public and Local Innovative Management,
- Suan Sunandha Rajabhat University, Thailand

Certifications

- The Joint State-Private Sector Course, National Defense College, (Class of 10th), Thailand
- Advanced Management Program, Harvard Business School, U.S.A.
- High Certificate of Democratic Politics and Governance for Senior Executive Program, (Class of 6^{th}), King Prajadhipoks Institutes, Thailand
- Capital Market Academy Leadership Program, (Class of 3rd), Thailand
- Thai Institute of Directors Association (IOD), DAP 26/2004

Work Experiences

2001 - 2003 : Senior Executive Vice President, Gas Business Group, PTT

2003 - 2008 : President, PTT

2008 - Sep, 2011: President and Chief Executive Officer, PTT

2006 - 2008 : Member of the National Assembly

2008 - 2011 : Chairman, PTT Exploration and Production Public Company Limited

Relevant Important Positions

- Chairman, PTT Global Chemical Public Company Limited
- Chairman, IRPC Public Company Limited
- Director, Krung Thai Bank Public Company Limited
- Director, Shin Corporation Public Company Limited



Dr. Pailin ChuchottawornPresident & Chief Executive Officer

He took his position on September 10, 2011

Age 55

(%) Share Possession / 0.000217

Educations

- B.Eng. (Chemical Engineering) (Hons.), Chulalongkorn University, Thailand
- Master of Engineering in Chemical Engineering, Tokyo Institution of Technology, Japan
- Doctor of Engineering in Chemical Engineering, Tokyo Institution of Technology, Japan

Certifications

- PTT Executive Leadership Program / GE Crotonville, U.S.A.
- NID A-Wharton Executive Leadership Program, The Wharton School, University of Pennsylvania, U.S.A
- Industrial Liaison Program (ILP) 2005 / Massachusetts Institute Technology, U.S.A.
- The Joint State Private Sector Course, National Defense College, (Class of 22nd), Thailand
- Thai Institute of Directors Association (IOD), DAP 24/2004, DCP 51/2004, FND 14/2004

Work Experiences

2008 - 2009

2006 - 2008 : Executive Vice President, Petrochemicals & Refining Business Unit,

 ${\it PTT, working as President of PTT Asahi Chemical Company Limited}\\$

: Senior Executive Vice President, Petrochemicals & Refining Business Unit, PTT, working as President of PTT Polymer Marketing Company

Limited and PTT Asahi Chemical Company Limited

2009 - Jun, 2011 : Senior Executive Vice President, PTT, working as President,

IRPC Public Company Limited

 ${\sf Jun, 2011-Sep, 2011} \ : {\sf Chief Operating Officer, Upstream Petroleum and Gas Business}$

Group, PTT

Sep, 2011 - Present : President & Chief Executive Officer, PTT

- Director, Secretary to the Board, PTT Public Company Limited
- Director, IRPC Public Company Limited
- Director, PTT Exploration and Production Public Company Limited



Mr. Tevin VongvanichChief Financial Officer

(%) Share Possession / 0.000196

Educations

- B.Eng. (Chemical Engineering) (Hons.), Chulalongkorn University, Thailand
- M.S. (Chemical Engineering), Rice University, U.S.A.
- M.S. (Petroleum Engineering), University of Houston, U.S.A.

Cortifications

- Program for Global Leadership (PGL), Harvard Business School, U.S.A.
- Democratic Politics and Governance for High-Level Administrators Program, (Class of 10th), King Prajadhipok's Institute, Thailand
- Senior Executive Program (SEP), (Class of 7th), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Capital Market Academy Leadership Program, (Class of 6th), Thailand
- The Joint State Private Sector Course, National Defense College, (Class of 22nd), Thailand
- Thai Institute of Directors Association (IOD), DCP 21/2002, FSD 6/2009, RCC 13/2011

Work Experiences

2008 - 2009 : Senior Vice President, PTT Exploration & Production Public Company

Limited (PTTEP) working as Senior Executive Vice President,

Corporate Strategy & Development, PTT

2009 - 2010 : Chief Financial Officer and Senior Executive Vice President,

Corporate Strategy, PTT

2010 - Present: Chief Financial Officer, PTT

Relevant Important Positions

- Director, PTT Exploration and Production Public Company Limited
- Director, Thaioil Public Company Limited



Mr. Wichai PornkeratiwatChief Operating Officer,
Upstream Petroleum and Gas
Business Group

Age 58

(%) Share Possession / 0.000195

Educations

- B.Eng. (Electronic Engineering), Khon Kaen University, Thailand
- Master of Public Administration, National Institute Development Administration (NIDA), Thailand

Certifications

- Asian Executive Program (AEP), GE Management Development Institute
- Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- NIDA-Wharton Executive Leadership Program, The Wharton School, University of Pennsylvania, U.S.A
- Thai Institute of Directors Association (IOD), DCP 111/2008

Work Experiences

2002 - 2008 : Executive Vice President, Project Management, Exploration,

Production and Gas Business Group, PTT

2008 - 2009 : Executive Vice President, PTT, working as President,

PTT LNG Company Limited

2009 - 2010 : Executive Vice President, Natural Gas Vehicle, PTT 2010 - 2011 : Senior Executive Vice President, Gas Business Unit, PTT

2011 - Present : Chief Operating Officer, Upstream Petroleum and Gas Business Group, PTT

- Chairman, PTT LNG Company Limited
- · Chairman, PTT Green Energy Pte., Ltd.
- Director, IRPC Public Company Limited



Mr. Nuttachat CharuchindaChief Operations Officer,
Downstream Petroleum
Business Group

