

Annual Report 2010 PTT Public Company Limited





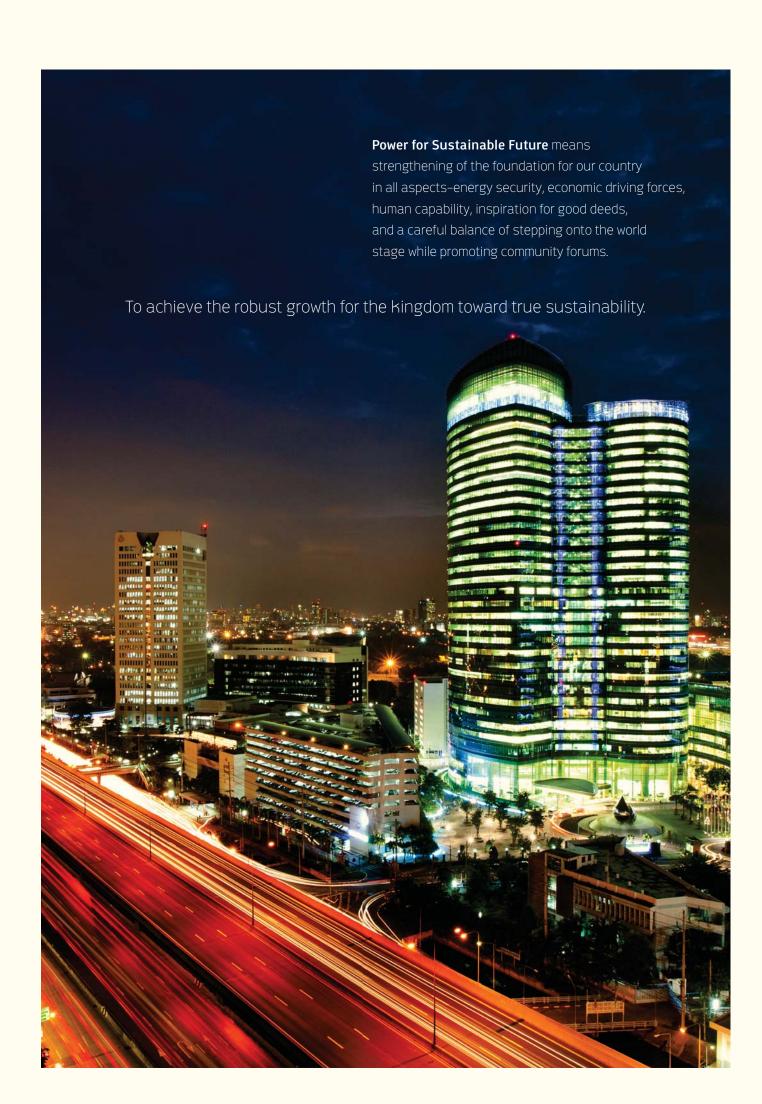




Forging Thai Energy ahead toward Sustainable Future

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Our capacity and capability are rooted in PTT's three decades of existence. Blood, sweat, and tears were never spared for the sake of national energy security. Relentlessly building on innovations, we utilize national resources to the utmost and provide environmentally-friendly alternative energy in driving our country forward. TILEGRING TO THE CHE KNUSH ELEIGH

Entral explosation

# Responsibility goes beyond duties

A secure business enterprize emerges from a stalwart society. Out of our responsibility to Thailand, PTT transforms society into a livable place by evolving human capability toward self-reliance, thanks to the immunity based on knowledge and virtue.



Human strengthening on sufficiency path

Lively

Map Ta Phut, our livable

Better life, better environment | Extending knowledge | Self-reliance path broadening

to communities

In transforming from "Thai Energy for Thais" into "Power for Sustainable Future", PTT prides itself on identifying and promoting Thai talents-which shine here and worldwide to bring pride and smiles to fellow Thais. Inspiring society, these honed talents ignite a chain reaction of good deeds.

Planting a million saplings in the human heart

Creating inspiration

Greening the land



A perfect balance among business, society, and the environment yields sustainable value

PTT's ultimate goal lies in neither excellence in innovation, nor prestigious world rankings, nor accolades. Rather, it lies in our performance that strikes a perfect balance among business, society, and the environment. This, we contend, is the driving force for the kingdom's move toward sustainability.



010 PTT Public Company Limited Annual Report 2010 PTT Public Company Limited 011

Responsibility

for Society

Integrity &

**Ethics** 

Trust &

Respect

## PTT GROUP VISION

## Thai Premier Multinational Energy Company

#### PTT GROUP MISSION

To conduct integrated energy and petrochemical business as the national energy company with a balanced mission of stakeholder satisfaction through:



#### To the country

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

#### To community and society

Being a good corporate citizen by exercising environmental stewardship of international acceptance and improving the quality of life for communities and society

#### To shareholders

Conducting profitable business leading to sustainable growth and providing optimum returns

#### To customers

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

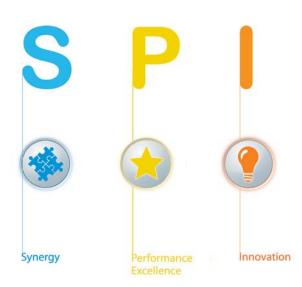
#### To business partners

Conducting fair business with partners while promoting trust, relationship, and cooperation to develop capability and enhance efficiency in long-term business partnership

#### To employees

Supporting capability-building in professional conduct and ensuring employees' well-being on par with other leading companies to forge employee engagement

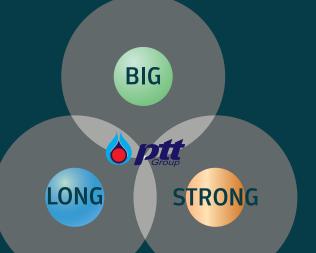
#### PTT GROUP VALUES



## The way we work together

#### PTT STRATEGIC FRAMEWORK





**BIG** A world scale 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

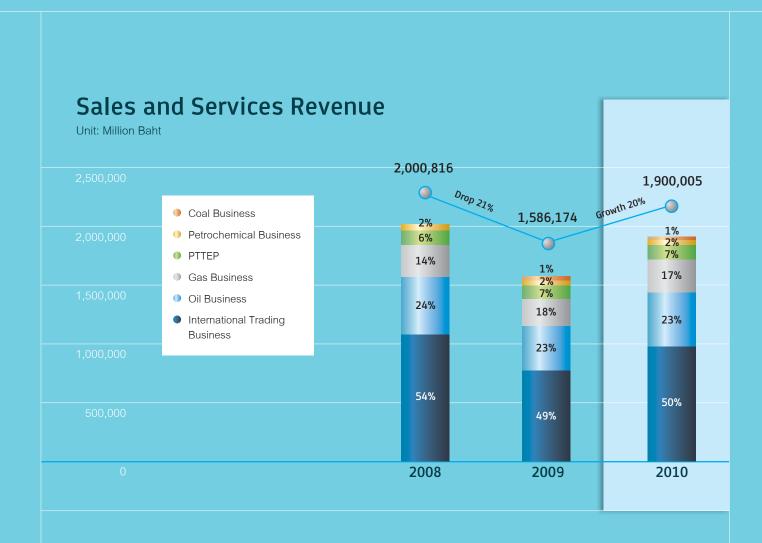
Top Quartile Performance by 2020

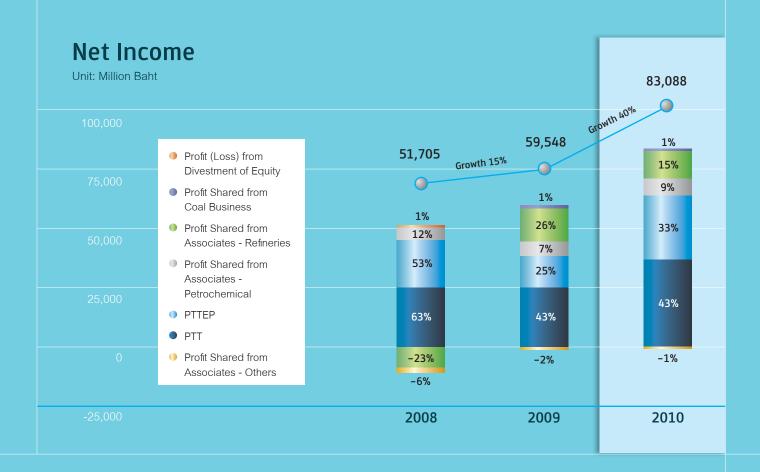
## **Financial Highlights**

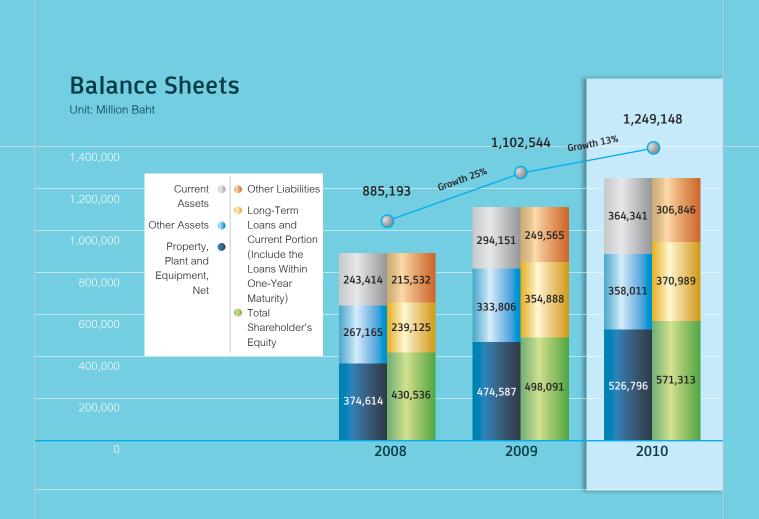
		2008	2009	2010
Statements of Income	(Million Baht)			
Sales and Services Revenue		2,000,816	1,586,174	1,900,005
Earnings before				
Finance Costs, Income Taxes,				
Depreciation and Amortization including				
Other non-operting income and expenses (EBITDA)			142,704	167,376
Net Income (Loss)		51,705	59,548	83,088
Balance Sheets	(Million Baht)			
Assets		885,193	1,102,544	1,249,148
Liabilities		454,657	604,453	677,835
Shareholders' Equity and Minority Portion		430,536	498,091	571,313
Shareholders' Equity		383,579	429,180	490,925
Share or Information about Common Sh	nares			
Share and Fully Paid-up Share Capital	(Million Shares)	2,824.06	2,833.78	2,849.04
Book Value per Share <sup>1/</sup>	(Baht)	136.01	151.82	172.91
Earning per Share <sup>1/</sup>	(Baht)	18.33	21.06	29.26
Dividends per Share	(Baht)	8.00	8.50	10.25 <sup>2/</sup>
Dividends Payout Ratio on Net Income	(%)	44	40	35
Share Price at the End of Financial Period	(Baht)	175.00	246.00	320.00
Financial Ratios				
Net Income on Total Revenues	(%)	2.57	3.68	4.30
Return on Equity	(%)	13.88	14.65	18.06
Return on Total Assets	(%)	5.82	5.99	7.07
Debt to Equity	(Times)	1.06	1.21	1.19
Net Debt to Equity	(Times)	0.36	0.50	0.40
Net Debt to EBITDA	(Times)	1.01	1.74	1.37
Interest Coverage	(Times)	15.71	10.07	12.96

#### Notes

- 1/ Based on the weighted number of common shares of 2,820.27 million (as of December 31, 2008), 2,826.90 million (as of December 31, 2009) and 2,839.22 million (as of December 31, 2010).
- 2/ The Board of Directors approved the rate of dividend paid to the shareholders on February 28, 2011, which will be tabled for the 2011 AGM's approval on April 20, 2011.







## **Financial Ratios**



#### **PTT Information**

Name

Initial

**Registered Number** 

Type of Business

downstream petroleum businesses and coal business.

**Registered Capital** 

10 baht per share (as of December 31, 2010)

Paid-up Capital

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

> Telephone: 66 (0) 2537-2000 Telefax: 66 (0) 2537-3498-9 Web Site: http://www.pttplc.com

**Corporate Communications** 

Department

Telephone: 66 (0) 2537-2150-1

Telefax: 66 (0) 2537-2169, 66 (0) 2537-2171

E-mail: corporate@pttplc.com

**Investor Relations Department** Telephone: 66 (0) 2537-3518-9

> Telefax: 66 (0) 2537-3948 E-mail: ir@pttplc.com Telephone: 66 (0) 2537-3850-1

Office of the President and Corporate Secretary

66 (0) 2537-3887 E-mail: corporatesecretary@pttplc.com

#### References

· Share Registrar Thailand Securities Depository Company Limited

Telefax:

4<sup>th</sup> Floor, SET Building, 62 Ratchadapisek Road, Klongtoey, Bangkok 10500

Telephone: 66 (0) 2359-1200-1 Telefax: 66 (0) 2359-1259

 Auditor Office of the Auditor General

Rama VI Road, Phayathai, Bangkok 10400

Telephone: 66 (0) 2618-5803 66 (0) 2618-5807 Telefax:

 Registrar Siam Commercial Bank Plc.

Registrar 1, Markets Operations Division

2<sup>nd</sup> Building, 3<sup>rd</sup> Floor, 1060 Petchaburi Road, Ratchatawee, Bangkok 10400

Telephone: 66 (0) 2256-2323-8 Telefax: 66 (0) 2256-2406

Corporate Trust Sales, Corporate Trust

9 Ratchadapisek Road, Chatuchak, Bangkok 10900 Telephone: 66 (0) 2544-3937, (66) 2544-3930

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Dr. Naris Chaiyasoot

Acting Chairman of the Board

Dr. Norkun Sittiphong

Chairman of the Board
(Resigned on December 24, 2010)

Mr. Prasert Bunsumpun

President & CEO

## Message from the Board of Directors

#### Dear Shareholders,

The global economy and domestic economy of 2010 were characterized by a healthy, dramatic recovery, causing a massive capital inflow to the region and strengthening the baht. Energy prices and energy consumption naturally followed the economic trend, with natural gas (Thailand's main fuel) rising in consumption to 4,058 MMcf/d, a 13% leap from 2009. Similarly, LPG showed remarkable expansion with a rise in imported volume from 700,000 tons in 2009 to about 1.5 million tons in 2010, for which PTT continued to shoulder the price gap for the imports, to be reimbursed by the government. To shield our consumers and economic growth from price exposure, LPG prices were capped at 333 US\$ per ton against the world market price of 712 US\$ per ton. As for NGV, PTT received 2 baht per kilogram in reimbursement from the government from March 2010 to June 2011 after having to sell it at 8.50 baht per kilogram against the cost of 14 - 15 baht per kilogram for years, as demand steadily rose. Today, we have 428 NGV refueling stations in 51 provinces.

Dramatic improvement by PTT Exploration and Production Plc. (PTTEP) dominated the year in both price and production volume, as did all our petrochemical companies, thanks to the rising margins between all product and feedstock prices. These have contributed to PTT Group's revenue of 1,900,005 baht this year (a 20% rise from last year) together with EBITDA of 167,376 million baht (a 17% rise from last year) and net income of 83,088 million baht (a 40% rise from last year). Other highlights consist of the signing of a gas sales agreement from the Zawtika field in the M9 block of Myanmar, the midyear start-up of the ethane cracker plant, and the start-up of Gas Separation Plant Unit 6 toward the year-end, which raised the volume of feedstock. On the oil business side, PTT still led the retail market for the 18<sup>th</sup> straight year with a 34.5% share this year and led the lubricating oil product market with a 37.7% share for the second straight year. Proudly we introduced the Blue Innovation fuels-PTT Research & Technology Institute's reformulated fuels with premium quality. Our non-oil business sector saw the launch of Café Amazon Coffee Shop and Jiffy convenience stores to excellent market responses along with consumers' confidence. As a result, PTT service stations won the Trusted Brands Awards for 10 consecutive years and became the only platinum-class recipient in Thailand, voted by readers of the Reader's Digest magazine.

Equally important, PTT is committed to the development of novel alternative energy forms amenable to value addition or regarded as friendly to the environment, including power generation from wind energy, solar energy, and compressed biogas for vehicles in place of NGV. To counter global warming, we have also developed a greenhouse gas emission database, which relates to energy efficiency and can form an element of policy or approach to lower emissions. This led to a reduction of energy consumption for PTT.

As for international trading, this year we signed an agreement on the purchase and import of LPG with the Abu Dhabi, United Arab Emirates, national oil company for 220,000 tons over 12 months-enabling us to import an adequate volume of LPG to meet the growing demand. Thanks to the synergistic strategy of PTT Group, our overall business capability has grown, and as a result, we have signed a purchase agreement for acetone, phenol, and bisphenol A with PTT Phenol Co., Ltd., to add value to these and other products and foster a market base for the Group. Finally, we have signed a sales agreement for crude oil for the third year with Idemitsu Kosan Co., Ltd., the operator of the third largest oil refinery in Japan, which has added not only more to the Group's crude oil transactions, but also more opportunities for business development in other areas.

As for the Group's investment success, on the upstream side, PTTEP's outputs of natural gas and condensate have grown through the Arthit North and Bongkot fields, and B-17 of the Malaysia-Thailand Joint Development Area. The Group's overseas business expansion now has clearer goals, thanks to the depth of knowledgeable, competent personnel in the integrated exploration and production field, equipped with a robust financial status - now ready to expand to diversify risks and add growth opportunities by exploring for energy and alternative-energy sources through overseas investment by PTT International Co., Ltd., and PTT Green Energy Co., Ltd. Meanwhile, on the downstream end, the Petrochemicals and Refining Business Group has steadily grown their investment in product lines, added commercial channels, and focused on forging synergy among the Group under cooperative schemes, including improvement of the efficiency of the Group's logistics, strengthening of international trade with greater volumes, and risk management. Finally, the business group has developed oleochemicals as basic raw materials and bioplastics for the manufacturing of everyday consumer goods and optimal consumption of natural resources.

While proud of business achievements for enhanced energy security - a key cornerstone of national economic and social well-being - we have taken our stewardship of society, communities, and the environment seriously in parallel, particularly social and community development, education, sports, arts and culture, and the surroundings. Our showcase project, 84 Tambons on a Sufficiency Path, has exceeded its target of enlisting under the project over 9,000 volunteer households from 87 tambons (subdistricts) nationwide, which lowered the expenses under the project by about 14% a year. One Million Trees for the King, another of our project to honor HM the King's 60<sup>th</sup> anniversary of the Coronation and 84<sup>th</sup> Birthday Anniversary, has nurtured people's awareness and participation through the donation of saplings for perennials and ornamental plants for their homes and online tree-planting through www.milliontreesforking.com and joint reforestation with communities in five regions, altogether more than 1 million saplings. And in line with the declaration by the UN to mark 2010 as an international year of biodiversity, the Thai public sector declared it a year of diversity for Thailand. In keeping with this move, we launched a technical seminar and exhibition entitled **Biodiversity is Life** to illustrate our various successful social, community, and environmental projects designed to unify communities and associates in all regions, together with masters, learned people, academics, conservationists, thinkers, authors, and so on, to commingle and share ideas freely at this event.

While domestic conflicts early on in the year brought a negative image to Thailand in the eyes of the rest of the world, PTT Group exerted a counteracting force by inviting worldwide personalities to our land, including the World Golf Salutes King Bhumibol event on this auspicious year, former US president Bill Clinton to give a special talk on combating global warming, the Thai Fight which is a world-class Thai boxing contest (featuring 16 countries internationalizing Thai boxing), and the PTT Thailand Open tennis tournament with top-class tennis players. Besides Thais' exposure to these distinguished personalities, our image of a peaceful and beautiful terrain has been publicized to the world, thus bolstering their renewed confidence in Thailand.

As a state enterprise listed on the local stock exchange, PTT has a pivotal role in addressing the diverse expectations of stakeholders. This role is managed by its clear principles of forging a balance between our commitment to high performance organization, good corporate governance, and social responsibility-with the Thailand Quality Award (TQA) criteria applied to corporate improvement. This year, Natural Gas Transmission achieved Thailand Quality Class (TQC) for the third straight year. In addition, we found ourselves widely recognized among domestic and international entities. Here at home, our highlights included two awards bestowed by HRH Princess Maha Chakri Sirindhorn (Thailand Corporate Excellence Awards), which included Leadership Excellence for the fourth straight year; Best State Enterprise of the Year: Best of the Best for the second year in a row, presented by the Ministry of Finance; and the SAA Award for Listed Companies, Best CEO 2010 (industry group, resources category), presented by the Security Analysts Association. Away from home, PTT was ranked 196<sup>th</sup> among the 2,000 large-capital and most powerful listed companies worldwide by Forbes magazine; 155<sup>th</sup> among 500 major companies worldwide by Fortune magazine; 7<sup>th</sup> among energy companies in Asia and 35<sup>th</sup> among global energy companies by PLATTS Companies in Asia; won the Recognition Awards 2001, The Best of Asia, presented by Corporate Governance Asia magazine, Hong Kong; and finally, Khun Prasert Bunsumpun garnered the Asian Corporate Director Recognition Award 2010 from the same publisher.

On behalf of the Board of Directors of PTT Plc., we are grateful to all our stakeholders for their confidence, trust, and wonderful support provided to our successful business, which has helped all employees and the management relentlessly overcome obstacles to become a Thai Premier Multinational Energy Company, which will bring sustainable fame to Thais and their beloved country.

**Dr. Naris Chaiyasoot** 

Acting Chairman of the Board

N.S. HL

Dr. Norkun Sittiphong

Chairman of the Board

(Resigned on December 24, 2010)

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Mr. Prasert Bunsumpun

President & CEO

## **Report of the Audit Committee**



Agn Relliager.

**Dr. Ampon Kittiampon**Chairman of the Audit Committee

#### Dear Shareholders,

The Audit Committee of PTT Plc. consists of three independent directors knowledgeable in finance, law, and organization management, chaired by Dr. Ampon, with Mr. Chaikasem Nitisiri and Mr. Surachai Phuprasert as members. The Committee underwent several changes during the year as a result of Board of Directors Orders No. 1/2010, 2/2010, and 6/2010, appointing Dr. Ampon as Chairman in place of Mr. Chakramon Phasukavanich; Mr. Chaikasem Nitisiri in place of Khun Pornthip Jala (both replacements in effect since April 30, 2010); and Mr. Surachai Phuprasert in place of Mr. Chulayuth Hirunyavasit (effective from October 22, 2010).

In 2010, the Committee performed its Board-assigned duties in conformance with the criteria and practical guidelines governing the Audit Committee, in line with the regulations of the Stock Exchange of Thailand (SET). Since PTT's business has increasingly expanded among PTT Group in the midst of macro-financial volatility, the Audit Committee's policy is to focus on a Group approach to internal audits, as summarized below:

- A greater focus on the audits of subsidiaries and other affiliates for interconnection and alignment. An instance is the adjustment of human resource management rules for compatibility with those of PTT.
- Institution of preventive mechanisms through training on rules and approval authorities for executives and the rank and file of PTT Group for their proper understanding, leading to proper job performances, thus preventing job negligence and losses.
- Recognition of the criticality of risk management, particularly non-price risks or those arising from economic uncertainty, including that of government policies.

The Committee held 12 meetings with the Management, the external auditor, and the Office of Corporate Audit, as summarized below:

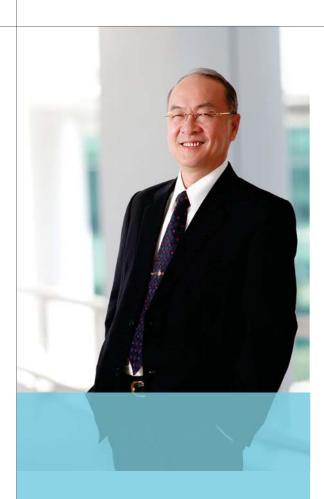
1. Review of quarterly, annual, and consolidated financial statements. This review was made along with the Management and the Office of Corporate Audit and, each time quarterly financial statements and annual financial statements were examined, with the external auditor in attendance. In reviewing such

statements, the Committee conferred with the external auditor about the Company's complete and accurate presentation in its financial statements, adjustments for accounting entries materially affecting the statements, and its adequacy of information disclosure. These questions ensured that the prepared financial statements conform with legal and accounting standard requirements under generally accepted accounting principles, that its accounting procedures and financial statements were both accurate and reliable, and that adequate and timely information was disclosed in the financial statements for the benefit of investors or potential investors. In 2010, the Committee met with the external auditor in meeting that excluded management team to independently discuss the annual organization accounting scope and approaches. In addition, the Committee reviewed the readiness of financial statement preparation under the International Financial Reporting Standards (IFRS) and concluded that PTT Plc. was ready for conformance.

- 2. Review of risk management. The Committee examined PTT risk management policy, its plans and approaches together with the identification of comprehensive corporate risks arising from external and internal factors, including those arising from public-sector supervision and government policies. To this end, the Committee held quarterly meetings with the Management to examine and review the efficiency and suitability of risk management processes while providing recommendations for improvement.
- 3. Review of internal audit assessment. Together with the external auditor and the head of the Office of Corporate Audit, the Committee revised and reviewed the internal control system with a focus on resource utilization, due care of properties, and prevention or minimization of defects, loss, waste, and fraud. It also investigated the reliability of financial and operational reports, and compliance with laws, rules, regulations, and cabinet resolutions. The external auditor concluded that there were no material findings or shortcomings, PTT concurrently assessed its internal controls against regulations set out by the Government Auditor Commission in 2001, receiving more substantive cooperation from Executives in all capacities, e.g. completing questionnaires. Note that, review techniques for internal controls had been conducted alongside self assesment control. The Management and the Office of Corporate Audit concluded that PTT's internal control system was both adequate and effective.
- 4. Review of good corporate governance. The Committee reviewed such performance against the designed system and found that PTT's business was conducted with virtue, and the Company conformed to 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 the Company had conducted regular business under normal and reasonable conditions. In addition, the Committee assessed its own performance as well as for the entire committee, in conformance to state-enterprise audit committee best practices and SET. The findings were reviewed that the performance was of a "very good" quality.
- 5. Oversight of internal audit. The Audit Committee reviewed the strategic plan of the Office of Corporate Audit, its adherence to the annual audit plan and three-year audit plan. The audit findings were reviewed and recommendations given to ensure on corrective actions taken of those things considered material to good corporate governance and adequate internal controls. The Committee approved PTT's amended regulations concerning the criterias and guidelines of the audit committee together with PTT's requirement concerning internal audits and a related manual in line with international standards. Finally, the Committee has reviewed the annual budget for the Office of Corporate Audit, including its recruitment and rotation plan, staff training roadmap, resource utilization, Key Performance Measurement Indicators (KPIs), as well as appointments and transfers, and the annual merit consideration for its head.
- 6. Appointment of the external auditor for 2011. The Audit Committee proposed the appointment of the Office of the Auditor-General as the external auditor for PTT Plc. for 2011 to the Board, which would in turn submit it for shareholders' approval at their 2011 AGM.

The Audit Committee values internal controls and continuous risk management so that PTT may command good corporate governance and excellence in management, adequate internal controls compatible with its business, effective risk management, together with accurate accounting practices and financial statements, and compliance with relevant laws and regulations.

## Report of the Corporate Governance Committee



C. Dritision -

#### Mr. Chaikasem Nitisiri

Chairman of the Corporate Governance Committee February 14, 2011

#### Dear Shareholders,

Amid volatile economic conditions and energy prices; more competition in the energy business due to limited global resources; and global warming that urges for greenhouse gas emission cuts; business development needs to sustainably grow along with society, community, and the environment. As the national energy company, PTT adheres to good corporate governance under the OECD Guidelines on Corporate Governance of State-owned Enterprises and the Principles of Good Corporate Governance for Listed Companies by the Stock Exchange of Thailand (SET) to harmonize and address all stakeholders' needs. Additionally, the principles shall apply to organization management for transparency, efficiency, and become a role model for other companies in Thailand.

The Corporate Governance Committee consists of three independent directors. The Committee accounts for supervising and monitoring PTT's implementation of good corporate governance principles, code of conduct, and the PTT Group CSR Framework to achieve stakeholders' satisfaction and ensuring updates in economic, social, and environmental. The Committee convened 3 meetings in 2010 to consider action plans and monitor the corporate governance and the social responsibility progress with the following highlights.

#### **Fair Disclosure**

Besides of complete essential information disclosure in the annual report and the website (www.pttplc.com), PTT published "PTT Group's CSR Report 2009" under the international guidelines of the Global Reporting Initiative (GRI), awarded B level, better than 2008 C level. PTT also maintains several accessible communication and complaint channels including the "Contact Us", an effective complaint responding and information management system. Key performance and substantial information for investors are disclosed quarterly. Conflicts of interest are reported annually and incidentally, when an individual conflict incurs, through various kind of reports. Nevertheless, no significant cases arose in 2010.

#### **Shareholder Rights Protections**

2010 Annual General Meeting of Shareholders (AGM) was hold on April 9, 2010. PTT encouraged the shareholders' rights execution in line with the "Annual General Meeting Checklist" established by the Securities and Exchange Commission (SEC).

The checklist includes minor shareholders opportunities to propose meeting agenda items in advance; distribution of meeting information to shareholders in advance; facilitation of proxy assignment in case for shareholders who cannot attend the meeting; encouragement of freely expression in the meeting; and comprehensive meeting minuets with essential records. As a result, PTT achieved maximum score of 100 by the assessment of the Thai Investors Association. Besides, PTT offered shareholder relations programs such as site visit and functions.

#### **Ethical Behavior Encouragement and Transparency**

PTT published and distributed the Corporate Governance Handbook (2009) for each director, executive, and employee. Each of them shall individually and evidently acknowledge and comply. The violation of the code subjects to disciplinary punishment. Campaigns and communication are frequently carry out through publications and information networks for employees and external parties. The SPIRIT core values have been embedded among employees through various activities. The "PTT Group CG Day 2010"; featuring exhibitions, employee plays, and senior PTT Group executives discussions under the theme "CG: The Code to Growth"; improves awareness importance of good corporate governance and stakeholders.

In 2010, the Thai government hosted the 14<sup>th</sup> international conference on anti-corruption, an international forum for exchange in corruption problems and resolutions in each country. The conference fostered perception of anti-corruption moves in both public and private sectors. PTT participates as one of the 27 founder companies to join the "Collective Action Coalition" against corruption in private-sector. The collaboration tends to share experiences on fraud risks management, promotion of ethics behavior and transparency, and collaboration with stakeholders against corruptions. Additionally, PTT was nominated for the "Transparent Organization" award by the Office of the National Anti-Corruption Commission.

#### **Stakeholder Engagements**

The PTT Group CSR Framework establishes 10 key elements in accordance with corporate economic, social, and environmental responsibility as a guideline for PTT Group to achieve sustainability. In 2010, there are implementations in several business lines, with the following highlights:

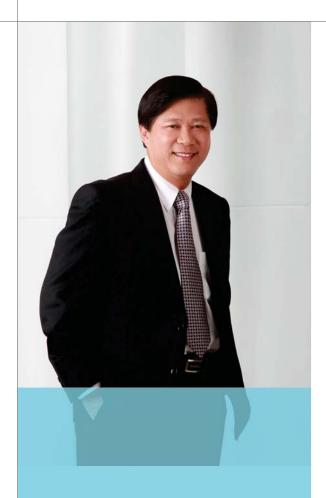
- The "One Million Trees for the King" project: This is a sequence H.M. the King honorary project of PTT's well-known "The One Million Rai Reforestation Project In Honor Of The King" project. The project encourages the public participation to add green space in Thailand and pay homage to the royal initiatives on forest and environmental conservation in honor of the 60<sup>th</sup> anniversary of the H.M. Coronation. The project significantly gains public responses.
- The PTT Blue Innovation Initiation: PTT introduces the innovative petroleum products that improve engine performance, preserve the environment, and save energy.
- As a result of the "84 Tambons on a Sufficiency Path Project" of the past four years (2007 to 2010), about annually 170 million baht (14%) was saved in joining communities, 34,000 baht per household per annum in average. Over 9,000 people from 87 Tambons joins the project so far.
- Biodiversity Management: including the 12<sup>th</sup> Green Globe Contest, a seminar on the methods and exhibition on biodiversity, and the fifth contest on the development and campaign for the use of Vetiver Grass in line with royal initiatives.

#### **Board Efficiency**

The Board of Directors established the self assessments namely, individual self assessment, cross-individual assessment, and the entire board assessment. The assessment results and recommendations will be considerably applied with directors' development direction. In 2010, the assessment scores are "Excellent". To ensure continuous learning and development, PTT provides orientation for new directors, PTT Group site visits, and training and seminar sponsorship for domestic and international courses in various institutions such as the Thai Institute of Directors (IOD), King Prajadhipok's Institute, and Harvard University, USA, etc.

In 2010, PTT won many corporate governance awards such as Top Corporate Governance Report Awards from Stock Exchange of Thailand (SET) with Finance & Banking Magazine; "Excellent" in 2010 Survey of Good Corporate Governance of Listed Companies from SET, Security and Exchange Commission (SEC), and Thai Institute of Directors Association (IOD); the Recognition Award 2010, The Best of Asia (5<sup>th</sup> consecutive years) form Corporate Governance Asia magazine; and "Platinum Corporate Award" from The Asset magazine, Hong Kong.

## Report of the Remuneration Committee



#### Dear Shareholders,

The Article of Association of PTT Public Company Limited establishes the Remuneration Committee comprised of 3 members from the Board of Directors, one of the members shall be an independent director. The Committee accounts for consideration of remuneration package for the board of directors and the President & CEO and establishment of fair and reasonable remuneration procedures and method.

The Committee currently comprises of 3 independent directors, performing the designated duty carefully, cautiously and rationally. There is a meeting in 2010 for consideration of remuneration package for directors and the President & CEO. The consideration depends on performance and achievements in comparison with the key performance indicators; and effective assessments. For the board of directors, there are 3 kinds of assessments, namely, the entire board assessment, individual self-assessment and cross individual assessment. For the President & CEO's assessment, the key performance indicators had been set at the beginning of the year and assessed by the Committee at the end of the year. In addition, the Committee brought directors' responsibility, size of business, economic factors, relationship between operational result and turnover, and remuneration rates in leading enterprise in the similar business both listed and non-listed companies in consideration.

The Committee discloses the remuneration packages of directors, specific committee members and executives in this annual report.

N. Kandanicht

**Mr. Nontigorn Kanchanachitra**Chairman of the Remuneration Committee
February 14, 2011

## **Report of the Nominating Committee**



#### Dear Shareholders,

The Article of Association of PTT Public Company Limited establishes the Nominating Committee comprised of 3 members from the Board of Directors, one of the members shall be an independent director. The Committee has authority, duty and responsibility in selection of qualified individuals and nomination of the directors and the President & CEO. The Committee shall establish transparent, fair and corporate goals achievable nomination methods and procedures.

The Committee carefully, cautiously and rationally performed the designated duty. There were 3 meetings for selection of legal and regulatory qualified talented amiable persons from diverse professions in replacement of the vacant positions. Additionally, the Committee offered a chance for minor shareholders to nominate persons as their director.

For the replacement of retiring directors by rotation, the Committee nominated candidates to the board of directors for consideration of nomination in Annual General Shareholders' Meeting, conformed to the designated procedures. For the replacement of resigning directors, the Committee nominated candidates to the board of directors for considerations. The detail of the Committee's performance is disclosed in this annual report.

Offen Relblager.

**Dr. Ampon Kittiampon**Chairman of the Nominating Committee
February 14, 2011

## **Economic and Petroleum Review**



#### 2010 World Economic and Petroleum Review

#### 2010 World Economic Review

The global economy continued to recover throughout 2010 from the 2009 slowdown, driven by developing and emerging economies, particularly China and India - countries not severely affected by the 2008 economic crisis. Domestic consumption in these countries grew rapidly and strongly, driving higher demand. On the other hand, developed economies, especially the US and the European Union (EU) member countries, were still facing a series of economic structural difficulties, very high unemployment rates, and public debts. These countries had no choice but to provide economic stimulus packages such as a tax reduction scheme, a low-interest rate policy, and liquidity injection involving government bond buy-backs. Some of these measures were launched earlier, but were about to expire at the end of 2010. The US Federal Reserve (Fed) launched its second Quantitative Easing program (QE2) by using 600 billion US\$ to buy back long-term US Treasury bonds. This and other measures had eventually turned the economic crisis into a gradual recovery, more obvious in the second half of 2010. This growth prompted the International Monetary Fund (IMF) to revise its global economic growth forecast in January 2011 from their previous forecast in October 2010 of 4.8% to 5.0%, a jump from minus 0.6% in 2009. Their 2011 growth projection for developed economies is 3.0%, while the projection for developing and emerging economies is 7.1%.

The demand for energy and raw materials for manufacturing, including iron, copper, coal, oil, fundamental chemicals, and petrochemicals, in developing and emerging economies, particularly China, has been rising tremendously due to economic expansion and development in these nations. Pricing of these commodities soared in 2010 and continues to do so following the rolling demand. Higher incomes and urban expansion are the main factors driving rapid increases in demand for commodities and services, especially for property and building materials, automobiles, electrical and electronic appliances, computer and accessories, transportation, financial products and services, as well as telecommunications.



Source: IMF, January 2011

## 2010 Petroleum and Petrochemical Review

The International Energy Agency (IEA) announced in January 2011 that the average global demand for oil in 2010 was 87.7 million barrels per day, an increase of 2.7 million barrels per day from 2009, reflecting higher demand, especially from China and India, and the global economic recovery. This high demand drove the price of Dubai crude from 77.9 US\$ per barrel early in the year to 87.4 US\$ per barrel by year end. The 2010 price fluctuated significantly in response to key economic measures. The price of 68.2 US\$ per barrel was posted in May following reports of the high unemployment rate in the US, unresolved public debts in several European countries, and the launch of the Required Reserve Ratio by the Chinese Government to slow down its overheated economic growth. However, after the announcement of better-than-expected economic indices from the EU, the weakened US dollar compared to currencies of developing and emerging economies, and higher volatility in financial markets worldwide after the QE2 measures were launched by the Fed, trading in oil and gold was more active in the latter half of 2010. The oil price eventually traded at a peak at year's end of 91.8 US\$ per barrel.