(%) Share Possession / 0.000061

Educations

- B.Eng. (Civil Engineering), Chiang Mai University, Thailand
- M.B.A., Thammasat University, Thailand

Certifications

- Program for Global Leadership (PGL), Harvard Business School, U.S.A.
- · Oxford Energy Seminar, UK
- Break Through Program for Senior Executives (BPSE), IMD Institute, Switzerland
- The Joint State-Private Sector Course, National Defence College, (Class of 20th), Thailand
- Thai Institute of Directors Association (IOD), DCP 129/2010

Work Experiences

2004 - 2005 : Executive Vice President Supply and Logistics, PTT 2005 - 2009 : Executive Vice President Natural Gas Vehicle, PTT

2009 - 2010 : Executive Vice President International Trading Business Unit, PTT

2010 - 2011 : Senior Executive Vice President, Corporate Strategy, PTT

2011 - Present : Chief Operations Officer, Downstream Petroleum Business Group, PTT

Relevant Important Positions

- Director, Bangchak Petroleum Public Company Limited
- Director, Bangkok Aviation Fuel Services Public Company Limited
- Director, PTT Global Chemical Public Company Limited



Mr. Supattanapong Punmeechaow
Senior Executive Vice President,
Corporate Strategy

Age 52

(%) Share Possession / 0.000035

Educations

- Bachelor Degree, Chemical Engineer, Chulalongkorn University, Thailand
- Master Degree, Business Administrative, Chulalongkorn University, Thailand

Certifications

- Advanced Management Program, INSEAD University, France
- The Joint State-Private Sector Course, National Defense College, (Class of 5020), Thailand
- Thai Institute of Directors Association (IOD), DCP 131/2010

Work Experiences

1998 - 2005 : Managing Director, SCB Securities Co., Ltd. 2006 - 2008 : Managing Director, SCB Securities Co., Ltd.

2009 - 2011 : Executive Vice President Business Development, PTT International Company Limited and Executive Vice President Corporate Strategy, PTT

2011-Present : Senior Executive Vice President, Corporate Strategy, PTT

Relevant Important Positions

• Director, PTT International Company Limited



Mr. Pitipan TepartimargornSenior Executive Vice President,
Human Resources & Organization
Excellence

(%) Share Possession / 0.000029

Educations

- B.Eng., King Mongkut's Institute of Technology Ladkrabang, Thailand
- Master of Political Science. (Public Administration), Thammasat University, Thailand

Certifications

- Strategic Human Resources Management Program, Harvard University, U.S.A.
- NIDA-Wharton Executive Leadership Program, The Wharton School, University of Pennsylvania, U.S.A.
- Senior Executive Program (SEP), Sasin Graduate Institution of Business Administration of Chulalongkorn University, Thailand
- Thai Institute of Directors Association (IOD), DCP 138/2010

Work Experiences

2001 - 2003 : Vice President, Corporate Development, PTT
 2003 - 2004 : Vice President, Human Resources Policy, PTT
 2004 - 2010 : Executive Vice President, Human Resources, PTT

2010 - Present : Senior Executive Vice President, Human Resources & Organization

Excellence, PTT

Relevant Important Positions

- Director, Bangchak Petroleum Public Company Limited
- Chairman, Energy Complex Company Limited
- Director, PTT ICT Solutions Company Limited



Mr. Peerapong AchariyacheevinSenior Executive Vice President,
Gas Business Unit

Age 59

(%) Share Possession / 0.000376

Educations

- B.S. Industrial Engineering, King Mongkut's University of Technology Thonburi, Thailand
- M.B.A., Burapha University, Thailand

Certifications

- Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Public Administration and Law for Executives, King Prajadhipok's Institute, Thailand
- Thai Institute of Directors Association (IOD), DCP 80/2006, UFS 2/2006

Work Experiences

2001 - 2003 : Vice President, Natural Gas Distribution Department
 2003 - 2009 : Executive Vice President, Natural Gas Transmission
 2009 - 2011 : Executive Vice President, Natural Gas Processing
 2011 - Present : Senior Executive Vice President, Gas Business Unit

- Chairman, PTT Utility Company Limited
- Director, PTT International Company Limited



Mr. Sarun Rungkasiri Senior Executive Vice President, Oil Business Unit

(%) Share Possession / 0.000153

Educations

- B.Eng. (Industrial Engineering), Chulalongkorn University, Thailand
- M.S. Management, Polytech.Inst. of NY., U.S.A.

Certifications

- NID A-Wharton Executive Leadership Program 2009, The Wharton School, University of Pennsylvania, U.S.A.
- The Joint State Private Sector Course, National Defense College, (Class of 23rd), Thailand
- Thai Institute of Directors Association (IOD), CSP 8/2004, DCP 61/2005, FND 19/2005

Work Experiences

2003 - 2005 : Vice President Office of President 2006 - 2007 : Vice President Corporate Public Relation

2008 - 2009 : Executive Vice President, Corporate Communication & Social

Responsibility

2009 - 2010 : Executive Vice President, Commercial & International Marketing

2010 - 2011 : Executive Vice President, Retail Marketing 2011 - Present : Senior Executive Vice President, Oil Business Unit

Relevant Important Positions

- Director, Thailube Blending Company Limited
- Director, PTT Retail Management Company Limited
- Director, Thai Petroleum Pipeline Company Limited



Mr. Sukrit SurabotsoponSenior Executive Vice President,
Petrochemicals & Refining
Business Unit