As the daily traded price of refined petroleum products in Singapore tracked the global rising oil price and oil demand, the price of tank inventory of refined products worldwide which was high at the end of 2009 dropped continuously through 2010. The average price of gasoline (octane 95) climbed from 70.3 US\$ per barrel in 2009 to 88.4

US\$ per barrel in 2010, due primarily to higher consumption in China and India, and due partially to tight supplies following the massive blockades and strikes at refineries and oil depots in France during the last quarter. Because of higher demand for diesel in the manufacturing sector as a result of the economic recovery, many countries, particularly China, made significant imports of diesel and drove the average price of diesel from 69.1 US\$ per barrel in 2009 to 89.6 US\$ per barrel in 2010. The year end price of diesel was also raised by higher imports from China as the government decided to substitute diesel for coal in power generation after the Power Rationing Policy, a five-year policy designed to increase energy efficiency and decrease energy consumption and the use of coal in power generation. The average contract price of liquefied petroleum gas (LPG CP) in 2010 was 712 US\$ per ton, up considerably from 510 US\$ per ton in 2009 due to higher demand in the petrochemical industry.

The higher prices of refined products pushed up the refining margin of hydro-cracking refineries in Singapore from an average of 3.7 US\$ per barrel in 2009 to 4.6 US\$ per barrel in 2010.

Despite the additional supply of petrochemical products into the world market, the overall prices in 2010 increased in line with rising crude and naphtha prices. The demand for petrochemical products also surged, especially in China. Prices of olefins products were pushed up in response to the higher demand for plastics. The average price of high-density polyethylene (HDPE) rose from 1,134 US\$ per ton in 2009 to 1,222 US\$ per ton in



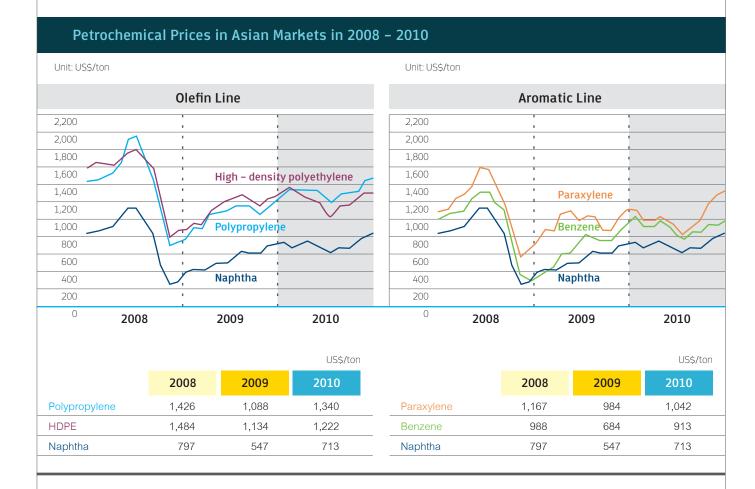
Source: IEA, January 2011

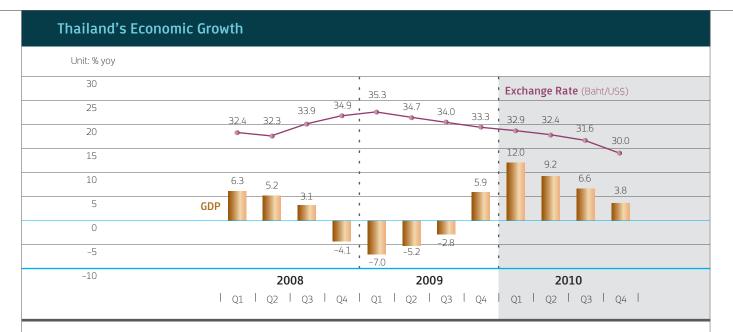
#### Prices of Dubai Crude and Refined Products in 2008 - 2010 Unit: US\$/bbl US\$/bbl 190 Dubai Crude 2009 2008 170 Gasoline Octane 95 Dubai Crude 93.4 61.8 78.1 150 Diesel Gasoline Octane 95 102.5 70.3 88.4 130 Fuel Oil 119.4 69.1 89.6 Diesel 110 Fuel Oil 78.6 57.1 72.4 90 70 50 30 2008 2009 2010

2010. The polypropylene average price also jumped from 1,088 US\$ per ton in 2009 to 1,340 US\$ per ton in 2010. Aromatics prices climbed continuously through 2010, especially during the winter, as did the prices of polyester

Source: ICIS

products. The average price of benzene jumped from 684 US\$ per ton in 2009 to 913 US\$ per ton in 2010. Similarly, the average paraxylene price was up from 984 US\$ per ton in 2009 to 1,042 US\$ per ton in 2010.





Source: NESDB and BOT

## 2010 Thailand Economic and Petroleum Review

#### 2010 Thailand Economic Review

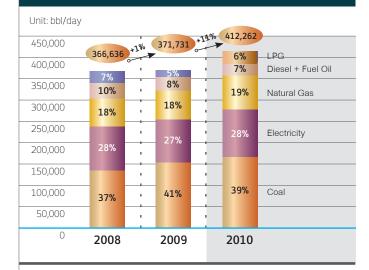
Despite internal disturban ces, natural disasters, and strengthening of the Thai currency, Thailand's economy recovered remarkably throughout 2010. The baht strengthened from 34.3 baht per US\$ in 2009 to 31.7 baht per US\$ in 2010. The Bank of Thailand estimated in January 2011 that Thai GDP had grown by 7.8% in 2010 from a contraction of 2.3% in 2009. The 2010 growth was

driven by both domestic consumption and better-thanexpected export demand due to the steady global economic recovery, especially among Thailand's key trading partners, including China and other Asian economies. Major exports from Thailand included computers and accessories, automobiles and auto parts, electrical circuits, petroleum products, plastic feedstock, and chemicals. These are the primary raw materials and components for manufacturing sectors, particularly automotive, electronics, and petrochemical industries.





#### Industrial Energy Consumption in 2008 - 2010



Note: Excluding renewables

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

## Household and Commercial Consumption in 2008 - 2010

#### Unit: bbl/day 250,000 178,882 +3% 173,193 200,000 LPG 40% 40% 150,000 39% 100,000 60% Electricity 61% 60% 50,000 0 2008 2009 2010

Note: Excluding renewables

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



#### 2010 Thailand Petroleum Review

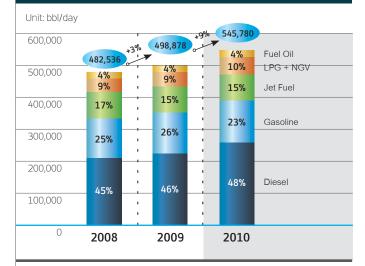
As a result of the better-than-expected GDP, Thailand's average commercial primary energy consumption in 2010, excluding renewables, was at 1.783 million barrels per day, an increase of 7.2% from 2009. Consumption of natural gas, oil and electricity increased by 15%, 1.5%, and 10.3%. Consumption of LPG as fuel for households and industrial manufacturing rose by 11.5% in 2010, a big leap from the contraction in 2009, while the use of LPG for transportation stayed flat. With this big jump in LPG consumption, Thailand had to double its imports of LPG from 0.7 million tons in 2009 to more than 1.5 million tons in 2010. Meanwhile, NGV consumption grew by 35.1% to 181 MMcf/d. The government maintained its policy to cap the LPG price at the refinery at 333 US\$ per ton and the retail NGV price at 8.50 baht per kilogram.

Energy consumption in each economic sector grew at a different pace as described below.

- 1. The industrial sector consumed energy at the highest pace as a result of a big jump in purchasing orders and subsequent production. Consumption of LPG increased by 31% year-on-year since it was a cheaper alternative under the capped pricing policy. Consumption growth of natural gas and electricity in this sector in 2010 was 21% and 13%. Increased production for domestic consumption and export mainly accounted for higher consumption in this sector.
- 2. As a result of the government policy regarding the economic hardship subsidy from February 1, 2009, to the end of June 2011, the household and commercial business sectors consumed more energy. The policy includes free electricity for any household using less than 90 units of electricity per month. Commercial businesses also consumed 10% more electricity following the economic recovery. Consumption of LPG in this sector grew by 9% due to the policy in capping the price for this sector.



#### Land Transportation Energy Consumption in 2008 - 2010



Note: Excluding renewables

Sources: Department of Energy Business, Energy Policy

and Planning Office, and PTT

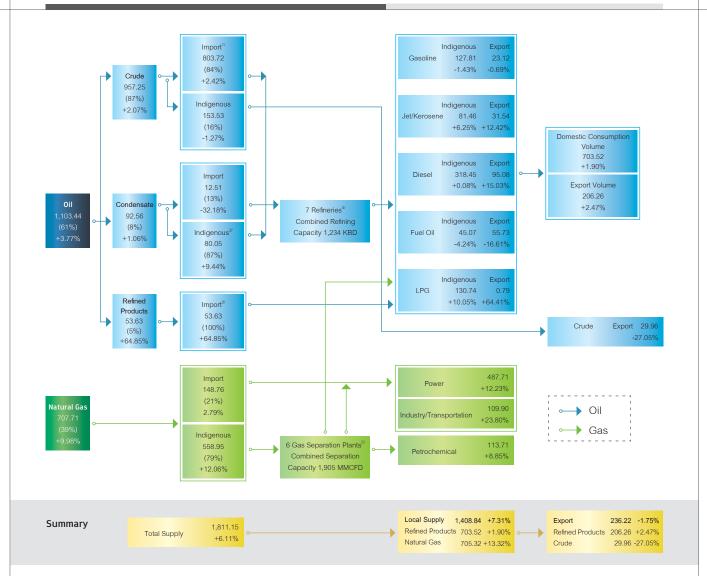
3. The transportation sector also consumed more energy in 2010, led by LPG and NGV consumption, which grew by 20% because of the price-cap policy. Consumption of diesel also increased by 16%. However, as a result of the political demonstrations during April - May, a change in energy consumption to use cheaper alternatives, and the severe flooding in many places, the overall consumption of gasoline for transportation dropped by 1% in 2010. Within the alternative energy group, gasohol consumption grew to 59.1% of all gasoline consumption, but the volume dropped by 2.0% from the 2009 level. Similarly, bio-diesel B5 consumption grew to 38.2% of all gasoline consumption, although the volume dropped by 13.5% from the previous year.

Overall procurement increased by 6.1% from 2009 to 1,811,148 bbl/day Total imports accounted for 56.2%, including 53,626 bbl/day of refined products, 816,232 bbl/day equivalent of crude oil and condensate, 50,770 bbl/day equivalent of LPG and 148,764 bbl/day equivalent of natural gas. The remaining consumption was indigenous, including 153,534 bbl/day of crude oil, 80,046 bbl/day of condensate, and 558,946 bbl/day equivalent of natural gas.

The overall distribution rose by 2.3% from 2009 to 1,408,840 bbl/day in 2010. This includes 703,523 bbl/day of refined products, and 705,317 bbl/day equivalent of natural gas. The 2010 total exports included 206,262 bbl/day of refined products and 29,957 bbl/day of crude oil, representing a drop of 1.7% from the previous year.

#### Thailand 2010 Petroleum Balance

Supply Distribution Unit: KBD



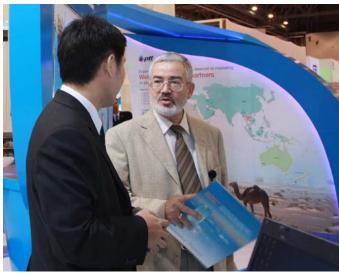
Data: Energy Policy & Planning Office, Department of Energy Business, Department of Mineral Fuels and PTT (as of February 2011)

Remarks: 1/ Crude import, including Long Residue, Waxy Distillate, VGO, Heavy Nahtha, Condensate Residue, SLOP

- 2/ Domestic condensate supply data from Department of Mineral Fuels
- 3/ Including LPG
- 4/ Bangchak, Esso, IRPC, PTTAR, SPRC and TOP, excluding Fang
- PTT's GSP Unit 1 5 and (ESP included), and GSP of PTTEP Siam (excluding GSP 6 which was under commissioning in October 2010)

Data set excludes bitumen supply and distribution.





## Global Economic and Petroleum Outlook for 2011

#### **Global Economic Outlook**

The 2011 global economy is expected to grow at a slower pace than 2010. The IMF projection for global GDP for 2011 is 4.4% as opposed to 5.0% for 2010. The major economic drivers will be domestic consumption in developing and emerging economies, particularly China and India, while exports to developed countries like the US, the EU, and Japan will slow down due to lower demand resulting from their economic structural difficulties, the high public debts in many European countries, high unemployment rates, and current account deficits between the US and its trading partners, especially China. This long-standing and cumulative current account deficit has created a precarious global imbalance that could grow exponentially and eventually trigger a world economic contraction. Many economic consequences could jeopardize the world economy, including currency wars, trade protectionism, economic bubbles, and market speculation as a result of extreme capital flows from the US into Asian countries. However, there have been many positive economic indicators in the US, including lower unemployment rates, higher consumption, and increased property sales. Also, the EU seems to be able to control and restrict public debt impacts and contain banking crises.

#### **Petroleum and Petrochemical Outlook**

It is expected that the 2011 average Dubai crude price will be between 80 US\$ and 90 US\$ per barrel. The higher demand for energy in developing and emerging economies, especially China and India, will be the main driving force. Developing countries, particularly the US, will still be resolving internal economic troubles, resulting in a continued weakening of the US dollar. Speculation in oil will also continue. Political disturbances in the Middle East and North Africa could affect global oil transportation, and the oil price could rise to 100 US\$ per barrel However, OPEC's spare capacity of 5 - 6 million barrels per day will cap any big jump in the oil price, and the 2011 average oil price should not exceed 100 US\$ per barrel. Oil price volatility is inevitable and could move rapidly in either direction. If economic recovery of developed countries beats expectations, this could further push up the GDP of developing and emerging economies. On the other hand, if the economic recovery of developed countries is slower than expected, this could eventually create a global economic contraction.

The 2011 refining margin in Singapore is projected to average 5.7 US\$ per barrel, an increase from 4.6 US\$ per barrel recorded in 2010. This reflects the economic recovery and higher demand for refined products in the industrial, service, land transportation, aviation, and petrochemical sectors.





Despite the additional production supply scheduled but postponed from 2010, the Asian demand for olefin products will drive the price in 2011 upward. HDPE is projected to be priced at 1,294 US\$ per ton, while the price of PP (polypropylene) will be around 1,460 US\$ per ton. Based on a projection of higher demand for electrical appliances and automotive parts, aromatics prices will also climb. The price of benzene is expected to rise to 1,002 US\$ per ton. The paraxylene price is projected to be 1,255 US\$ per ton as a result of higher demand in Asian countries, especially from China and India.

## Thailand Economic and Petroleum Outlook for 2011

#### **Thailand Economic Outlook**

Thailand's 2011 economic growth is projected to slow down in response to slower global economic growth because the export sector is the main driving force in the Thai economy. However, strong growth will be maintained by several government stimulus packages, including investments in infrastructure under the Thai Khem Khaeng Operation. The private sector will continue to invest in several key sectors, including automobiles, electronics, processed foods, and alternative energy. However, certain economic threats do exist. The rising economic growth and

economic contraction of trading partners could severely impact the export growth. Appreciation of the baht as a result of foreign capital inflow could generate currency speculation and economic bubbles. Pressure on the export sector will persist as the baht could rise to 30 per US dollar. Interest rates are likely to increase as a result of rising inflation, following any upward adjustments of wages, raw materials, and the oil price. Internal political instability will continue to affect the investment confidence of foreigners. In January 2011, the Bank of Thailand projected an economic growth rate of 3.5 - 4.5% for 2011.

#### Thailand 2011 Petroleum Outlook

The Energy Policy and Planning Office projected that Thailand's commercial primary energy consumption, excluding renewables, would grow by 4.2% to 1,860 million barrels per day, a slower growth rate compared to 2010. The demand growth for natural gas and oil will likely grow by 5.1% and 2.2%. LGP consumption is projected downward as certain industrial users may switch to fuel oil following the cancellation of the LPG price subsidy under the recently launched Pracha Wiwat government welfare policy. The LPG price is set to free float in July 2011 for the industrial sector, but will still be capped for households and the transportation sector.

## **Nature of Business and Performance**



#### Nature of Business

PTT is the national energy company engaged in conducting an integrated petroleum and petrochemical business, with a business philosophy to balance business growth with environmental stewardship while contributing to the country's sustainable social development and economic growth.

PTT invests in upstream and downstream businesses, emphasizing business value chain for national energy security and the development of the domestic petrochemical industry through its operations and investment through PTT Group companies. An overview of PTT business operations is summarized below.

#### **PTT-operated Businesses**

#### Natural Gas Business

This ranges from supply procurement, transportation, distribution, gas processing, and investment in NGV service stations, to investment in related businesses through Group companies. The supply comes from domestic sources and imports. Imported LNG will be procured in the future to meet growing demand. Gas distribution covers distribution to major power producers through PTT's gas transmission pipelines, to industrial users through PTT-invested gas distribution pipelines, and NGV distribution through its NGV service stations. In addition, PTT invests in gas separation plants in order to create higher value for natural gas in the Gulf of Thailand by extracting valuable components from the gas to be used as petrochemical feedstock for the country's petrochemical industry development to generate Thailand's economic growth as well as to be sold as LPG for uses in households, industry, and transportation sectors.

Moreover, PTT has invested in LNG-receiving terminals with commercial operations expected in 2011 through a wholly-owned subsidiary (PTT LNG Co., Ltd.) to receive tankers, store, and degasify imported LNG; the gas-fired power generation business; and industrial electricity, steam, and water generation and distribution through another wholly-owned subsidiary (Combined Heat and Power Producing Co., Ltd.).







Natural gas procurement, transportation, and distribution are subject to the Energy Industry Act, B.E. 2550 (2007), supervised by the Energy Regulatory Commission appointed by His Majesty The King. Supply procurement to users in the power sector and under gas pipeline transmission has a relatively constant rate of return, while procurement to industrial users depends on world fuel oil prices and aims to make prices competitive to domestic fuel oil. Gas separation performance is subject to world petrochemical prices. For LPG and NGV, due to the government's policy to mitigate the impact of rising world oil prices on the people's fuel expenses, the prices are controlled below the world market prices at 333 US\$/ton and 8.50 baht/kg until June 2011. (According to the National Energy Policy Committee Resolution on February 23, 2011)

PTTEP contributes to the gas supply procurement, which provides more than 70% from indigenous sources, with the remaining being imported from Myanmar.

#### Oil Business

This business distributes quality petroleum products including vehicle fuels, LPG, lubricating oils and other products in the retail market through PTT service stations, which were modernized and integrated with supplementary services and facilities to meet customers' demand, including convenience stores, Café Amazon coffee shops, restaurants, Pro-Check lube oil services, car washes, as well as banking services under the concept of "PTT Life Station". Products and services are also provided to various commercial markets and the government sector, including state enterprises, industries, airlines, ocean liners, fishing vessels, gas bottling plants, and gas supply stores, and extend to the export and sale of products to clients who are in the same industry under Article 7. In providing these products and services, PTT is committed not only to developing services to achieve customer satisfaction, but also to offering new fuel oils and lubricating oils to serve all customer groups.

As the national energy company, PTT owns and operates product terminals, and is involved in procurement and distribution of petroleum to ensure national energy security, and to support government policies on alternative energy and the environment by providing leadership in the research and development of bio-fuels. The oil business also 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 shops and service stations, lubricating oil blending and bottling operations, and aviation fuel services.

The oil business is liberalized and highly competitive under various laws, including the Fuel Oils Trade Act, B.E. 2543 (2000), and the Fuel Oils Control Act, B.E. 2542 (1999). PTT is one of 43 fuel oil traders registered with the Department of Energy Business (as of January 2011). Moreover, the business is under close supervision of various government units, such as the Energy Policy and Planning Office, the Department of Energy Business, the Department of Internal Trade, and the Office of the Consumer Protection Board. Performance relies on marketing margins, retail markets and supplementary businesses expansion in service stations, and year-end stock levels.

#### International Trading Business

This business ranges from supply procurement (import and export) of crude oil, condensate, petroleum products, petrochemical products, and chemicals; sourcing of international transportation vessels or carriers for PTT

Group companies; provision of transportation vessels to other PTT Group businesses; exploring opportunities for the physical swap of crude oil, condensate, petroleum products and petrochemical products; and hedging to manage price risks. Performance is primarily subject to the world oil price.

## Investment Businesses through Group Companies

#### Petroleum Exploration and Production Business

This business involves domestic and international exploration and production, as well as investment in downstream businesses undertaken by PTT Exploration and Production Plc. (PTTEP) to secure crude oil and natural gas at competitive prices to guarantee Thailand's energy security. PTTEP sells petroleum products, mostly natural gas, from domestic projects and projects in nearby countries to PTT's Gas Business unit for the domestic market. Some domestic crude oil not suitable for domestic refineries is exported, whereas condensate, a by-product from gas production, is sold to domestic refineries to produce aromatics and premium oil products as well as for export. Furthermore, PTTEP has expanded its foreign exploration and production investment to replace diminishing domestic petroleum reserves. Some of the produced petroleum is sold within the country, while some is sold abroad, which represents another source of revenue for the country.







PTTEP's performance is primarily subject to the world oil price, exploration and production success, efficient management of exploration and production costs, opportunities for investment, and organizational competency development. Exploration and production activities and petroleum prices are subject to the Petroleum Act, B.E. 2514 (1971), under the supervision of the Petroleum Committee.

### Petrochemical Business

This business adds values to PTT's domestic natural gas and refinery products by providing exportsubstituting feedstock to support the development of local petrochemical industries, and those companies using petrochemical products as raw materials such as the agriculture industry, packaging industry, automotive industry, and construction industry. PTT's petrochemical business involves olefins products and downstream industry in an integrated fashion through the investment of eight group companies, including PTT Chemical Plc., HMC Polymers Co., Ltd., PTT Phenol Co., Ltd., PTT Asahi Chemical Co., Ltd., PTT Polymer Logistics Co., Ltd., PTT Polymer Marketing Co., Ltd., PTT Tank Terminal Co., Ltd., and PTT Maintenance and Engineering Co., Ltd. The scope of business ranges from the processing and distribution of assorted upstream, intermediate, and polymer products, and marketing and distribution of polymers both domestically and internationally, to integrated logistical

services and the supply of related public utilities. Performance is primarily subject to world petrochemical prices, which move in cycles with the world supply and demand and year-end stock gains.

PTT's gas separation plant products used as feedstock in PTT Chemical Plc., HMC Polymers, and PTT Asahi Chemical include ethane, propane, LPG, and natural gasoline (NGL).

### Refining Business

This business involves oil refining and the aromatics petrochemical business as well as olefins, which rely on refined products as feedstock, and is conducted through five group companies, including Thai Oil Plc., PTT Aromatics and Refining Plc. (PTTAR), IRPC Plc., Star Petroleum Refining Co., Ltd. (SPRC), and Bangchak Petroleum Plc. (BCP). PTT provides crude oil and buys refined petroleum products and petrochemical products from refining companies in the PTT Group for domestic sale and export.

Performance is primarily subject to the refining margin - the difference between the average value of refined products and the average cost of crude runs (based on the world price) - which is cyclical with the world-market supply and demand, the volatility of the world oil price, and year-end stock gains.

### International Investment Business

PTT seeks to secure the country's energy supply, including both new energy and alternative energy sources, through international investment activities involving two of its wholly owned subsidiaries, PTT International Co., Ltd., and PTT Green Energy Co., Ltd. (PTTGE).

PTT International has invested in coal mining business in Indonesia and Australia, and in an Egyptian gas transmission project to deliver gas from Egypt to Israel. The company also plans to enter the power generation business in the region and natural gas-related businesses. PTTGE invests in the development of palm plantations in Indonesia.

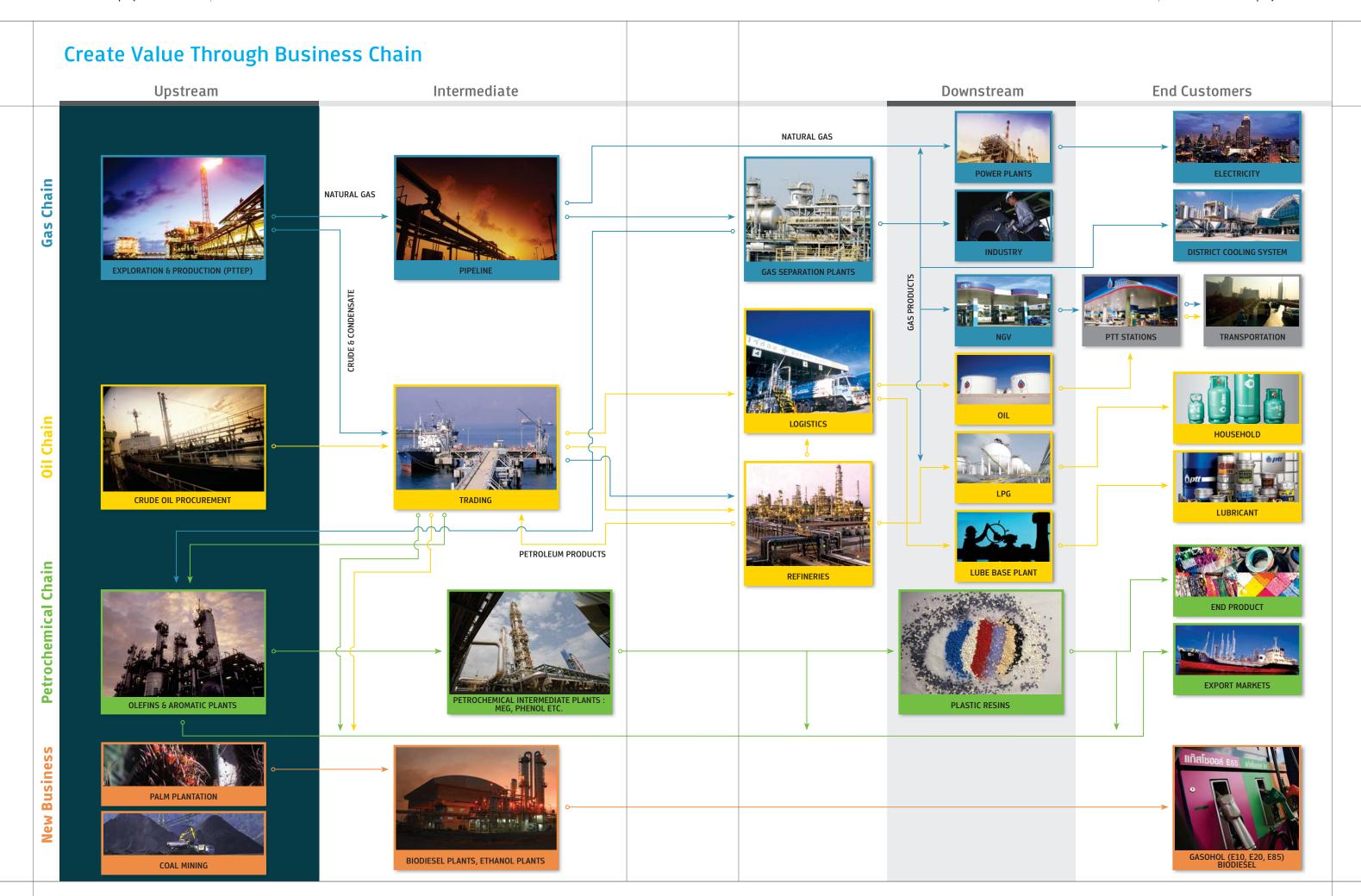


## Performance Report 2010

The year 2010 was another year of PTT Business success as seen in its rise in profit from 59,548 million baht in 2009 to 83,088 million baht, an increase of 40%, which resulted from increased domestic gas supply procurement to meet higher demand, especially from the power sector, improved gas separation plant efficiency yielding more natural gas and hydrocarbon products, reduced costs thanks to NGV business restructuring, higher production volumes from PTTEP, enhanced efficiency through operational excellence, effective price risk management of PTT Group, as well as increased synergy among petrochemical and refining businesses to add value and lower production costs through Group Integrated Supply Chain Management & Optimization: GISMO Program. GISMO Program consists of Petrochemical Integrated Supply Chain Management (PIM) which creates cooperation among the Group's petrochemical business; Oil Supply Chain Integration Management (OIM) which creates cooperation among the Group's oil refining business; Group Logistics Master Plan which improves efficiency of PTT Group's logistics; Group Trading Project which helps strengthen international tradings by means of risk management on price volatility; IndoChina++ Project which helps expand regional export markets in case of domestic supply surplus; and Group Supply Chain Optimization Project which creates synergy management on procurement and fuel products of PTT Group.

Additional factors leading to PTT success included the resumption of construction on suspended investment projects in the Map Ta Phut area and the efficient management of resources in a volatile business environment subject to external factors beyond its control, that is, the strengthening of the baht, the downturn in the petrochemical and refining businesses, and the government's price control policy on LPG and NGV. In addition, the rise of oil and petrochemical product prices last year resulted in better performance than that of the previous year. Operational performance of each of the business units is described as follow:

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### **PTT-operated Businesses**

### · Gas Business Unit

The operational success of the business unit in 2010 resulted from various factors: 1) the ability to procure additional gas from Arthit North FPSO, Bongkot, and Block B-17 in the Thai-Malaysia Joint Development Area, which came on stream in 2010, to support rising demand, mostly from the power sector, 2) reduction in NGV business costs due to a change in business operation from "hired management" to "wholesale," which reduced operating costs, 3) improved procedures and enhanced production efficiency of GSPs, and 4) the start of the ethane plant. The key performance of the business unit in 2010 is summarized below:

### Natural gas procurement

Supply procurement totaled 4,058 MMcf/d (based on 1,000 Btu per cubic foot), an increase of 483 MMcf/d (13%) from the previous year, consisting of 3,205 MMcf/d from indigenous sources and 853 MMcf/d from Myanmar, yielding an indigenous: import ratio of 79:21.

### Gas sales to the power sector

Sales to this sector totaled 2,762 MMcf/d (about 68% of total sales), representing an increase of 301 MMcf/d (12%) from 2009 due to higher electricity demand. The Electricity Generating Authority of Thailand (EGAT)

accounted for 1,344 MMcf/d (49%); seven independent power producers (IPPs), 943 MMcf/d (34%); and 20 small power producers (SPPs), 475 MMcf/d (17%).

#### Gas sales to the industrial sector

Sales to this sector totaled 451 MMcf/d (11%), an increase of 81 MMcf/d (21%) to 299 users this year, seven more than last year, and included 296 industrial users and three commercial users. Sales volumes rose as a result of the expansion of the gas distribution pipeline network to include Thaikoon Worldwide Group (Thailand) Plc. in the Pattana Industrial Estate, Natural Gas Cylinder (Thailand) Co., Ltd. in the Eastern Industrial Estate, and to Siam Latex Synthetic Co., Ltd in the Asia Industrial Estate. Natural gas sold to industrial users was used for power and steam generation, which increased electricity generation efficiency from 35 - 45% to 70 - 80% and reduced losses in the transmission system. In 2010, gas totaling 4 MMcf/d was supplied to existing and new users, including the public utility unit in Bangchak refinery, the Metropolitan Electricity Authority, and the Government Complex Commemorating HM the King's 80<sup>th</sup> Birthday Anniversary, 5<sup>th</sup> December, B.E. 2550 (2007). PTT has been expanding its gas distribution pipeline network, which at the end of 2010 measured 853 kilometers covering 10 provinces.



### Gas sales to the transportation sector

Sales to the transportation sector averaged 181 MMcf/d (4%) of total sales, registering a 47 MMcf/d (35%) increase due to the growing number of service stations, currently 428 stations in 51 provinces, and the government policy to control the NGV retail price at 8.50 baht per kg - below the cost of production - to increase its proportion as a substitute for gasoline and diesel from 7.3% to 8.5%. At year-end 2010, the number of NGV cars was 225,668, an increase of 63,645 (39.3%) from 2009.

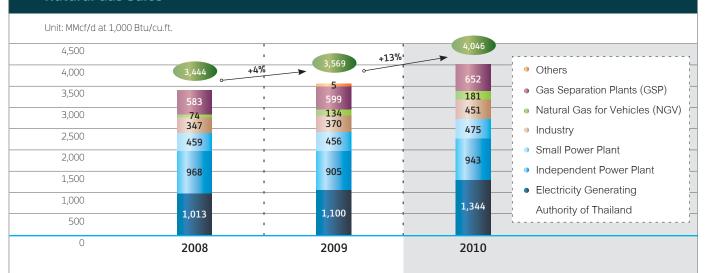
### Sales of Gas Separation Plant products

Gas separation plants processed 652 MMcf/d of natural gas (16% of total sales), producing 4,279,038

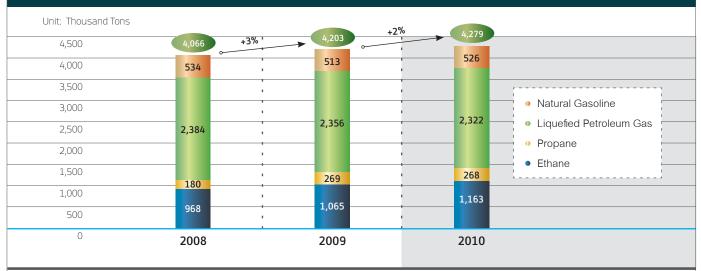
tons of products, a 2% increase from 2009 thanks to the start-up of the Ethane Separation Plant (ESP) in July 2010. This plant separates more ethane from Gas Separation Plant Unit 2 and Unit 3, raising the design capacity from 600 to 750 MMcf/d, and improving efficiency, which increased the maximum capacity of Unit 5 from 530 to 545 MMcf/d. However, the Map Ta Phut environmental case delayed the commissioning of Unit 6 to October 2010, although construction was completed at the beginning of the year.

In 2010, gas separation plants produced 1,162,884 tons of ethane, 268,203 tons of propane, 2,321,685 tons of LPG and 526,267 tons of NGL.

### **Natural Gas Sales**



## **Products from Gas Separation Plants**





Myanmar Gas Sales/Purchase Signing Agreement Ceremony

### Milestones of 2010

### March

- Gas transmission pipeline management, evaluated against the Thailand Quality Award (TQA) criteria, won the TQC award from the Office of Thailand Quality Award for the third consecutive year.
- Rayong and Khanom gas separation plants won certificates for meeting the requirements of the Integrated Management Standard (IMS) / OHSAS 18001 / TIS 18001
   Occupational Health and Safety Standard / ISO 9001
   Quality Management Standard / ISO 14001 Environmental Management Standard.
- PTT cooperated with the Family Transportation (2002) Co., Ltd., a service provider of express boats in Saen Saeb and Maha Nak canals, to use LNG as fuel for the boats in the Saen Saeb canal. They set up an LNG service station, equipped with a 120-liter/minute capacity LNG pump and a one-nozzle LNG dispenser to provide the fuel to two 36,000-liter LNG tanks installed on a boat.

### May

• PTT signed a heads of agreement for a "Pilot Project to Develop Biogas from Animal Manure for Transportation in Chiang Mai" with Universal Adsorbent and Chemicals Plc. PTT agreed to buy 6 tons/day of biogas to substitute for about 6,000 liters/day of diesel or 4,600 kg/day

of LPG from the company and to resell it as an alternative to NGV in areas far from an NGV station. The biogas production capacity at the Rayong Gas Separation Plant won the "Thailand Energy Award" from the Ministry of Energy. from the Ministry of Energy.

### June

- The Rayong Gas Separation Plant won the 2010 Outstanding Industry Award for energy management from the Ministry of Industry and was the first runner-up in the ASEAN Energy Award 2010, organized by the ASEAN Center For Energy.
- PTT signed a heads of agreement with the Provincial Electricity Authority (PEA) for a wind farm project with a generation capacity of 5 10 megawatts (MW) in the South and the East. Commercial operations are expected to begin in 2014 to replace 2.3 4.5 million liters of oil every year.

### July

• PTT and PTTEP signed a Gas Sales Agreement for natural gas from the Zawtika field, Block M9 and part of Block M11 in the Gulf of Moattama, Myanmar, with a daily contract quantity of 240 MMcf/d for 30 years, starting in 2013. The gas will place 2,400 million liters of fuel oil annually, saving around 400,000 million baht in foreign currency throughout the contract duration.





Gas Transmission Pipeline System Won TQC Award

The Research and Bio-gas Quality Improvement Demonstration As Fuel For Vehicles Project Signing Agreement Ceremony

- Gas distribution pipeline construction at the Chaeng Wattana Government Complex was completed and is ready for gas delivery to the Combined Power and Heat Producing Co., Ltd., to generate and sell electricity to the Metropolitan Electricity Authority and chilled water to the complex.
- The Ethane Separation Plant, with a maximum capacity at 750 MMcf/d, or 630,000 tons/year, started commercial operations to supply feedstock to PTTPE's Ethane Cracker Plant for ethylene production.
- The Natural Gas Transmission group won the following Outstanding Organization Awards (from 1998 -2010)
  - · National-level awards:
    - 1. Chonburi Operation Center
- 2. Region 2 Gas Operations Division, Phra Nakhon Si Ayutthaya
  - 3. Region 3 Gas Operations Division, Rayong
  - 4. Region 4 Gas Operations Division, Khon Kaen
  - 5. Region 5 Gas Operations Division, Ratchaburi
  - · Provincial-level awards:
    - 1. Region 6 Gas Operations Division, Bangkok
  - 2. Region 7 Gas Operations Division, Songkhla.
- Rayong Gas Separation Plant won the 2010
   Outstanding Recreational Contributor Award under the category of organization or plant from the Office of Sports and Recreation Development, Ministry of Tourism and Sports.

### **August**

• The NGV station in the Saraphi district, Chiang Mai, was upgraded to a liquid-to-compressed-natural-gas station (LCNG), using LNG from the Nong Tum LNG plant in Sukhothai province to save transportation costs in areas far from transmission pipelines. Construction began in August 2010 and is expected to be completed in March 2011.