Age 53

(%) Share Possession / 0.000007

Educations

• Chemical Engineering, Chulalongkorn University, Thailand

Certifications

- Thai Listed Companies Association, TLCA Executive Development Program (EDP)
- Thai Institute of Directors Association (IOD), DCP 132/2010

Work Experiences

2007 - 2008 : Assistant Managing Director - Business, Thaioil Public Company Limited (TOP)

2008 - 2009 : Assistant Managing Director - Strategic Planning & Business

Development, TOP

2009 - 2010 : Executive Vice President, Subsidiary Planning & Management

Petrochemicals & Refining Business Unit, PTT

2010 - Present : Senior Executive Vice President - Petrochemicals & Refining Business Unit, PTT

- Director, PTT Global Chemical Public Company Limited
- Director, Star Petroleum Refining Company Limited
- Director, PTT International Company Limited



Mr. Sarakorn Kulatham Senior Executive Vice President, International Trading Business Unit

(%) Share Possession / 0.000236

Educations

- B.Eng., Chulalongkorn University, Thailand
- M.S. (Science) Civil Engineering, University of Missouri, U.S.A.

Certifications

- Leadership Program, IMD Institute
- NIDA-Wharton Executive Leadership Program, The Wharton School, University of Pennsylvania, U.S.A

Work Experiences

2005 - 2006 : Executive Vice President, PTT, Secondment Supply and Planning

Management, Alliance Refining Company Limited

2006 - 2007 : Executive Vice President, PTT, Secondment Deputy CEO-Supply

Planning, Star Petroleum Refining Company Limited

2007 - 2008 : Executive Vice President, International Trading Business Unit, PTT 2008 - Present : Senior Executive Vice President, International Trading Business Unit,

PTT

Relevant Important Positions

- Director, Bangchak Petroleum Public Company Limited
- Chairman, PTT International Trading Pte.
- Director, Star Petroleum Refining Company Limited



Mr. Anon Sirisaengtaksin
President & Chief Executive Officer,
PTT Exploration and Production
Public Company Limited

Age 59

(%) Share Possession / 0.000496

Educations

- B.Sc. (Geology), Chulalongkorn University, Thailand
- M.B.A., Thammasat University, Thailand
- Honorary Doctor of Public Administration, Bangkok Thonburi University, Thailand

Certifications

- Project Investment Appraisal and Management and Global Leadership, Harvard University, U.S.A.
- \bullet Capital Market Academy Leadership Program, (Class of $1^{\rm st}$), Thailand
- Thai Institute of Directors Association (IOD), DAP 52/2006, LBP 1/2011, R-CAC 1/2011

Work Experiences

2002 - 2008 : Senior Executive Vice President Corporate Strategy and Development,

PTT

2008 - 2010 : Senior Executive Vice President, PTT, working as Chief Executive Officer,

PTT Exploration and Production Public Company Limited

2010 - Present: Senior Executive Vice President, PTT, working as President & CEO,

PTT Exploration and Production Public Company Limited

- Director and Secretary to the Board, PTT Exploration and Production Public Company Limited
- Director, PTT FLNG Limited



Mr. Veerasak Kositpaisal Chief Executive Officer, PTT Global Chemical Public Company Limited

(%) Share Possession / 0.000110

Educations

- B.Eng. (Mechanical), Chulalongkorn University, Thailand
- M.S. (Mechanical Engineering), Texas A&I University, U.S.A.

Certifications

- Top Executive Program in Commerce and Trade (TEPCOT) 2/2009
- Capital Market Academy Leadership Program, (Class of 11th)
- Thai Institutes of Directors Association (IOD), DCP 82/2006 and FND 30/2006

Work Experience

2006 - 2008 : Executive Vice President, PTT, working as Senior Executive

Vice President, Trading Business, PTT Chemical Public Company Limited (PTTCH) and Managing Director, Bangkok Polyethylene Public Company

Limited

2008 - 2008 : Executive Vice President, PTT, working as Senior Executive

Vice President, Polymer Product Business Unit, PTTCH

2008 - 2009 : Executive Vice President, PTT, working as President, PTTCH

2009 - 2011 : Senior Executive Vice President, PTT, working as President, PTTCH
2011 - Present : Senior Executive Vice President, PTT, working as Chief Executive
Officer, PTT Global Chemical Public Company Limited

Relevant Important Positions

- Director and Secretary of the Board, PTT Global Chemical Public Company Limited
- Chairman, PTT Phenol Company Limited
- Director, PTT Polymer Marketing Company Limited



Mr. Bowon VongsinudomPresident, PTT Global Chemical
Public Company Limited

Age 57

(%) Share Possession / 0.000042

Educations

- B.Eng. (Chemical Engineering), Chulalongkorn University, Thailand
- Master of Engineering in Chemical Engineering, Chulalongkorn University, Thailand
- Master of Business Administration (Management), Sasin Graduate Institute of Business Administration, Thailand

Certifications

- The Joint State Private Sector Course, National Defense College, (Class of $17^{\rm th}$), Thailand
- Thai Institute of Directors Association (IOD), DAP 76/2008

Work Experience

2006 - 2007 : Senior Executive Vice President, PTT, working as President,

Rayong Refinery Public Company Limited

2007 - 2009 : President, Alliance Refining Company Limited (ARC)

2009 - 2010 : Senior Executive Vice President, PTT Aromatics and Refining

Public Company Limited (PTTAR)

2010 - 2011 : Senior Executive Vice President, PTT, working as President & CEO,

PTTAR

2011 - Present : Senior Executive Vice President, PTT, working as President, PTT Global Chemical Public Company Limited

- Director, PTT Global Chemical Public Company Limited
- Director, PTT Phenol Company Limited



Mr. Surong Bulakul Chief Executive Officer, Thaioil Public Company Limited

(%) Share Possession / 0.000414

Educations

- Bachelor of Science Industrial Engineering and Operations Research, Syracuse University, New York, U.S.A.
- Master of Engineering Operations Research and Industrial Engineering Cornell University, New York, U.S.A.
- Master of Business Administration, Cornell University, New York, U.S.A.

Certifications

- PMD, Harvard University, Boston, U.S.A.
- Democratic Politics and Governance for High-Level Administrators Program (Class of 8th), King Prajadhipok's Institute, Thailand
- The Joint State-Private Sector Course, National Defense College, (Class of 4919), Thailand
- Capital Market Academy Leadership Program, (Class of 10th), Thailand
- Thai Institute of Directors Association (IOD), DCP 121/2009, R-SS 1/2011

Work Experiences

2005 - 2008 : Executive Vice President, International Trading, PTT
 2008 - 2009 : Senior Executive Vice President, International Trading, PTT
 2009 - Present : Senior Executive Vice President, PTT working as Chief Executive Officer, Thaioil Public Company Limited

Relevant Important Positions

- Director and Secretary of the Board, Thaioil Public Company Limited
- Chairman, Independent Power (Thailand) Company Limited
- Chairman, Thaioil Power Company Limited



Mr. Suwanunt ChatiudompunthPresident,
PTT Phenol Company Limited

Age 59

(%) Share Possession / 0.000112

Educations

- B.Eng. (Civil Engineering), Khon Kaen University, Thailand
- Master of Sciences (M.Sc.), Petroleum Engineering, New Mexico Institute of Mining and Technology (MNINT), U.S.A.

Certifications

- Tennessee Associates International : Leadership Assessment Program
- Senior Executive Program (SEP) (Class of 14th), Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand
- Public Administration and Law for Executives, King Prajadhipok's Institute, Thailand

Work Experiences

2001 - 2002 : Senior Vice President, Natural Gas Transmission
2002 - 2009 : Executive Vice President, Natural Gas Processing
2009 - 2011 : Executive Vice President, PTT, Working as President,

PTT Phenol Co., Ltd.

2011 - Present : Senior Executive Vice President, PTT, Working as President,

PTT Phenol Co., Ltd.

- Director, PTT Phenol Company Limited
- Director, HMC Polymers Company Limited
- Director, PTT Maintenance and Engineering Company Limited



Mr. Atikom TerbsiriPresident,
IRPC Public Company Limited

(%) Share Possession / None

Educations

- B.B.A., Assumption University, Thailand
- M.B.A. (Finance & International Business), High Distinction, Armstrong University, Berkeley, California, U.S.A.

Certifications

- Doctoral Course in Human Resources Management and Managerial Economics, Golden Gate University, San Francisco, California, U.S.A.
- Executive Education Program, Harvard Business School, Harvard University, U.S.A.
- PTT Group EVP Leadership Development Program, co-hosted by PTT Public Company Limited and Development Dimensions International (DDI)
- Thai Institute of Directors Association (IOD), DCP 125/2009

Work Experiences

2002 - 2007 : Executive Vice President, Business & Finance, The Aromatics (Thailand)

Public Company Limited

2007 - 2009 : Executive Vice President, Corporate Strategy & Commercial,

PTT Aromatics and Refining Public Company Limited (PTTAR)

2009 - 2011 : Senior Executive Vice President, Corporate Strategy & Planning,

Acting Senior Executive Vice President, Port & Asset Management

Business Unit, IRPC Public Company Limited

Present : Senior Executive Vice President, PTT, working as President,

IRPC Public Company Limited

Relevant Important Positions

• Director and Secretary of the Board, IRPC Public Company Limited

Positions held by the Management and Authorized Controllers of PTT Plc., Subsidiaries, Associates, and Related Companies