### September

- PTT signed a heads of agreement for the "Research and Demonstration Project to Improve Biogas Quality to be Used as Car Fuel in Ubon Ratchathani Province" with Ubon Biogas Co., Ltd., to produce biogas derived from effluent from a tapioca flour plant and produce compressed-biomethane gas (CBG), suitable for car engines. PTT agreed to buy the biogas from the company, produce CBG and sell it as an alternative to NGV for car fuel in areas far from NGV stations in the Northeast. CBG production capacity will be around 6.5 tons/day, equivalent to 6,500 liters/day of diesel or 5,000 kg/day of LPG. Commercial operations are expected to start in late 2011.
- Pipeline Operation Department, Natural Gas
   Transmission, was certified under the TIS/OSHAS 18001
   Occupational Health and Safety Standard.



Opening Ceremony of PTT NGV Station at Thammasat University Rangsit Campus

 Rayong Gas Separation Plant won a national-level Outstanding Organization Award for Safety, Occupational Health and Environment and a silver prize for its Zero Accident Campaign from the Department of Labour Protection and Welfare, Ministry of Labour.

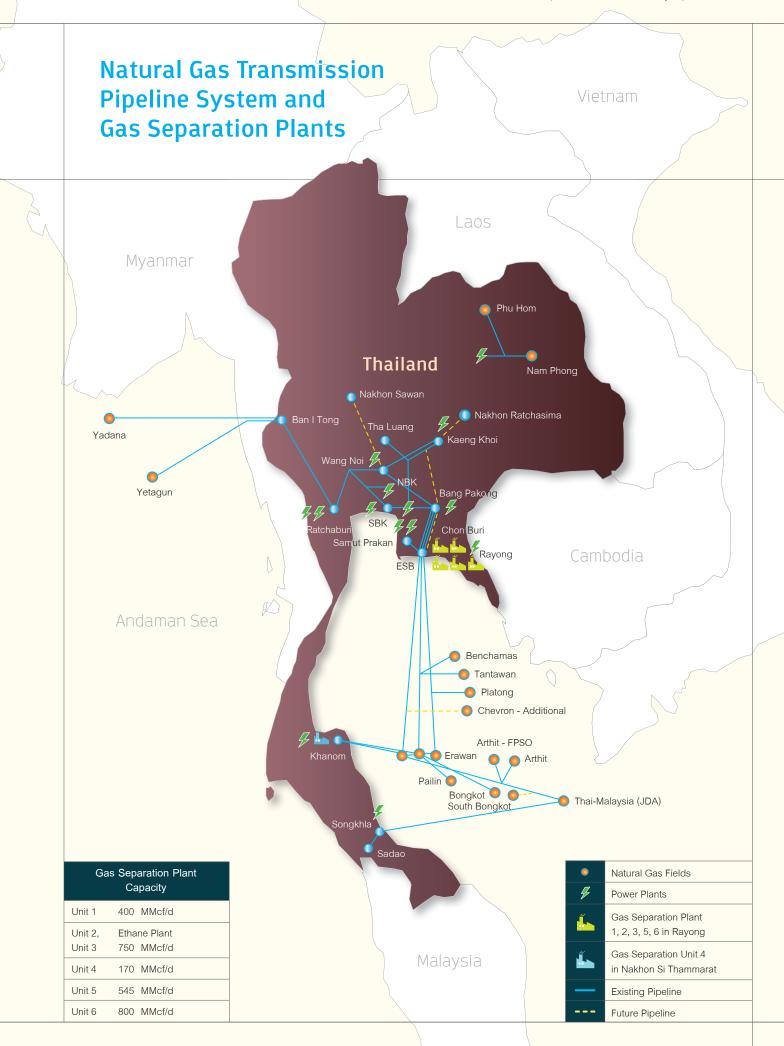
### **October**

- PTT and Thammasat University launched a PTT NGV station at the university's Rangsit Campus and conducted an inaugural ceremony to plant trees to honor His Majesty the King with the "Love Thammasat, Preserve the Environment, Combat Global Warming for the Father of the Nation" project to commemorate the 60<sup>th</sup> anniversary of HM the King's Coronation. The station, capable of delivering 40 tons/day, is a branch station outside the gas distribution pipeline routes and is a part of the "Green University for Energy and Environment Conservation" pilot project.
- Gas Separation Plant Unit 6 started commissioning with a nameplate capacity of 800 MMcf/d and is expected to begin commercial operations in early 2011.

- Pipeline Operation Department, Natural Gas Transmission, won certification for ISO 9001 Quality Standards, ISO/IEC Guide/ ISO/IEC 17025 Quality Standards for Testing/Calibrating Laboratory, and ISO 14001 Environmental Management Standards.
- HRH Princess Maha Chakri Sirindhorn Herb Garden won an Outstanding Figure/Organization in Traditional Medicine Award from the College of Public Health Sciences, Chulalongkorn University.

### **December**

• PTT acquired 23% of the shares in B.Grimm BIP Power Co., Ltd., in a joint venture with B.Grimm Energy Corporation Co., Ltd., (a 51% share), and Bang Kradee Industrial Park Co., Ltd., (a 26% share) to develop the Bang Kradee Industrial Power Plant, a small power producer (SPP). The JV will use combined heat and power process fueled by natural gas to produce 118 megawatts (MW) of electricity and 3,400 tons of chilled water for contracted customers, namely EGAT and industries in the industrial park. Commercial operations are expected to begin by the second quarter of 2014.







Grand Opening of "PTT Blue Innovation"

### Oil Business Unit

In 2010, the Oil Business Unit continued to top the domestic oil market for the 18<sup>th</sup> consecutive year, with a 7% rise in sales volume, and captured the highest lubricating oil market share for two years in a row, with an increase of 11% in sales volume. This increase was the result of several factors, including 1) new products, such as PTT Blue Innovation, new-formula fuels that improve engine performance and save fuels thanks to complete combustion, and four new lubricating oil products; 2) more service stations with integrated supplementary services; and 3) more gasohol and biodiesel service stations. Business performance is summarized below:

### Fuel Sales

In 2010, PTT sold 13,952 million liters of fuel, an increase of 946 million liters (7%) from the previous year, and captured 34.5% of the market comprising 2,251 million liters of gasoline, 5,742 million liters of diesel, 1,455 million liters of jet fuel and kerosene, 1,599 million liters of fuel oil, and 2,509 million liters of LPG. Sales volume, including sales of PTT Retail Management Co., Ltd. (PTTRM), stood at 15,091 liters, a 37.3% market share, or 34.2% if the fuel oil sold to the Electricity Generating Authority of Thailand (EGAT) is discounted.

The average marketing margin was 1.43 baht per liter against 1.39 baht per liter last year, a 3% rise - against a suitable margin of 1.50 - 2.00 baht per liter to cover the operating expenses and returns to the business unit and retailers. Because the world oil price kept climbing during the year, the business unit made 3,072 million baht profit from year-end stock gains.

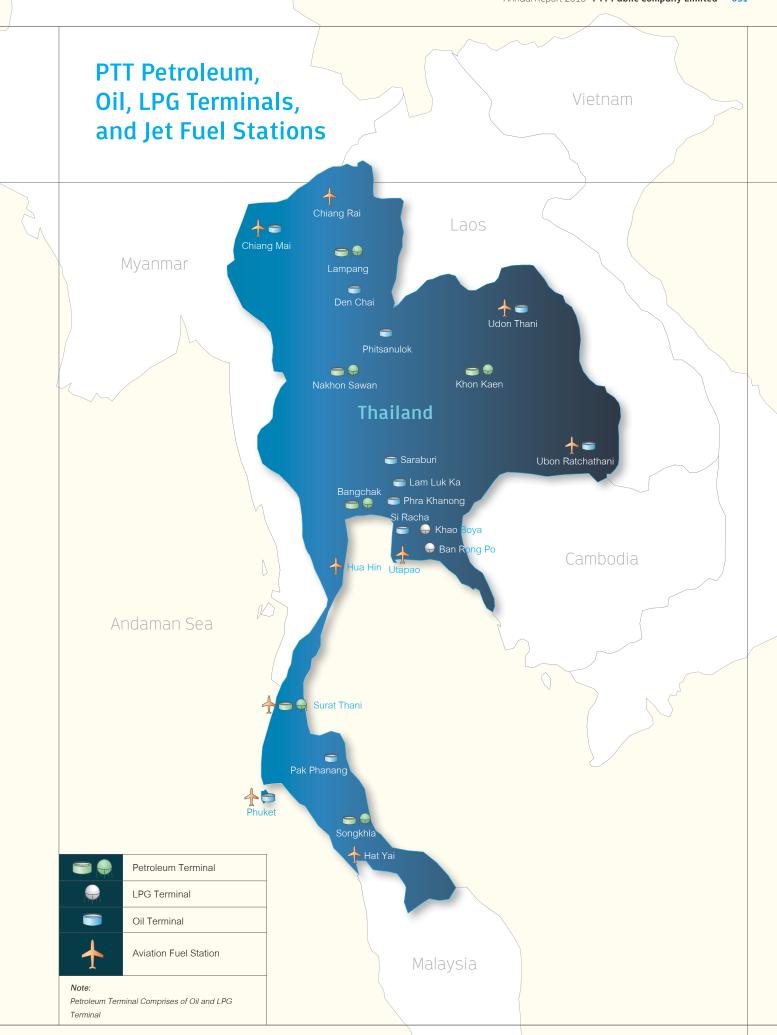
At year-end 2010, PTT operated 1,162 service stations across the country (6% of the total), 9 jet fuel stations, 11 oil terminals, 2 LPG terminals, 6 petroleum terminals, 4 LPG bottling plants, 879 Seven-Eleven convenience stores, 538 Café Amazon outlets, and 133 Pro-Check lube service centers.

### Biofuel Sales

PTT continued to promote alternative energy to offer options to consumers through expanding the market for gasohol and biodiesel. It increased the number of service stations selling Gasohol E10, E20, and E85, and high-speed diesel B5 to meet consumers' demand. Market shares in 2010 for Gasohol E10, Gasohol E20, Gasohol E85, and high-speed B5 diesel are 31.1%, 44.6%, 42.7%, and 21.9%. To secure the supply, PTT has signed long-term contracts for ethanol and methyl ester from domestic producers.

### Lubricating Oil Sales

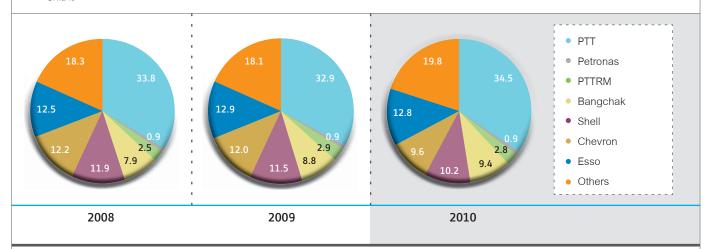
In 2010, PTT captured the top market share for lubricating oil products for the second consecutive year thanks to constant innovation and quality improvement to achieve the highest standard, API SN, from the American Petroleum Institute (API), as well as the International Standardization and Approval Committee (ILSAC) GF-5 standard. In addition, PTT launched four new products, namely Performa Super Synthetic SN/GF-5 for gasoline engines, Dynatrac for diesel engines, Challenger 4 T-IT for motorcycles, and Dynamic Synthetic Plus for NGV vehicles, and expanded its customer base into Indochina. Sales totaled 126 million liters, an increase of 12 million liters (11%) from 2009, representing a 37.7% market share.



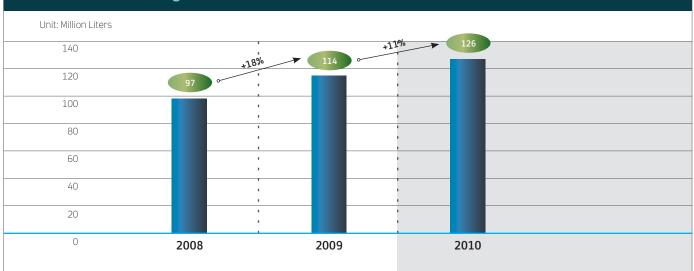


## **Domestic Market Share**









**Note:** Excluding LPG used as petrochemical feedstock **Source:** Department of Energy Business, Ministry of Energy





LPG Imports

Grand Opening of Café Amazon Coffee Shop

## Highlights of 2010

### **January**

 PTT, in cooperation with Topship Chemical Co., Ltd., launched its lubricating oil products at an event entitled "PTT Lubricants Harmony Road" in Tonguan, Quanzhou, China.

### **February**

 PTT, with support from the government, imported LPG on a floating-storage tanker, where propane and butane were mixed and LPG was transferred ship-to-ship to transportation vessels for the first time to support growing domestic demand.

### March

 A Café Amazon outlet was opened at the Energy Complex (ENCO) building as a model for market base expansion outside service stations to serve new customer groups in offices using a new formula and quality ingredients.

### June

• PTT Gasohol E85 Plus was sold at the PTT station in the Khorat Royal Thai Air Force Base (Wing 1), Mueang district, Nakhon Ratchasima, as the first point of sale for Gasohol E85 Plus outside Bangkok.

 PTT service stations became the only recipient in the service station category to win the Platinum Trusted Brand award for the tenth year running, as voted by Reader's Digest readers.

### **August**

• Won 2009 EIA Monitoring Awards, given to government units or private organizations whose operations conformed to government policy from the Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment. Six out of the 25 project winners represented PTT Group, including the Songkhla Jetty and LPG terminal, operated by the Oil Business Unit.

### September

- Inaugurated a Jiffy Market convenience store and Jiffy Bistro restaurant outside a service station at the Energy Complex Tower A. These facilities got a positive response because they met modern customers' demand for good quality, freshness, variety, and convenience.
- Launched PTT Blue Innovation, a new fuel formula that upgraded all PTT fuels to premium quality, which will improve engine performance and fuel combustion, save fuel, preserve the engine, be friendly to health and the environment, and serve different needs of all vehicle driversas a way to enhance energy efficiency and reduce global warming.





Opening of the rest area and PTT Gasoline Service Station

Inauguration of New Selling Point of PTT Blue Gasohol E85

 During the Vegetarian Festival, PTT and Green Spot Co., Ltd., launched the Amazon Soya drink, a combination of soya milk and coffee, served at Café Amazon outlets in three varieties, namely Hot Soya Latte, Iced Amazon Soya, and Iced Tea Soya, drinks which meet the health concerns of customers.

### **October**

• Introduced "PTT Performa Super Synthetic," which received API-SN certification from the American Petroleum Institute (API), the latest and highest standard in the world, for providing better performance during start-up and acceleration. The product was also certified under the ILSAC GF-5 standard, the highest fuel-saving standard in the world. PTT plans to market the product internationally.

### **November**

 Opened rest areas and PTT service stations along the Chaloem Maha Nakhon Expressway (Bang Na inbound)
 Phase 2, to allow expressway customers to refuel and use the facilities as well as helping reduce traffic problems and accidents.

### **December**

- Set up the fifth point of sale for PTT Blue Gasohol
   E85 at the PTT Kaset-Navamin service station in Bangkok
   to provide more access to this innovative fuel.
- PTT service stations won the most gold medals for the second straight year in the "Quality Station" project, organized by the Department of Energy Business, Ministry of Energy. PTT stations also won the most medals combined - gold, silver, and bronze - for 272 out of 437 recipient stations.
- PTT won the Most Popular Automotive Business Award in the TAQA Awards 2010, organized by the Thailand Productivity Institute, Ministry of Industry, in cooperation with Inter-Media Consultant Co., Ltd. and Custom Asia Co., Ltd. The awards were given to businesses that won public consensus in different categories. PTT won in two categories for fuels and fuel service stations.



## International Trading Business Unit

This business unit focuses on improving its competitive advantage through more physical trading volumes of crude oil, petroleum products, and petrochemicals and emphasized price risk management using a "zero-cost collar", the MOPS Dubai option on time spread, MOPJ Naphtha/Dubai, and MOPS Naphtha/Dubai to smooth out the prices of PTT Group refineries' feed. In addition, PTT and PTT Group companies joined forces to add value throughout the supply chain by using Oil Supply Chain Integration Management (OIM), which consisted of oil price risk management, crude oil management, operational excellence, surplus management, transporting vessel management, lubricating oil management, and ethanol logistics modules. The following summarizes the performance of the business unit:

## Crude oil, petroleum products, and petrochemicals trading

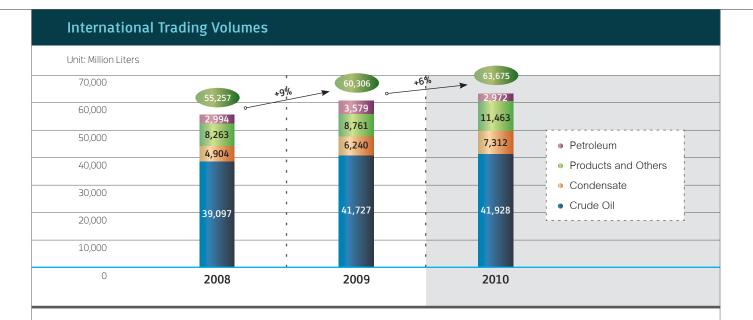
In 2010, the business unit's physical trading amounted to 63,675 million liters (about 1.2 MMBOED), a 6% rise from last year or about 3,369 million liters. This traded volume consisted of 41,928 million liters of crude oil (a 1% rise); condensate, 7,312 million liters (a 17% rise); petroleum products, 11,463 million liters (a 32% rise); and petrochemicals, 2,972 million liters (a 17% drop). The rise in this traded volume was mostly accounted for by the rise in crude oil, which was out-out trading, in which crude oil from other regions, including Azeri Light from Azerbaijan, Oman crude, and Bayu Udan condensate from Australia, were sold in Asian markets. The majority of traded petroleum product included LPG imports to sustain the fast-rising domestic demand.

## Price risk management

Price risk management in 2010 amounted to 33,297 million liters, 58% more than that in 2009, due to improved risk management of fuel price by PTT Group and the expansion of diesel markets in the region.

Note: MOPS = Mean of Platt's Singapore: the average buying-selling price in Singapore

MOPJ = Mean of Platt's Japan: the average buying-selling price in Japan



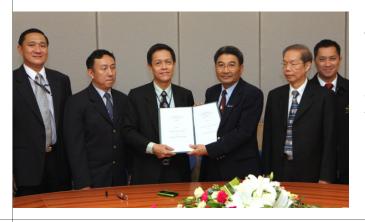
## Highlights of 2010

### March

 Signed a Styrene Monomer (SM) sales and import agreement with PT Styrindo Mono Indonesia (SMI) for 16,000 - 24,000 tons per year for use as raw materials for polystyrene production under PTT Group, thereby adding supply security for PTT's petrochemical business development.

### **April**

 Signed an LPG sales and import agreement for 2010 with Abu Dhabi National Oil Company (ADNOC), United Arab Emirates, for five shipments of 44,000 tons each. The conclusion of this deal strengthened LPG supply security to support rising domestic demand.



## May

• Signed an LPG sales agreement and a transportation agreement with Itochu Corporation, a leading LPG importer in Japan, for three 44,000-ton shipments. This transaction strengthens LPG supply and provides an opportunity for PTT to not only learn and share experience, but also to develop relationships with LPG trading partners.

### **October**

• Signed a purchasing agreement for Acetone, Phenol, and Bisphenol A (BPA) with PTT Phenol Co., Ltd., worth about 2,200 million baht, for a period of three years. Through the business unit, PTT's business has extended its operations in China in keeping with one of its core values - to promote synergy - which added value to products and secure a market base for further business expansion.