As of December 31, 2011

					1	2 3	3 4	5	6	7	8 9	9 1	0 1	1 12	13	14	15	16 1	7 18	19	20	21	22	23 2	4 2	5 26	27	28	29 3	10 3	1 32
		\	PTT Exec	utive	Sitthiphong	Chulasingh Vasantasingh	Watcharakiti Watcharothai	Suranon Nitikrainot	Krairit Euchukanonchai	Benja Louichareon	Vilkuha	Mr. Waroonthep Watcharaporn	Montri Sotangkur	at Indradat	Chitrapongse Kwangsukstith	Mr. Sihasak Phuangketkeow	Pailin Chuchottaworn	ongvanich	Mr. W Ichal Pornkeratiwat	Supattanapong Punmeechao	Mr. Pitipan Tepartimagorn	Peerapong Achariyacheevin	ıngkasiri	Sukrit Surabotsopon	Sarakorn Kulatham	Mr. Anon Sirisaengtaksin Mr. Veerasak Kositpaisal	Bowon Vongsinudom	Sulakul	Suwanunt Chatiudompunth	Terbsiri	Mr. W Irat Uanarumit Mrs. Prisana Prahankhasuk
	Company	/			Dr. Norkun Sitthiphong	Mr. Chulasir	Mr. Watchar			Mrs. Benja L	Mr. Krairit Nilkuha	Mr. Warooni	Mr. Montri S	Gen Prin Suvanadat	Dr. Chitrapor	Mr. Sihasak	Dr. Pailin Ch	Mr. Tevin Vongvanich	Mr. Withsch	Mr. Supattana	Mr. Pitipan	Mr. Peerapor			Mr. Sarakorr	Mr. Anon Si Mr. Veerasal	Mr. Bowon			Mr. Atikom Terbsiri	Mr. W irat Uanarumit Mrs. Prisana Prahank
			PTT Plc.	PTT	Х	1 1	1	1	1	1	1	/ /	' /	1	1	1	*0/	// //	<i>'\ </i>	//	//	//	//	// /	/ /	/ //	//	//	// /	// //	/ //
	E&P	1	PTT Exploration and Production Plc.	PTTEP	Х												/	/							*(0/					
		2	PTT Natural Gas Distribution Co., Ltd.	PTTNGD																											
	Gas	3	PTT LNG Co., Ltd.	PTTLNG														×													
		4	Combined Heat and Power Producing Co., Ltd.	CHPP																											
		5	PTT (Cambodia) Co., Ltd.	PTTCL																											
S		6	PTT Retail Business Co., Ltd.	PTTRB																											
Subsidiaries		7	Subic Bay Energy Co., Ltd.	SBECL																											
ia	Oil	8	PTT Green Energy Pte., Ltd.	PTTGE														×													
Sic		9	Business Services Alliance Co., Ltd.	BSA																											
q		10	Thai Lube Blending Co., Ltd.	TLBC																			х								
S		11	PTT Polymer Marketing Co., Ltd.	PTTPM																						/					
	Petrochemical	12	PTT Polymer Logistics Co., Ltd.	PTTPL																											
	& Refining	13	PTT Tank Terminal Co., Ltd.	PTT TANK																											
	Trading	14	PTT International Trading Pte.	PTTT																					x						/
		15	Energy Complex Co., Ltd.	EnCo																	Х										
	Others	16	PTT International Co., Ltd.	PTTI											х					/		/		/							
		17	PTT Utility Co., Ltd.	PTTUT																		х									Т
	18 19	18	Thaioil Power Co., Ltd.	TP																								х			
		19	Independent Power (Thailand) Co., Ltd.	IPT																								х			
		20	Trans Thai-Malaysia (Thailand) Co., Ltd.	TTM (T)																											
		21	Trans Thai-Malaysia (Malaysia) Co., Ltd.	TTM (M)																											Т
	Gas	22	District Cooling System and Power Plant Co., Ltd.	DCAP																											
		23	Ratchaburi Power Co., Ltd.	RPCL																											
		24	B.Grimm Power Ltd.	B.Grimm BIP																											
		25	Nava Nakorn Electricity Generating Co., Ltd.	NNEG																											
Companies		26	Bangpa-in Cogeneration Co., Ltd.	BIC																											
in.		27	Thai Petroleum Pipeline Co., Ltd.	THAPPLINE						П													/								
ď		28	Petro Asia (Thailand) Co., Ltd.	PA (Thailand)																											
υC		29	Bangkok Aviation Fuel Service Plc.	BAFS						П									/												
ŭ		30	Intoplane Services Co., Ltd.	IPS																											
Related		31	Fuel Pipeline Transportation Co., Ltd.	FPT						П																					
at	Oil	32	Vietnam LPG Co., Ltd.	VLPG																											
e		33	Keloil-PTT LPG Sdn. Bhd.	KPL						П																					
5		34	Petro Asia (Huizhou) Co., Ltd.	PA (Huizhou)																											
and		35	Petro Asia (Maoming) Co., Ltd.	PA (Maoming)																											
		36	Petro Asia (Sanshui) Co., Ltd.	PA (Sanshui)																											
te		37	PTT Global Chemical Plc.	PTTGC															/					/		*/	0/				
ia	4:	38	PTT Phenol Co., Ltd.	PPCL																						х	/		0/	/	
Š		39	Star Petroleum Refining Co., Ltd.	SPRC																				/	/					/	
Associated		40	Thai Oil Plc.	TOP	/													/										*/			
		41	Bangchak Petroleum Plc.	ВСР							х								1		/				/						
	Petrochemical	42	IRPC Plc.	IRPC		,											/	/											()/	
	& Refining 42	43	HMC Polymers Co., Ltd.	нмс																									/		
		44	PTT Asahi Chemical Co., Ltd.	PTTAC																											
		45	PTT Maintenance and Engineering Co., Ltd.	PTTME																									/		
		46	PTT MCC Biochem Co., Ltd.	PTTMCC																											
		47	PTT Energy Solutions Co., Ltd.	PTTES																											
		48	Dhipaya Insurance Plc.	TIP																											/
	Others	40	PTT ICT Solutions Co., Ltd.	PTTICT																	/										

 $\textbf{Notes} : \textit{Symbol} \quad \textit{X} = \textit{Chairman} \quad ^* = \textit{CEO} \quad \textit{O} = \textit{President} \quad / = \textit{Director} \quad / / = \textit{Executive}$

Awards of Success

Recognition for PTT in 2011

In 2011, PTT won 57 awards and prestigious ranking from 27 institutions:

- 18 national entities, for a total of 32 awards
- 8 international entities, for a total of 25 awards.