### **November**

• Signed a long-term oil purchasing agreement with Idemitsu Kosan Co., Ltd., owner of the third largest refinery in Japan, for the third year, worth 240 million US\$ over the one-year period. This helps expanding oil deals under PTT Group and allows opportunities for other business development in the future.

Signing of a purchasing agreement for Acetone, Phenol and Bisphenol A (BPA) with PPCL



# Investment Business through Group Companies

### Exploration and Production

The year 2010 marked another successful year for PTTEP, which continued to add value to its assets to satisfy the increasing energy demand and to enhance national energy security. The Company continued to provide a clear view of its strategic direction, as well as achieving continual efficiency improvement and organization improving efficiency to achieve compatibility development. It embarked on operational excellence and the Procurement Plus project to adjust its procurement to suit market conditions, and was able to achieve cost reduction in 2010. It also adopted a portfolio management process to manage risk and allocate investment in different projects, and applied the PTTEP project realization process to ensure appropriate and pertinent investment expansion. All of these accomplishments contributed to a significant rise in its production and sales volumes in 2010.

This success resulted in a net profit of 41,739 million baht, an 88% rise from 22,154 million baht in 2009. PTTEP's achievements are highlighted below:

### Exploration

Petroleum was discovered in 15 wells out of 19 exploration and appraisal wells, a success rate of 79%. The most significant discovery was in the PTTEP Australasia Project, where natural gas was found in the Oliver-2 well, which will lead to further investment opportunities in Australia, including Floating LNG (FLNG) development.

### **Project Development**

PTTEP has continually improved its production capacity and acquired additional reserves from domestic and overseas projects while accelerating project development to meet domestic energy demand. The MTJDA-B-17 project came on stream in 2010 and is now producing at about 335 MMcf/d. As of year-end 2010, PTTEP's proved reserves stood at 1,043 million BOE, with a 59% - 41% split between domestic and overseas.





Project development highlights include:

- Bongkot South Project: Installation of the processing platform jacket in the Gulf of Thailand was completed in 2010 and installation of the processing platform topside is ongoing. Gas production is expected in mid-2012 at 320 MMcf/d.
- Montara Field, PTTEP Australasia Project: Oil production is expected in the fourth quarter of 2011 at a rate of 35,000 bbl/day. The Australian Government considered PTTEP's action plan and announced its decision to let PTTEP continue its E&P operations in Australia. Regarding insurance, at year-end, PTTEP received compensation of 84 million US\$. Other claims are ongoing.
- Myanmar Zawtika Project: This project covers Block M9 and a small portion of Block M11 in Myanmar. In 2010, basic engineering work of the Zawtika

Project was completed and the call for tenders for the construction was proceeding. First commercial gas production is scheduled for 2013 at 300 MMcf/d, of which 240 MMcf/d will be sold to PTT and another 60 MMcf/d will be sold to Myanmar.

- Floating LNG (FLNG) Project: Pre-front end engineering design is expected to be completed in early 2011. PTTEP and PTT International Co., Ltd., hold a 50%: 50% interest in PTT FLNG Limited to support businesses related to FLNG.
- *Vietnam 16-1 Project:* Fabrication of wellhead platform jackets was completed, and the wellhead platform topside and floating production storage and offloading vessel (FPSO) were under construction. Oil production is expected in the second half of 2011 at an initial rate of 18,000 20,000 bbl/day and will be increased to 40,000 bbl/day in late 2011.

- Algeria 433a and 416b Project: Bidding for engineering procurement & construction (EPC) is in progress. Oil production is expected in 2013 at 20,000 bbl/day.

### Production Expansion and Sales

In 2010, all PTTEP projects met their targets, resulting in sales volumes of gas, crude oil, condensate and LPG increasing to an average of 264,575 BOED, a 13% rise from last year's total of 233,756 BOED. The higher sales volume was mostly from the start-up of MTJDA-B 17, and the increases from the Arthit North FPSO Project and the Bongkot Project. Supplies from these projects ensured energy supply security for the country to satisfy the rising demand from domestic economic expansion.

### Investments

In 2010, PTTEP entered into a farm-in agreement with Woodside Energy Ltd. and its joint-venture partners for Blocks WA-378-P, WA-396-P and WA-397-P in Australia, with a 20% share. These investments increased exploration opportunities in potential areas adjoining other current Australian blocks. The Company also won the bid for four exploration blocks in the Makassar Strait, offshore western Sulawesi, Indonesia.

PTTEP also signed a Partnership Unit Sale Agreement with Statoil Canada Ltd. and Statoil Canada Holdings Corp., the subsidiaries of Statoil ASA (Statoil), to acquire a 40% interest in the Kai Kos Dehseh (KKD) Oil Sands Project, covering 257,200 acres in Canada, with an estimated 4.3 billion bbl/day of recoverable bitumen resources and an expected project life of over 40 years for a total consideration of 2,280 million US\$. Production is expected in the first half of 2011 at an initial rate of 10,000 bbl/day increasing to 18,800 bbl/day within 24 months. Other areas will be developed as well to produce an additional 60,000 bbl/day Petroleum products derived from KKD will be sold to refineries in the US through its pipeline systems.

Incidentally, during the year, PTTEP relinquished exploration acreage in the Oman 58 Project and the Iran Saveh Project, and terminated its joint venture in the Bengara-1 Project in Indonesia since its studies indicated that these projects were not cost-effective. At the end of 2010, PTTEP therefore operated 43 projects in 12 countries.

### Corporate Capability Development

PTTEP accelerated its corporate capability development through operational technology development and personnel development in order to equip its personnel for future business expansion, and to develop high-potential personnel in business expertise and leadership to further enhance corporate growth.



### · Petrochemicals and Refining

Petrochemical and refining companies consistently expanded their investment to add product lines and trade channels to increase its competitiveness in the international arena. Research and studies on eco-friendly products and bio-fuels were conducted, as well as opportunities for investment. In addition to steady expansion, the Petrochemical and Refining Business Unit also focused on creating synergy within the group through various projects. Such as P&R Best Practice Sharing project that promote sharing of efficiency improving procedures. Another projects that foster cooperation along supply chain of petrochemical and petroleum product are Petrochemical Integrated Supply Chain Management (PIM) and Oil Supply Chain integrated Management (OIM) accordingly.

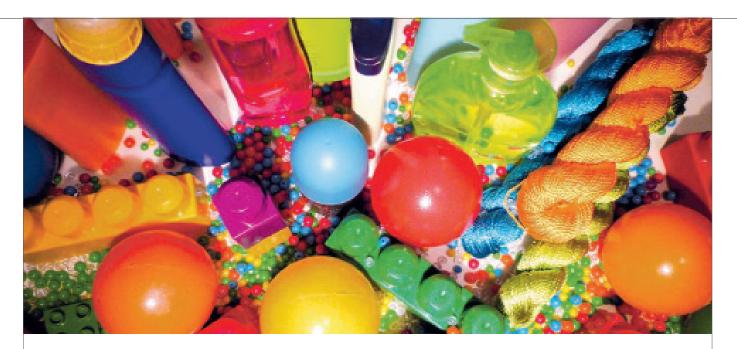
Furthermore, Zero Unplanned Shutdown Project was lauched to enhance the production reliability, reduce environmental impacts and losses from damage incurred from unplanned shutdowns.

### Performance

PTT Chemical Plc. (PTTCH). had the total output of 2,306,993 tons, a drop of 5,197 tons from the previous year due to the planned maintenance shutdowns of olefins plants in the first and third quarters of the year, late commissioning of the Ethane Cracker Project, operated by PTT Polyethylene Co., Ltd., a wholly owned subsidiary of PTTCH, and delays in raw material supply from PTT Gas Separation Plant Unit 6. However, the higher product-to-feed margin in the global market and gains from the strong baht contributed to PTTCH's better performance of 10,290 million baht, a 51% rise from 2009.

HMC Polymers Co., Ltd. (HMC)'s output totaled 396,368 tons, a drop of 21,991 tons from last year. However, because of the higher product-to-feed margin of all products due to tight polypropylene supply incorporated with gain from foreigh exchange caused by strong baht, HMC performance in 2010 was better than 2009.





PTT Phenol Co., Ltd. (PPCL)'s output totaled 333,385 tons, a jump of 11,391 tons from the previous year. The higher product-to-feed margin for its output due to the tight demand from a maintenance shutdown of Asian phenol factories contributed to the good PPCL performance for 2010, which increased from 2009.

PTT Polymer Marketing Co., Ltd. (PTTPM)'s output totaled 960,528 tons, a hike of 283,084 tons from the previous year, mainly due to its role as the petrochemical distribution center for PTT Group. In 2010, sales of products from new plants, such as LLDPE, LDPE from PTTPE, and HDPE from BPE 2 resulted in an improved PTTPM performance from last year.

PTT Polymer Logistics Co., Ltd. (PTTPL), provided an integrated logistics services to polymer producers of PTT Group. During 2010, the services provided amounted to 3,963,122 tons, a surge of 1,953,410 tons from 2009 due to services for newly on-stream factories, consisting of LLDPE, LDPE by PTTPE and HDPE by BPE 2. As a result, PTTPL's performance improved from last year.

PTT Maintenance and Engineering Co., Ltd. (PTTME), secured a long-term agreement on the provision of maintenance, engineering, and inspection for companies in PTT Chemical Group including PTTPE. The company also collaborated with its strategic partners, namely Jacobs Engineering Group Inc., Asia Cement Energy Conservation Co., Ltd., and IRPC Plc. to increase its service capacity. Income in 2010 was inferior to the previous year because Map Ta Phut's environmental impact issues delayed the planned commissioning of the petrochemical plant in 2010. However, because of the low service cost, performance improved from 2009.

PTT Group's five refining companies commanded 36% of Thailand's total capacity. The output increased to about 859,271 bbl/day, a 5% rise from the previous year. PTT's share accounted for 346,575 bbl/day. The utilization rate of these refineries was 95%, a rise from 90% in 2009, with gross integrated margin (GIM) at 6.89 US\$/bbl, compared with 6.93 US\$/bbl in 2009, a result of the rising market GIM, the difference between the product price and the oil price, and increased production efficiency. However, lower gains from risk management on prices and stock gains at year-end, as well as the stronger baht, resulted in lower net profits than the previous year.

## Highlights of 2010

### **January**

 PTT Polyethylene Co., Ltd. (PTTPE), a subsidiary of PTT Chemical Plc. (PTTCH), completed the construction of its Linear Low Density Polyethylene (LLDPE) Plant, with production capacity of 400,000 tons per annum, and started commercial operation.

### **February**

• IRPC Plc. (IRPC) launched a new product - Green ABS - the first ABS made from natural polymers.

### May

 PTT Aromatics and Refining Plc. (PTTAR) started to exchange its Intermediate products with Star Petroleum Refining Co., Ltd., to increase production efficiency and create benefits for each other.

### July

 Launching and signing of a memorandum of understanding to promote the use of biodegradable bags on Ko Samet, a joint project between the PTT Group and Mitsui Chemical Corp., Ltd.

### **August**

• Bangchak's foundation laying ceremony and the launch of electricity from the solar-cell project "Sunny Bangchak" with an installed capacity of 38 MW. Electricity from the project will be sold to EGAT and the Provincial Electricity Authority (PEA) in the fourth quarter of 2011. The project aims to enhance national energy security and increase electricity reserves to meet the demand of the business sector and private households, as well as to promote electricity generation from clean energy to reduce health and pollution impacts.

### September

- On September 16, PTT Polymer Logistics Co., Ltd. (PTTPL) officially launched its international distribution center in Map Ta Phut, Rayong.
- IRPC Plc. (IRPC) launched two new products, namely TDAE (Treated Distillate Aromatic Extract) and RAE (Residue Aromatic Extract), low-pollution aromatic rubber oil that reduces pollution and preserves the environment. The products will be sold worldwide to leading rubber and tire companies.

### October

 HMC Polymers Co., Ltd.'s expansion polypropylene project with a production capacity of 300,000 tons per year came on stream.

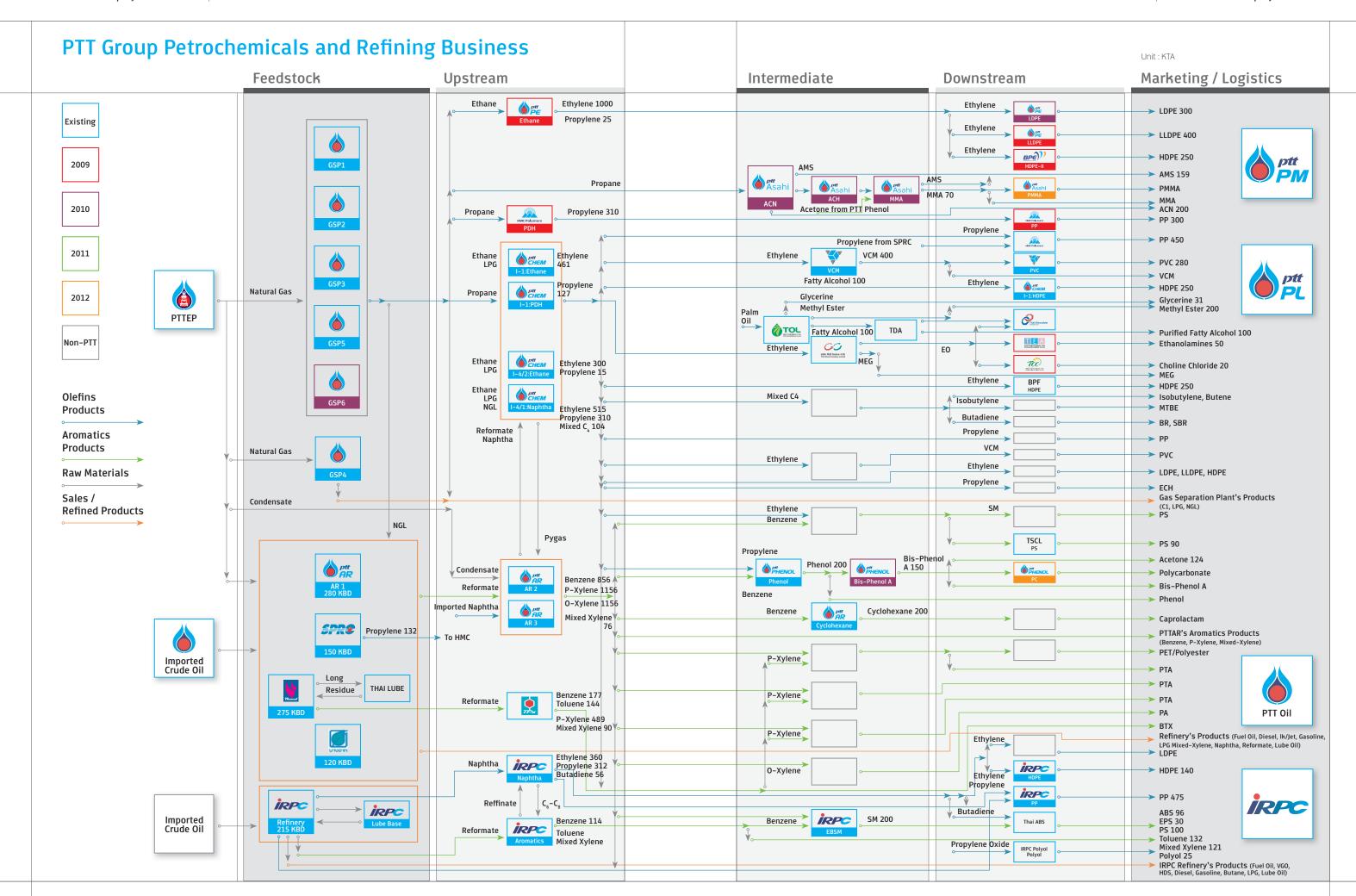
### **December**

- PTT Polyethylene Co., Ltd. (PTTPE), a wholly owned subsidiary of PTT Chemical Plc. (PTTCH), started commercial production of its construction of its low density polyethylene plant (LDPE), with a capacity of 300,000 tons per year, was completed and commissioning was ongoing. Commercial production is expected in the first quarter of 2011.
- IRPC Plc. (IRPC) launched its seven innovated and eco-friendly products in polyolefins line.





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### · International Investment Business

In 2010, PTT International Co., Ltd. (PTTI), set up two overseas subsidiaries, namely PTT International Holdings Ltd. and PTT International Investments Ltd., to support its investment expansion in businesses such as coal mining, floating LNG (FLNG), coal-fired power plants and hydropower plants. The operations will focus on overseas investment and promote cooperation in international investment among PTT Group. PTTI viewed this as a good opportunity to apply their knowledge, experience and expertise in overseas investment and assert the capability of PTT Group in international competition.

Significant highlights of overseas investment in 2010 include:

### **Coal Production**

• PTT, through PTTI, has invested in the coal business since 2009. The Company held 60% equities in PTT Asia Pacific Mining Pty. Ltd. (PTTAPM), an Australia-registered company. PTTAPM conducted coal exploration and production in Indonesia and coal distribution in Singapore through Straits Asia Resources Ltd. (SAR), a listed company in the Singapore stock exchange, a company in which PTTAPM held interests. In addition, PTTAPM won the rights to explore for coal in Madagascar and the rights to conduct a coal potential study in Brunei. During the year, SAR produced 10.6 million tons of coal and sold 10.7 million tons. The coal produced was exported to Japan, Hong Kong, South Korea, India, Taiwan and the People's Republic of China.

• PTTI signed a Scheme Implementation Agreement (SIA) in November 2010 with Straits Resources Limited (SRL), a listed company in the Australian stock exchange, for the purchase of all SRL's coal mines. SRL held 40% equities in PTTAPM, worth about 544.1 million AS\$, or 16,600 million baht. The agreement will help the operation of the two companies move in the same direction as PTT, with its share of coal production at 4.5 million tons in 2011 and 7.5 million tons in 2015.

### Natural Gas Production

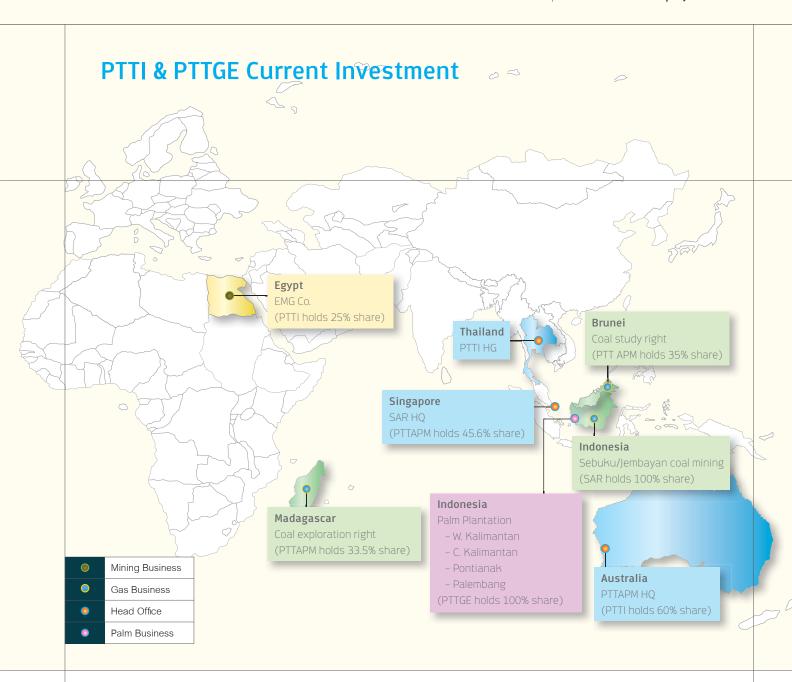
- PTT, through PTTI, has held 25% equities in East Mediterranean Gas (EMG) since 2007. EMG, a registered company under the laws of Egypt, operates an offshore pipeline transmission business for export to power plants and the industrial sector in Israel. In 2010, EMG exported about 200 MMcf/d.
- PTTI set up PTT FLNG Ltd. on April 12 to represent PTT Group in the joint investment and development of the LNG production and storage (Floating LNG or FLNG) with PTTEP to develop small offshore gas fields for which a pipeline system or onshore LPG plant might not be appropriate.