National (18 entities, 32 awards)



Award/ Ranking/ Criteria

Thailand Quality Award: TQA 2010

 The top award (TQA 2010): Natural Gas Transmission Pipelines

Notes (Reference/ Criteria)

- Criteria:
 - 1. Organizational leadership
- 2. Strategic planning
- 3. Customer and market focus
- 4. Testing, analysis, and knowledge management
- 5. Human resource focus
- 6. Process management
- 7. Business performance

- Same criteria as those used for worldclass awards in the US
- Natural Gas Transmission Pipelines had won Thailand Quality Class (TQC) awards for three consecutive years (2007-2009)
- This was PTT's second TQA award, with Rayong Gas Separation Plant a previous winner in 2006

Presented by

Thailand Quality Award Committee

Date

January 13th, 2011



Award/ Ranking/ Criteria

Thailand's Most Admired Brand & Why We Buy 2011 Award in which PTT was voted the top rank in the two following categories

- Service Stations
- Lubricant Products

Notes (Reference/ Criteria)

- Based on a survey among customers on products and services for 2011
- Service stations voted the most trusted ones for 8 consecutive years (2004-2011)

• Lubricant products ranked first for 2 consecutive years (2010-2011)

Presented by

BrandAge Magazine

Date

February 2011



Award/ Ranking/ Criteria

Mr. Prasert Bunsumpun was named the "Highly Valuable and Dedicated Person to Sports Sector" Merit Award at the "5th Siamsport Awards Ceremony"

Notes (Reference/ Criteria)

In recognition of Mr. Prasert
 Bunsumpun, who had constantly
 supported the national sports sector
 with dedication

Presented by

Siamsport daily newspaper

Date

March 6th, 2011



Award/ Ranking/ Criteria

ThaiBMA Best Bond Awards 2010

- Deal of the Year Award
- Most Creative Issue Award
- Best Investor Relations Issuer Award (based on the 10 billion baht special bond issue and the century bond issue)
- PTT was the sole winner in 2010 outside the financial institution circle
- In the past, PTT won ThaiBMA's Best Bond Awards 2009 (Best Investor Relations Issuer Award)

Notes (Reference/ Criteria)

 Based on votes given by bond market stakeholders, including institutional investors, sellers and bond issuers, with final decisions made by a panel of experts

- Deal of the Year Award in recognition of outstanding bond issuers with creativity, information transparency, success, and bond value
- Most Creative Issue Award in recognition of bond issues with uniquely creative characteristics well-accepted by the bond market
- Best Investor Relations Issuer Award, in recognition of bond issuers with outstanding information disclosure and efficient, continual investor relations activities

Presented by

Thai Bond Market Association (ThaiBMA)

Date

March 30th, 2011



The Best Design Award 2011 from The 32nd Bangkok International Motor Show 2011

 PTT's booth with "The Leader of Innovation" design theme

Notes (Reference/ Criteria)

• "The Leader of Innovation" booth exhibited PTT's product innovations-PTT Blue Innovation fuels and PTT Performa Super Synthetic Iubricant for gasoline engine. The booth also highlighted the modern "PTT Life Station" image.

Presented by

Grand Prix International Co., Ltd.

Date

April 2011



Award/ Ranking/ Criteria

- "Quality and Safe Service Station Awards 2010" were presented to 441 PTT service stations, the most in Thailand
- Special trophies were given to 49 PTT service stations that maintained operation at the gold medal level for 3 consecutive years

Notes (Reference/ Criteria)

- An increase of 169 service stations from last year, reflecting constant improvement in and maintenance of service standards:
 - 5-Star Gold Medal Awards for 201 stations
 - Silver Medal Awards for 159 stations
 - Bronze Medal Awards for 81 stations

- 4 aspects of assessment and certifying criteria:
 - Fuel quality control system
 - Safety control system
 - Cleanliness, sanitation, and service standards control system
- Public relations campaign against drinking and selling of alcoholic drinks in service stations

Presented by

Department of Energy Business, Ministry of Energy

Date

April 5th, 2011



Mr. Prasert Bunsumpun was voted as one of the "Top Ten Role Models" for 2010

Notes (Reference/ Criteria)

 Based on votes given by leading CEOs and readers for vision, organizational development, and good response to business needs, all of which represent a role model for transforming PTT Group from a state enterprise to a leading corporation

Presented by

Manager 360° Magazine

Date

April 2011



Award/ Ranking/ Criteria

Mr. Prasert Bunsumpun was named a recipient of the "100 NID A Outstanding Alumni Awards", bestowed by HRH Princess Maha Chakri Sirindhorn

Notes (Reference/ Criteria)

 In recognition of outstanding alumni who had contributed to the good of the nation in celebration of HM the King's 84th Birthday Anniversary and 45 years of NID A's establishment

Presented by

National Institute of Development Administration (NIDA)

Date

April 19th, 2011



Trusted Brands 2011

- Thailand's Top Brand Platinum Award for service stations
- Thailand's Top Brand Gold Award for lubricant products

Notes (Reference/ Criteria)

- PTT was the only brand awarded Thailand's Top Brand for 11 consecutive years, with Gold awards (2001-2008) and Platinum awards (2009 - 2011)
- A maiden consumer survey on lubricant products was firstly conducted in 2011

Presented by

Reader's Digest

Date

May 31st, 2011





Award/ Ranking/ Criteria

- National Outstanding Business Operator in Safety, Occupational Health, and Work Environment Awards:
 - Surat Thani Petroleum Terminal (PT) for 15 consecutive years
 - Lampang PT for 12 consecutive years
 - Phitsanulok Oil Terminal (OT) for 11 consecutive years
 - Phra Khanong OT, Chiang Mai OT,
 Pak Phanang OT, Nakhon Sawan PT,
 Lum Luk Ka OT, and Phuket OT for
 10 consecutive years
 - Udon Thani OT for 9 consecutive years
 - Ubon Ratchathani OT and Khon Kaen PT for 8 consecutive years
 - Khao Bo Ya Gas Terminal, Ban Rong
 Po LPG Terminal, Songkhla PT for
 7 consecutive years

- Bangchak PT for 6 consecutive years
- Denchai OT for 5 consecutive years
- Sara Buri OT and Phra Khanong Office Building for less than 5 consecutive years.

Notes (Reference/ Criteria)

 Awarded to workplaces with strong commitment to the management and operation of safety, occupational health, and work environment

Presented by

Occupational Safety and Health Bureau, Department of Labour Protection and Welfare, Ministry of Labour

Date

July 9th, 2011



3 Outstanding State Enterprise Awards in 2011:

- Best State Enterprise of the Year: Best of the Best for 3 consecutive years (2009-2011)
- Induction to the Hall of Fame on the basis of which Mr. Prasert Bunsumpun won the Outstanding Leadership Award for 2 consecutive years (2009-2010)
- Outstanding Innovation for 2 consecutive years (2010-2011)

Notes (Reference/ Criteria)

 Best State Enterprise of the Year in all categories was the most prestigious award covering best state enterprise board of directors, best organizational

- management, best leadership, best social and environmental operations, best service, best innovation, and best organizational restructure adjustment.
- Outstanding Leadership Awards were given to CEOs based on their successful transformation of long-term vision into sustainable achievement.
- Outstanding Innovation Awards in recognition of efforts toward developing a learning society.

Presented by

Ministry of Finance

Date

September 1st, 2011



Award/ Ranking/ Criteria

3 awards bestowed by HRH Princess Maha Chakri Sirindhorn: Thailand Corporate Excellence Awards 2010

- Leadership Excellence Award
- Financial Management Excellence Award
- A Decade of Excellence Hall of Fame Award given specially in 2010 for corporations with excellent management for 10 consecutive years

Notes (Reference/ Criteria)

 Based on a survey conducted annually among senior executives of 1,000 leading companies in Thailand to honor the awarded corporations and set role models for others. PTT had won this award for 10 consecutive years.

Presented by

Thailand Management Association (TMA), in conjunction with Sasin Graduate Institute of Business Administration of Chulalongkorn University

Date

September 8th, 2011





Prime Minister's Export Award 2011 - "Best of the Best" Award

Notes (Reference/ Criteria)

- In recognition of dedicated Thai exporters that provided role models for others and strengthen Thailand's international competitiveness
- Selected from 322 winners of the Prime Minister's Export Awards for the past 19 years

Presented by

Department of Export Promotion, Ministry of Commerce

Date

September 19th, 2011



CSR-DIW Continuous Awards 2554 CSR-DIW 2554 CSR-DIW Network Awards 2554

Award/ Ranking/ Criteria

CSR-DIW (Corporate Social Responsibility, Department of Industrial Works)
Awards given to 14 projects under PTT's operation:

- CSR-DIW Continuous Awards 2011 (Rayong and Khanom Gas Separation Plants)
- CSR-DIW Awards 2011
- CSR-DIW Network Awards 2011

Notes (Reference/ Criteria)

- Comparable to international standards awards, including ISO 26000, the awards were presented to industrial plants with demonstrated social responsibility
- All 14 projects submitted for consideration passed the certification

process and won the awards in 3 categories:

- 1. CSR-DIW Continuous Awards2011 for PTT (2 awards), IRPC(2 awards), PTTCH, PPCL, HMC,TOP, TPX, Thailube Base
- 2.CSR-DIW 2011 for PTTPL, IRPC (2 awards)
- 3. CSR-DIW Network Awards 2011 for HMC

Presented by

Department of Industrial Works, in conjunction with the Management System Certification Institute (Thailand) (MASCI)

Date

September 2011



Café Amazon won the Thailand Franchise Quality Award 2011 (TFQA 2011). This was Café Amazon's first entry in this project.

Notes (Reference/ Criteria)

- Awarded to franchise businesses that met the quality assessment criteria of TQA (or the Malcolm Baldrige National Quality Award). Out of the 115 applicants, only 55 franchises passed the assessment.
- To improve the competitiveness and raise the standards of franchise businesses

Presented by

Department of Business Development, Ministry of Commerce

Date

October 2011





Award/ Ranking/ Criteria

Thailand Automotive Quality Awards 2011 (TAQA 2011)

- Fuel products
- Service stations
- Lubricant products

Notes (Reference/ Criteria)

- PTT won the award for the second consecutive year
- In recognition of PTT's continuing efforts and determination to improve and develop service stations and products to address all consumers' lifestyles and gain their trust

Presented by

Thailand Productivity Institute, Ministry of Industry, in conjunction with Inter-Media Consultant Co., Ltd., and Custom Asia Co., Ltd.

Date

December 2nd, 2011



by alphabetical order

Award/ Ranking/ Criteria

Excellent ranking in the 2011 Survey of Good Corporate Governance of Listed Companies

Notes (Reference/ Criteria)

- Cited among 47 companies with 'Excellent' CG scoring. A total of 497 listed companies (exclusive of companies listed during the year and those under rehabilitation) joined the survey under the five OECD criteria for corporate governance:
 - 1. Shareholders' rights
 - 2. Equitable treatment of shareholders
 - 3. Regard for stakeholders' roles

- 4. Information disclosure and transparency
- 5. Responsibility of the board of directors

Presented by

Stock Exchange of Thailand (SET), Securities and Exchange Commission (SEC), Thai Institute of Directors (IOD)

Date

December 16th, 2011





Award/ Ranking/ Criteria

SET Awards 2011:

- SET Award of Honor for winning 3 consecutive years (2009-2011) of Corporate Governance Report
- Best Corporate Social Responsibility
 Awards

Notes (Reference/ Criteria)