### Oil Palm Planting and Development

• Investment in this area was made through PTT Green Energy Co., Ltd. (PTTGE), and included production of crude palm oil for vegetable oil for consumption, as oleochemical feedstock, and in the production of biodiesel as an alternative energy in line with the government policy on alternative energy and reduction of global warming caused by oil consumption.







• In 2010, PTTGE successfully expanded its palm acreage in Indonesia to 716,250 rai, as opposed to 631,875 rai last year. A total 62,830 rai was developed, and gradual acreage expansion is likely because of the country's ample acreage with suitable topography and climate, which has made Indonesia the highest palm acreage holder in the world. PTTGE also conducted a feasibility study on oil palm investment with neighboring countries, namely Myanmar and Cambodia. Recognizing the significance of environmental conservation, PTTGE applied the Clean Development Mechanism (CDM) in the operation for the treatment of waste water from crude palm oil (CPO) processing plants. In addition, PTTGE valued the community and social development in this area in parallel with its business.

• PTTGE acquired 77.6% shares in Chancellor Oil Pte. Ltd. (CO) in February 2010, with CO holding 95% shares in PT. First Borneo Plantations (PT.FBP). CO owns about 108,000 hectares of palm oil acreage, or 675,000 rai, in western Kalimantan.

PTT's international investment focus is on increasing the efficiency of its investments and maintaining a constant production volume, as well as considering investment prospects in downstream businesses to further its interest and maximizes the efficiency of resource exploitation.



PTT Group Strategic Thinking Session (STS)

In addition to improving the performance of its business units, PTT and 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 Strategic Thinking Session to define the direction and strategies of the Group so that its businesses could move in the same direction, create maximum added value, promote synergy and maximize resources. The defined direction and strategies, to be reviewed annually, will be used in preparing the corporate plan and the operating plan of each business unit and supporting line, both long term and short term. In 2010, the direction and strategies emphasized Driving Sustainable Growth, with a focus on business expansion and fair returns, and due regard for 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 in the Stock Exchange of Thailand (SET) with a capitalization of over 911,000 million baht, which accounted for about 11% of total market capitalization at the end of the year. If all listed companies

under PTT group are included, the market capitalization of the Group will be over 2,000,000 million baht, or about 26% of SET's total market capitalization. PTT Group continues to grow steadily and, in order to ensure a strong financial structure and discipline with credit ratings compatible with other industry peers, financial management must be efficient and well-disciplined, and disclosure of information to all investors must be transparent. To this end, PTT has applied its treasury and credit policy as a guideline in managing the finances of PTT and its Group.

In 2010, PTT managed its finances, cash flows, exchange rate risks and interest rates to reduce costs, and/or add value to the corporation by taking the following actions:

- Acquired a long-term fund in order to be prepared for any economic crisis that might affect PTT's operations and financial status, in the form of debentures and bank loans totaling 69,443 million baht for PTT and its afffiliates. PTT issued 4-billion-baht worth Century Bond, Thailand's first and longest maturity life bond ever, to be sold to the institutional and major investors. The century bond issurance reflects PTT's corporate vision of sustainability as well as to limit the long-term interest cost which consequently reduces the fluctuation of money market.
- Increased the efficiency of short-term cash flow by managing the financial activities of its wholly owned companies.

- Issued financial derivatives to lower risks arising from its long-term loans, which resulted in reduction of the loan cost of about 595 million baht.
- Managed its foreign-currency risks in its commercial transactions in the import, export, international sales and procurement of crude oil to the refineries under PTT group, valued at 22,700 million US\$, and added value to PTT Group of about 1,800 million baht.

### Performance and Efficiency Management

PTT applied Thailand Quality Award (TQA) criteria to maintain its management at international standards, gain satisfaction and loyalty from the customers, play a significant role in national economic and social development, and improve the competitive edge of the country. As a result, its Rayong Gas Separation Plant received the TQA award from the Thailand Productivity Institute in 2006, as did Natural Gas Transmission in 2010. PTT is also one of the seven state enterprises that applied State Enterprise Performance Appraisal (SEPA) in the organization. The Ministry of Finance plans to use the full-scale SEPA by 2011.

As a result of its documented management improvement above, PTT has won the Best of the Best Award, the highest prize awarded to outstanding state enterprises with high standards in all areas of operations, for two consecutive years. The award covers four categories, namely Best Board of Directors, Best Corporate Management, Best CSR, Best Services and Best Innovations. The PTT President & CEO also won the CEO of The Year Award.

### **Innovations**

During the year, PTT developed and distributed several new oil products, including Gasohol Blue Innovation and Biodiesel Blue Innovation, as well as other lubricants for motorcycles, diesel, and API standard gasoline for vehicles, and agricultural and industrial machines. PTT also conducted research on renewable energy. The company experimented on bio-fuel plants such as green algae, produced biogas from industrial waste and processed it into vehicle fuels.

In addition, PTTRCT fostered its capability in geological research to learn more about energy exploration and production of both conventional fossil fuels such as oil, natural gas and coal, and unconventional fossil fuels like oil sands to secure adequate energy supplies for the country. Other research and development was carried out on catalysts and adsorbents, as well as a variety of petrochemical products, to add value to PTT's business.

### **Key Crisis Management**

### Map Ta Phut Environmental Issue

The Stop Global Warming Association and residents in Map Ta Phut Municipality sued government agencies for issuing permits covering 76 investment projects in Map Ta Phut and nearby areas in Rayong, as well as the failure to conform to the provisions of the Constitution of Thailand B.E. 2550 (2007), Article 67 (2). The Central Administration Court issued an order on September 29, 2009, defining temporary relief measures for government agencies to order suspension of such projects or activities. Of the 76 projects, 25 were under PTT Group. These projects were suspended, and their operations could not proceed as planned.

PTT Group promptly took both short-term and long-term measures to ease impacts from the suspension of these projects. The Company's representatives participated in the appointed four-party committee and closely cooperated with government agencies in defining the rules and regulations under the Constitution. An HIA report was prepared promptly, as well as implementation of PTT Group's environmental management system and CSR and communication projects in the Map Ta Phut area. On September 2, 2010, the Central Administration Court revoked permits for projects issued after the constitution came into force and for projects falling into 11 categories of projects or activities that might cause severe impacts on the community according to the Announcement of the Ministry of Resources and Environment, dated August 31, 2010. As a result, PTT Group projects, including the Gas Separation Plant Unit 6, which had been suspended, were able to proceed with construction and operation. Commissioning testing was conducted in October 2010. The only project under PTT Group still suspended, and currently undergoing the HIA preparation process, is the Ethylene Oxide and Ethylene Glycol (Expansion) project.



PTT Top Executive Thinking Session (TTS)

## Strategies and Business Directions of PTT Group

PTT Group has defined a vision that focuses on consistent and sustainable growth in order to become the Thai premier multinational energy company, to be ranked among the top 100 companies by Fortune Magazine (BIG) in 2020, to be listed in the Dow Jones Sustainability Index (DJSI) in 2013 (Long), and to become a top-quartile performance company as reflected in its strong performance in 2020 (Strong).

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

1) "Keep" core value chain expansion to become a "Top Oil and Gas Player" by focusing on petroleum exploration and production expansion through PTTEP, both domestic and overseas, to increase the production volume to meet the target of 900,000 bbl/day within 2020, and to merge its petrochemical and refining businesses to increase its potential to compete with new business rivals by leveraging economies of scale and low raw-material costs to survive the current crisis of the industry downward trend. The company will also expand its business in petrochemical products using the "market back" strategy.

- 2) Expand to other energy-related businesses and move toward becoming an "Energy Conglomerate" by expanding its investment in coal, the most abundant fossil reserves with high consumption growth rates, investing in overseas power, since this area can still grow with the global economic recovery. PTT will invest more in the power business as well as other eco-friendly energy operations to counter global warming impacts, such as bio-fuels, both gasohol and biodiesel, and oleochemical products made from natural raw materials.
- 3) Identify expanding opportunities in non-energy businesses in moving toward the "Business Conglomerate" status by expanding investment in connected businesses that could add value to the current assets and brand, including the palm oil business, which is an environmentally friendly energy source and is also used as a raw material for oleochemical products.



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.

To maintain sustainable growth and achieve its vision, direction and business objectives, PTT observes three elements of operational ethics, namely High Performance Organization (HPO), Corporate Governance (CG) and Corporate Social Responsibility (CSR). The Company has also defined clear strategic objectives to provide a uniform approach for defining the business plans of all business units and affiliates. These strategic objectives include 1) creating sustainable value addition, 2) reducing costs to raise profits, and 3) enhancing competitive potential. Details regarding these objectives are as follows:

## Strategies regarding cost reduction, profit rises and competitiveness building:

 Performance: Best-in-Class to achieve operational excellence, increase operational efficiency, reduce costs and enhance energy/petrochemical security. 2. Synergy: Deeper and broader collaboration to forge synergy and cooperation among PTT Group in a broader and deeper dimension, to reduce costs and increase the competitive edge, to ensure that investments and operations enjoy an advantage in the economy of scale, to share resources, to jointly carry out research and technology development, to ensure the adequacy of business data management, and to promote knowledge management and knowledge sharing.

## Strategies regarding sustainable growth and value addition:

- 3. Growth: Sustainability and innovation to promote sustainable business growth and products innovation in processes and the business model innovations to accelerate growth. The PTT Research and Technology Institute will be the core unit coordinating the research and development of all innovations for PTT and PTT Group.
- 4. Stakeholder Excellence: Multiple-stakeholder balance the business and operations of PTT Group are extensive and affect all stakeholders, so, in order to ensure that its operations and investments can be executed as planned under the set vision, direction and strategic objectives, PTT needs to gain the trust and confidence of all stakeholders.

## Power for Sustainable Future

Sustainable growth is the philosophy that underpins PTT business. PTT Group aims to be an organization with operational excellence and commitment to good governance principles, which form a prerequisite for all stages of work and all levels of management, in parallel with responsibility for environmental conservation, as well as community and social development. PTT's corporate social responsibility (CSR) is, thus, not only part of the strategy on sustainable development but also part of the organization's missions and values.

PTT Group's business over the years has been conducted in compliance with international standards with a clear business plan and assessment method. The Company conducts best practices from the inside out while bearing in mind the benefit and impacts on all stakeholders. It also values stakeholder engagement in various aspects, including human rights, labor rights, environmental management, fair business, social and community development, supply chain management, development of excellent products, and reporting on social responsibility. All actions are based on good corporate governance and strong leadership to accomplish the efficient, effective, and continuous CSR mission.



"Thai Energy for Thais" is the dogma for running PTT's energy business. In addition to assuring energy stability and providing sufficient energy supply for Thais, PTT realizes the need to repay the country and Thai society. It therefore takes actions both inside and outside the organization. Inside, it conducts its business with a determination to provide sufficient energy supply at fair prices, use natural resources efficiently, search for alternative energy and renewable energy to provide options for energy consumers and the country, and come

up with innovative products in support of the quality of life.

Outside, PTT values communities surrounding its operating sites around the country. All PTT sites share one common objective, which is to always do better and even exceed whatever is required by law. Apart from the normal community development work performed under internationally accepted standards around plants and gas transmission pipelines as well as their adjacent areas, PTT's ultimate goal is "the sound coexistence of the community and the industry". This can be witnessed,



The board joined an activity of the "One Million Trees for the King" campaign.

for example, in the Rayong community, where operating sites of PTT Group are situated. There, a "synergy" was developed through the establishment of a committee to monitor the responsibility for society and communication between PTT's various units and the province under the following three approaches:

Approach 1: Assure Rayong residents with a decent quality of life so that they will have "a good life and happiness" through safety standards as well as development in various areas, including public health/sports, community enterprises and tourism.

Approach 2: Make Rayong a "Green Town" by adding more green areas and reviving the environment.

Approach 3: Provide more learning opportunities for Rayong youth to create "good and smart children" by developing schools and learning methods, establishing a university, and equipping students with knowledge and skills useful for entering the industrial sector.

PTT's business in Rayong involves 33 communities in the vicinity of Map Ta Phut Industrial Estate and 14 in Ban Chang district. In the first half of 2010, the focus of CSR work was on laying the foundation of cooperation by organizing activities designed to create good and smart people, such as Taking Kids to University Project, Science and Energy Youth Camp, Scholarship Fund, and Strong/Sustainable Community, which involved taking care of the ecology around operating sites with participation from the community. These activities stemmed from the initiatives to revive the environment, take care of natural biodiversity around operating sites with community participation, promote health and quality of life, and enhance the development of green areas while maintaining the

enforcement of safety standards, water resource management, and environmental management. Besides, PTT CSR Volunteer activities were also held and a network of PTT volunteers for society was, thus, built. The network of volunteers further shaped a social network that created the awareness of social and community development.

PTT CSR activities are based on willingness, earnestness and continuity together with a thorough understanding of fundamental activities and the community. The focus is on participation from all people and all dimensions of society with diversity highlighted through the fundamental activities in various aspects as follows:

## **The Environment**

Significant projects were organized on various special occasions, such as the 60<sup>th</sup> anniversary of HM the King's Coronation. In 2010, PTT set up the "One



"Biodiversity is Life" Seminar and Exhibilion





The Green Globe Award 25<sup>th</sup> PTT Art Contest

Million Trees for the King" project in honor of HM the King by promoting the awareness of environmental conservation. The project called on the public to grow perennial plants and decorative plants that can absorb toxic substances in their homes, on-line planting through www.milliontreesforking.com, and planting of more than 1 million trees with community in five regions. To observe the UN's announcement to dedicate 2010 as the year of international biodiversity and the government's announcement to dedicate 2010 as the year of Thailand's diversity, PTT held a seminar and an exhibition titled "Biodiversity is Life" to demonstrate how it values CSR projects for the benefit of society and the environment. The seminar was intended to be a forum where communities and all parties, including teachers, philosophers, academics, conservationists, and authors, could exchange their ideas and opinions. The Green Globe Award, which had been organized for 12 years, featured a contest in search of the outstanding community, individual, youth, essay, or media person working to conserve the environment. The Reforestation in Honor of HM the King Project won good cooperation from the Forest Research Center, Faculty of Forestry, Kasetsart University, in both phase 1 of environmental studies in 2004 and phase 2 in 2008. The study showed that the project had produced a very good outcome since its inception in 1994 until 2008. The reforested area could absorb as much as 18 million tons of carbon dioxide while releasing 14 million tons of oxygen in total. Moreover, the overall value of the wood accounts for 6 billion baht. The Vetiver Planting Project under HM the King's Initiative to conserve soil and water resources reduced soil destruction while preserving soil minerals. PTT Group created a network of "vetiver lovers" and

shared knowledge about vetiver planting and keeping among members. The Company granted support for community people to develop their skills in the design and crafting of vetiver products for sale in PatPat shop under the Chai Pattana Foundation. PTT has also continued organizing contests of vetiver product designs and promotion of Vetiver Planting project under HM the King's initiative for the fifth consecutive year.

### **Education**

The Company sponsored construction of school buildings and libraries. In 2010, the 20<sup>th</sup> location was Ban Phayun School in Rayong and the 21<sup>st</sup> at Ban Pa Ngam in Songkhla. The Company also built three more "Thai Energy for Thais" libraries, which were the 25<sup>th</sup> under the project at Lung Kang School, Kanchanaburi, the 26<sup>th</sup> at Wat Pok Pak School, Saraburi, and the 27<sup>th</sup> at Ban Mong Wan, Khon Kaen. In addition, PTT assists the renovation of school buildings and libraries, and donated stationery items, sports equipment, computer sets, and books for libraries at various schools in the PTT Group network around the country.

### Culture

PTT joined Silpakorn University in the organization of the 25<sup>th</sup> PTT Art Contest in 2010 under the theme "The Ultimate Dream", which attracted a large number of entries from artists and youths around the country. A similar event was also regularly organized for the young generation in all regions of the country. In the North, it was the 11<sup>th</sup> year in which PTT organized this event with Chiang Mai University; in the South, the seventh year with Khon Kaen University. PTT joined Lampang residents in the conservation and





World Golf Salutes King Bhumibol

PTT Thailand Open

revival of a nearly extinct local tradition. The event featured the ninth Poo-cha Drum-Beating Festival, the second International Drum Festival, and the eighth PTT Youth Camp for Poo-cha Drum-Beating Conservation.

### **Sports**

PTT promoted sports development in Thailand through support given to Football Association of Thailand under the Royal Patronage and the Lawn Tennis Association of Thailand under the Royal Patronage. Besides, the company sponsored international sports events such as PTT Thailand Open and PTT Pattaya Open to support ATP male and WTA female professionals. In addition, the company granted support to the organization of the Royal Trophy Golf Competition, International Marathon, and Jet Ski International Competition.

### **Society and Community**

PTT granted support to the Community Enterprise Institute Foundation to strengthen the community's competitiveness by promoting the learning processes and creating core personnel at all levels to form a systematic and strong community enterprise network, to become a strong base for the country. In 2010, the Foundation was licensed by the Office of the Higher Education Commission to establish an institute for public learning to provide knowledge, with BAs conferred in Interdisciplinary Program for Local Development and in Community Health Systems Management.

In addition to stressing participation from local communities, PTT, in running its social activities, established PTT Volunteers Club of PTT employees and retirees. Club members all aspire to do good things and to share

as much as they can up to the limit of each individual's capability for the benefit of society. Activities performed by the Club included taking in part in the Company's CSR programs, teaching art, drawing, or whatever subject members are keen on, or taking part in activities requested by the community. All activities are aimed at doing good things at all levels, all stages, and all dimensions ultimately to improve the quality of life of Thais and create lasting happiness. PTT will still play its role as the supplier of sustainable energy and move forward with its neighboring communities and the entire Thai society.

(Details of social responsibility activities can be found in the 2010 PTT Group's CSR Report)



## 84 Tambons on a Sufficiency Path Project

Thanks to the various social responsibility programs that PTT had continuously run over the years, including the One Million Rai Reforestation in Honor of HM the King, Green Globe Award Project, Sirinath Rajini Mangrove Ecosystem Learning Center, and Vetiver Planting Project under the Royal Initiative, PTT has accumulated experience and understanding of the power of "human" and "community" to create true sustainability. Support granted to communities and community people to help them stand on their own feet, able to make good judgment, and live in equilibrium paves the way to the conservation of many other important things, including energy, natural resources, and nature, as well as the foundation of the country's stable growth.