- In recognition of outstanding listed, securities, and mutual fund management companies for management excellence
- SET Awards of Honor on Corporate Governance Report were given to companies that had consecutively won Top Corporate Governance Report Awards for 3 years or more

Best Corporate Social Responsibility
 A wards were given to companies with outstanding social responsibility

Presented by

SET, in conjunction with Money & Banking Magazine

Date

December 22nd, 2011

International (8 entities, 25 awards)



Most Organized IR
Best Senior Management IR Support
Strongest Adherence to CG
Most Consistency Dividend Policy

Award/ Ranking/ Criteria

One of the top three in:

- Most organized IR
- Best senior management IR support
- Strongest adherence to CG
- Most consistency dividend policy

Notes (Reference/ Criteria)

 Based on a survey among more than 450 investors and analysts in the region to select Southeast Asia's top companies

Presented by

Alpha Southeast Asia Magazine

Date

March 2011



Award/ Ranking/ Criteria

6 Asian Excellence Recognition Awards 2011:

- Asia's Best CEO-Investor Relations:
 Mr. Prasert Bunsumpun
- Asia's Best CFO-Investor Relations:
 Mr. Tevin Vongvanich
- Asia's Best Investor Relations' Professional:
 - Best Investor Relations Website/ Promotion
 - Best Investor Relations Companies
 - Best Environment Responsibility
 - Best Investor Relations Officer: Ms. Pannalin Mahawongtikul

Notes (Reference/ Criteria)

 In recognition of listed companies in each country with outstanding investor relations practices in all aspects. No ranking specified.

Presented by

Corporate Governance Asia Magazine

Date

March 31st, 2011



No. 171 in Forbes Global 2000 Ranking 2011

Notes (Reference/ Criteria)

- PTT ranked 171st among the 2,000 largest-capital and most powerful listed companies worldwide
- Past rankings: 196th/2010, 244th/2009.
 205th/2008, 354th/2007, 372nd/2006,
 425th/2005, 461st/2004

Presented by

Forbes Magazine

Date

2011



Award/ Ranking/ Criteria

PTT received the top rank in 7 out of 9 categories:

- Thailand's Best CEO Mr. Prasert Bunsumpun
- Thailand's Best CFOMr. Tevin Vongvanich
- Thailand's Best Managed Company
- Thailand's Best Corporate Governance
- Thailand's Best Corporate Social Responsibility
- Thailand's Best Investor Relations
- Thailand's Best Committed to Strong Dividend Policy

Notes (Reference/ Criteria)

 Based on an annual survey among fund managers, analysts, and leading financial experts to select outstanding companies in 9 categories among 10 Asian countries

- Past rankings
 - 1st Best IR 2008, 2006
 - 1st Best CG 2005, 2006
 - 1st Best Managed Company 2008, 2006, 2005
 - 1st Best CFO 2008, 2006

Presented by

FinanceAsia Magazine

Date

June 8th, 2011



- 2nd Asian Corporate Director Recognition Awards 2011:
 Mr. Prasert Bunsumpun
- 7th Corporate Governance Asia Recognition Awards 2011

Notes (Reference/ Criteria)

• In recognition of Asian listed companies' leaders and directors with outstanding management performance and good corporate governance. Mr. Prasert Bunsumpun won this award for 2 consecutive years (2010-2011)

- PTT won the Corporate Governance
 Asia Recognition Awards for 6
 consecutive years, based on:
 - 1. Public recognition of its profile of outstanding CG performance
 - 2. CG promotion activities during the past 12 months.
 - 3. Substantial improvement of CG practices

Presented by

Corporate Governance Asia Magazine

Date

June 20th, 2011



Award/ Ranking/ Criteria

Ranked 128th among the world's largest companies in 2011

Notes (Reference/ Criteria)

- Based on revenue and income in 2010
- PTT remained the sole Thai company among the top 500
- Past rankings:
 - 155th/2010
 - 118th/2009
 - 135th/2008
 - 207th/2007
 - 265th/2006
 - 373rd/2005
 - 456th/2004

Presented by

Fortune Global 500 Magazine

Date

2011



Platts Global Energy Awards 2011, presented at the Top 250 Energy Company Awards Ceremony, held in Singapore

- In the "Overall Performance" category, ranked 8th in Asia (28th worldwide)
- In the "Integrated Oil & Gas" category, ranked 3rd in Asia (18th worldwide)

Notes (Reference/ Criteria)

 Based on asset value, income/sales revenue, income, and ROI of energy companies worldwide with assets of over 2 billion US\$

Presented by

Platts

Date

November 2011



Award/ Ranking/ Criteria

 The Asian Talent Management Award was presented to Dr. Pailin Chuchottaworn (President/CEO) at the 10th Asia Business Leaders Awards 2011, held in Singapore

Notes (Reference/ Criteria)

- Based on outstanding ability in managing the company toward success
- The awards were presented annually by CNBC Station to outstanding, visionary CEOs in Asia, Europe, and US for assorted business achievements

Presented by

CNBC News Station

Date

November 25th, 2011



Award/ Ranking/ Criteria

 The Asset's Platinum Awards in 2011 "Prestigious Platinum Awards". PTT has won the Platinum Award for 3 consecutive years

Notes (Reference/ Criteria)

 Based on a survey of leading worldwide institutional investors, analysts, and experts in Asian stock markets and self-assessment by each company

- Based on:
 - Financial Performance
 - Management Acumen
 - Corporate Governance
 - Social Responsibility
 - Environmental Responsibility
 - Investor Relations

Presented by

The Asset Magazine

Date

December 2011





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