On the occasion of HM the King's  $80^{th}$  anniversary in 2007, PTT Group and its associates organized an activity called "Forest Conservation, 84 Tambons on a Sufficiency Path Project", which spanned 2007 to 2011, to build up communities to live on a sufficiency path. These communities will be presented to HM the King to honor him on his  $84^{th}$  birthday anniversary.



The main idea that underpins the project lies in the elements concerning "forest conservation" and "creating personnel". Forest conservation comes from the One Million Rai Reforestation Project. Here, the forest represents essential natural resources - soil, water, and trees. On the other hand, Creating personnel means the determination to develop the power of human and the community to make residents realize their own potential and that of their communities, able to stand on their own feet, and solve problems with knowledge and mindfulness. This would turn their way of

life into a sufficiency path, on which they can develop themselves and their communities with a good balance of sustainable economy, social, and the environment. "Tambons on a Sufficiency Path" is another key word representing the participating communities that embraced the royal initiative of sufficiency into their way of life and become pilot communities living on such concept. They will, moreover, be able to pass on their knowledge to other communities and Thai society at large.



In running the project, PTT recognized the needs of villagers through participation from all parties. This project is different from others - it doesn't value financial power but brain power. Under the cooperation with PTT and its associates, the project intended to build up knowledge within the community and expand the usefulness of the knowledge further. Building up a tambon on a sufficiency path started from self-analysis, a vital tool to understand oneself. This is a prerequisite for moving forward with good sense while staying away from imprudence and developing one's immunity within the community's context.

Data collection for analysis led to direction-setting for the community to meet the eight targets of the project: community analysis, mental development, community skills, schools/teachers/students, community resources, the environment, health, community energy, and fund. Meeting these targets will particularly lead to a learning process, which is to learn about external factors vital to one's living: energy, work, natural resource management, environmental conservation, and combination of folk wisdom with modern knowledge. But most important, it's the learning about inner things, which means consciousness that drives the change

of mindset and behavior toward the sufficiency path.

Determination of all parties concerned not only resulted in building strong communities, but also brought pride to Thais. In 2009, the project was recognized internationally by winning Platt's Global Energy Awards 2009 for annual community development projects against 20 contestants around the world. This shows how HM the King's initiative on the sufficiency path is accepted at the international forum.

Currently, there are altogether 87 tambons participating in the project. This comprises 898 villages with 9,456 selected "sufficiency household volunteers". The project has created 240 "Models of Sufficiency Path". These 87 tambons will move forward on a sufficiency path with happiness and will be a concrete proof of sustainable development without extreme stress on any area but with a focus on the balance of everything. The sufficiency path also values the building of a solid foundation for orderly growth. Most important, becoming a model community that puts the sufficiency concept into practice is considered an excellent way to pay respect to HM the King, the soul of the nation, on his 84<sup>th</sup> birthday anniversary.

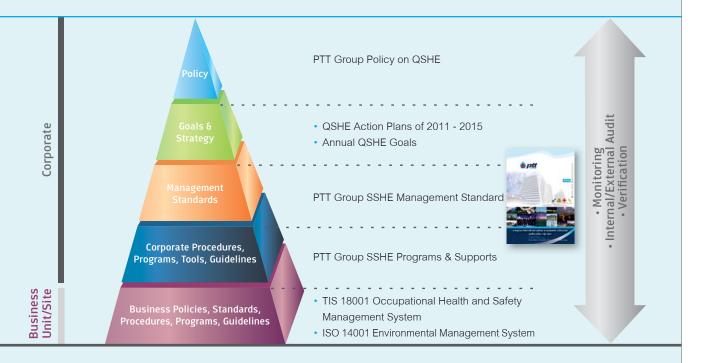




## Quality, Security, Safety, Health and Environmental Management for Organizational Excellence



Quality Security, Safety, Health and Environmental (QSHE) Management has always been a fundamental part of PTT in operating its business in a socially and environmentally responsible ways. It is also an enabling factor for corporate development toward a Thai Premier Multinational Energy Company. PTT has set up the following management system:



#### **QSHE Policy Management**

PTT is always aware that its sustainable growth "means not only strong economic and operational performance growth, but also the acceptance and trust from communities and the public. Committed to the duties and responsibilities to the country and society at large, in 2010, PTT reviewed and announced a new PTT Group Policy on Quality, Security, Safety, Health and Environment (QSHE) for all companies in the group to be able to efficiently manage SSHE risks covering those of investment/ joint ventures in petroleum/petrochemicals and diverse other businesses. The policy also sustains a framework for the Group on their CSR operation and other related issues, such as climate change.

The new Group QSHE Policy covers the following areas:

- 1) Compliance with SSHE laws and corporate requirements as a minimum.
- Prevention of losses resulting from accidents and promotion of occupational health for operators and communities.
- Protection of lives, properties, and corporate data by strict measures under the Universal Declaration of Human Rights, taking into account threats and risks.
- 4) Continuous control and mitigation of environmental impacts from the group's operations through pollution prevention, waste reduction, natural resource conservation, efficient energy consumption, and ecosystem protection.

- 5) Research, development, and provision of environmental friendly and social responsibility products to ensure that proper applications through the life cycles are understood by customers and consumers.
- Developing Greenhouse gas emission account and promoting technological advancement in order to control and reduce emissions.
- Application of management systems in line with the Group's QSHE Management Standard to encourage participation in various management tools.

- 8) Communication of QSHE operations and effectiveness with stakeholders.
- Total Quality Management through efficient work processes to tailor products and services to customers' satisfaction.

The QSHE Policy will be a framework for the PTT Five-Year SSHE Action Plan comprising different aspects as shown in the following figure. In addition, annual QSHE goals are set proactively (leading indicators) and passively (lagging indicators) to ensure the efficiency and effectiveness of SSHE risk management (control and prevention) as required.



#### **Process**

- PTT Group SSHE
   Management Standard is in place, covering all business processes, are efficient, and are measurable on a par with international standards.
- Goals are defined for pollution reduction and continuous development.
- A system is in place for environmental and health impact assessment that is credible and in line with legal requirements.



#### **Products and Services**

 Leadership in research, development, and procurement of environmental friendly products/services.



#### **Operation and Equipment**

- Development of activities and processes to reduce environmental impacts.
- Design of processes and choice of equipment with SSHE in mind.



#### People

 Safety and Green Mind is constantly considered, on and off work.

#### PTT Group SSHE Management Standard

PTT Group SSHE Management Standard is the basis for the implementation of policies and action plans regarding QSHE and other business areas. It is a minimum standard in SSHE risk management in all operation sites of all companies in the group for their uniformity of approach. The standard was implemented at pilot sites in 2010 and will be expanded to all areas in the group.

Consisting of six key components, 25 sub-components and 119 requirements under the sub-components, the standard was developed in line with international standards, such as ISO 14001 and OHSAS 18001, as well as current management systems, best practices of international energy companies, and the Thailand Quality Award (TQA) criteria adapted to suit group operations.

#### PTT Group's SSHE Performance Monitoring and Improvement Process

To systematically monitor and improve the efficiency and effectiveness of SHE risk management (through control and prevention) of the group, PTT requires all operation sites of all companies in the group to monitor and report SHE indicators under the SSHE Performance Data Collection and Reporting Standard, developed in 2009. Data collection was carried out for all companies in the group in 2010. Internal audit and verification of SSHE performance data collection and reporting are planned for 2011 - 2012 in preparation for the companies to be Dow Jones Sustainability Index (DJSI) listed companies in 2013.

A summary of SHE performance data of PTT and five other companies in the group appears in PTT Group's Corporate Social Responsibility Report 2010.

#### **SSHE Management Tools**

In addition to top-down management, PTT focuses on building SSHE capability and awareness in its management, staffs, and employees by applying SSHE management tools adopted from international standards and developed in-house that suit operation sites, work processes, products and services. These tools include the following.

QSHE Management Tool	Application Guideline
5S	All office units and operation sites lack of productive management in line with the Japan Institute of Plant Maintenance (JIPM)
Suggestion	Across the organization
QC groups and QC projects/productivity projects*	Across the organization
Total Production Maintenance and Total Productive Management in line with the Japan Institute of Plant Maintenance (JIPM), (TPM-JIPM)	PTT operation sites
Office SHE management system*	All office units
QSHE manuals and standards for service stations (adapted from the Green Label requirements of Thai Industrial Standards Institute)*	Company-owned, company-operated service stations
Environmental friendly procurement	Common goods

<sup>\*</sup> QSHE tools developed by PTT.



## Management's Discussion and Analysis of Financial Status and Performance



#### PTT and its subsidiaries' performance

Unit: Million Baht

	2009	2010	Increase (Decrease)
Sales and services revenue	1,586,174	1,900,005	19.8%
EBITDA*	142,704	167,376	17.3%
Share of net income (loss) from investments in associates	18,767	18,992	1.2%
Gain (loss) on foreign exchange	4,683	11,855	153.2%
Earning before interest and tax (EBIT)	99,556	117,802	18.3%
Income taxes	33,315	39,107	17.4%
Net income	59,548	83,088	39.5%

Note: \* Earning before finance costs, income taxes, depreciation and amortization including other non-operating income and expenses

Sales and services revenue of PTT and its subsidiaries in 2010 was 1,900,005 million baht, increasing from 2009 by 313,831 million baht or 19.8% from all businesses mainly due to the increase in sales volume and selling prices in relation to the increase in global market prices. Earnings before finance costs, income taxes, depreciation and amortization including other non-operating income and expenses (EBITDA) was 167,376 million baht, increased from 2009 by 24,672 million baht or 17.3% due to the increase in selling price of all businesses in relation to higher product price in global market except the coal business due to the higher operating cost from higher strip ratio, higher fuel cost, and additional cost from the temporary loading facility in Jembayan mine.

The share of net income from investments in associates was 18,992 million baht, increased from 2009 by 225 million baht or 1.2%, mainly due to the higher performance of olefins petrochemical associates resulted from the higher spread margin of most products, especially Monoethylene Glycol (MEG), which had higher spread margin due to decrease in supply from SABIC group's maintenance shutdown until midyear of 2011. However, the performance of refining associates and aromatics petrochemical associates decreased resulted from the

lower Gross Refining Margin (GRM) due to the lower stock gain and hedging gain when compared with the previous year, and lower spread margin of aromatics petrochemical associates, especially Paraxylene in the second and the third quarter, due to excess supply, while Paraxylene market was pressured with tighten supply from the raw material shortage in 2009. However, Paraxylene price rebounded in late 2010 resulted from the tighten supply as a result of the postponement of commercial operation of the Urumqi Petrochemical Complex plant in China to midyear of 2011 and the emergency shutdown of plants in Kuwait and Oman from technical problem. In addition, the gain on foreign exchange of PTT and its subsidiaries was 11,855 million baht in 2010 which increased from 2009 by 7,172 million baht or 153.2%. PTTEP recognized Montara incident expenditures (net insurance claim revenue) amounting to 9,086 million baht in 2009, while in 2010, PTTEP recorded other income from additional insurance claim amounting to 1,369 million baht. As a result, the net income of PTT and its subsidiaries in 2010 was 83,088 million baht (or 29.26 baht per share), increased by 23,540 million baht or 39.5% from 59,548 million baht (or 21.06 baht per share).

#### PTT and its subsidiaries' financial performance comparison by business group

Unit: Million Baht

	2009	2010	Increase (Decrease)
Sales & Services	1,586,174	1,900,005	19.8%
Exploration & Production	119,310	141,978	19.0%
• Natural Gas <sup>1/</sup>	313,738	357,018	13.8%
• Oil <sup>2/</sup>	398,686	480,852	20.6%
<ul> <li>International Trading<sup>3/</sup></li> </ul>	861,897	1,061,694	23.2%
<ul> <li>Petrochemical<sup>4/</sup></li> </ul>	32,423	46,459	43.3%
• Coal <sup>5/</sup>	20,200	24,652	22.0%
• Others <sup>6/</sup>	832	1,863	123.9%
Elimination	(160,912)	(214,511)	(33.3%)
EBITDA	142,704	167,376	17.3%
<ul> <li>Exploration &amp; Production</li> </ul>	81,423	99,524	22.2%
• Natural Gas <sup>1/</sup>	41,329	46,875	13.4%
• Oil <sup>2/</sup>	11,732	11,858	1.1%
<ul> <li>International Trading<sup>3/</sup></li> </ul>	2,026	2,349	15.9%
<ul> <li>Petrochemical<sup>4/</sup></li> </ul>	1,077	1,248	15.9%
• Coal <sup>5/</sup>	7,317	5,431	(25.8%)
• Others <sup>6/</sup>	(2,361)	(100)	95.8%
• Elimination	162	190	17.3%
EBIT	99,556	117,802	18.3%
Exploration & Production	51,571	64,348	24.8%
• Natural Gas <sup>1/</sup>	32,921	37,618	14.3%
• Oil <sup>2/</sup>	9,000	9,401	4.5%
<ul> <li>International Trading<sup>3/</sup></li> </ul>	2,016	2,338	16.0%
<ul> <li>Petrochemical<sup>4/</sup></li> </ul>	901	882	(2.1%)
• Coal <sup>5/</sup>	5,694	4,005	(29.7%)
• Others <sup>6/</sup>	(2,714)	(983)	63.8%
• Elimination	167	193	15.6%
Net Income (loss)	59,548	83,088	39.5%
Earnings per Share (Baht/share) <sup>7/</sup>	21.06	29.26	38.9%

- Notes: 1/ Including the natural gas business, the consolidation of PTT Natural Gas Distribution Co., Ltd. (PTTNGD), PTT LNG Co., Ltd. (PTTNG) and 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) since August 31, 2009 due to the 51.05% TLBC's shares acquisition by PTTRB, TLBC's status of which was changed from affiliate of PTT to subsidiary while PTT owns another 48.95%.
  - 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) and proportionate consolidation of PTT Asahi Chemical Co., Ltd. (PTTAC) and HMC Polymers Co., Ltd. (HMC).
  - 5/ Including the consolidation of PTT Asia Pacific Mining Pty. Ltd. (PTTAPM) which PTT Mining Limited (PTTML), a subsidiary of PTTI, holds 60% shareholding.
  - 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 2010, sales revenue of PTTEP was 141,978 million baht, increasing by 22,668 million baht or 19.0% from 2009, mainly due to;

- 1) The increase in average selling price by 13.4% from 39.53 US\$ per barrel of crude oil equivalent (BOE) in 2009 to 44.83 US\$ per BOE in 2010.
- 2) Sales volume increased from 233,756 barrel of crude oil equivalent per day (BOED) to 264,575 BOED in 2010. The increase in sales volume was mainly from the increase in natural gas and condensate sales volume from the MTJDA-B17, Arthit North, and Bongkot projects. However, natural gas and condensate sales volume from the Arthit project decreased in 2010.

EBITDA in 2010 was 99,524 million baht which increased by 18,101 million baht or 22.2% from 2009 mainly due to the increase in selling price and sales volume as mentioned. Furthermore, the petroleum exploration expenses decreased by 4,625 million baht from the write-off of dry wells from the Myanmar Zawtika projects, while in the last year, there were higher dry well write-off costs from Iran Saveh, Australia AC/P36, and PTTEP Australasia projects. The operating expenses increased from the Arthit North and MTJDA-B17 projects due to higher production activities and change in its provision of decommissioning

costs from Jabiru and Challis fields of PTTEP AA. In addition, the petroleum royalties and exploration expenses increased in relation to higher sales revenue.

EBIT in 2010 increased by 12,777 million baht or 24.8% mainly due to the increase in EBITDA as aforementioned, despite the rise in depreciation and amortization expenses, mainly resulted from the higher production volume from MTJDA-B17 and Arthit North projects.

#### Natural Gas Business

Sales revenue increased by 43,280 million baht or 13.8% to 357,018 million baht in 2010 due to the followings:

#### Natural Gas Supply sales

The average natural gas sales volume increased as the aforementioned from all customers especially from the operational start-up of North Bangkok power plant of Electricity Generating Authority of Thailand in December 2009, despite the decrease in average natural gas selling price to all customers except industrial customers.

#### GSPs' product sales volume

The GSPs' products sales volume increased from 2009 as mentioned. In addition, in 2010, the GSPs' product prices increased in accordance with the increased global petrochemical product prices, being used for GSPs' product prices calculation, in relation to the increase in oil price and global economic recovery.

## The details of reference products prices for calculation of gas separation plants' products sales prices are as follows:

Unit: US\$/ton

	2009	2010	Increase (Decrease)
LPG <sup>1/</sup>	511	713	39.4%
Ethylene <sup>2/</sup>	864	1,074	24.3%
Propylene <sup>2/</sup>	883	1,130	28.0%
High Density Polyethylene <sup>2/</sup>	1,134	1,222	7.8%
Polypropylene <sup>2/</sup>	1,088	1,340	23.1%
Naphtha <sup>3/</sup>	505	660	30.7%

Notes: 1/ Contract price (CP)

2/ South East Asia Spot Price

3/ MOP Singapore (MOP'S) price

EBITDA in 2010 was 46,875 million baht, increased from 2009 by 5,546 million baht or 13.4% mainly due to the increase in margin of natural gas sales to industrial customers in relation to the increase in fuel oil reference price, as well as the higher GSPs' margin due to the increased GSPs' selling price in relation to the higher reference petrochemical product prices. Furthermore, PTT's burden on selling of NGV decreased even though the sales volume of NGV has continuously increased because the government has approved to give compensation on NGV sales to PTT at 2 baht per kilogram during March 6 -June 30, 2011. The company recognized the compensation amounting to 3,037 million baht in 2010 in which 533 million baht has been received. EBIT in 2010 was 37,618 million baht, increased by 4,697 million baht due to the increase in EBITDA as mentioned and the increase in depreciation and amortization expenses of Ethane Seperation Plant's assets.

#### **Downstream Business**

#### Oil Business

Sales revenue in 2010 was 480,852 million baht, increased by 82,166 million baht or 20.6% from the same period last year due to the increase in average selling price in relation to the global oil price. Sales volume also increased resulted mainly from the increase in sales volume of LPG, diesel and fuel oil.

EBITDA in 2010 was 11,858 million baht, increased by 126 million baht or 1.3% from 2009, resulted mainly from the increase in aviation fuel margin, despite the decrease in gasoline and diesel margins. EBIT in 2010 was 9,401 million baht, increased by 401 million baht due to the increase in EBITDA as mentioned and the decrease in depreciation.

#### International Trading Business

Sales revenue in 2010 was 1,061,694 million baht, increased by 199,797 million baht or 23.2% from 2009 due to the increase in average selling price by 26.1% in relation to the increase in the global oil price. Sales volume also increased mainly from the increased sales volume of condensate and refined products.

EBITDA in 2010 was 2,349 million baht, increased by 323 million baht, resulted mainly from the increase in condensate and crude oil margins. EBIT in 2010 also increased by 322 million baht.

#### Petrochemical Business

In 2010, sales revenue was 46,459 million baht, increased by 14,036 million baht or 43.3% from 2009 mainly due to the increase in sales volume and average selling price of PTTPM (PTT's subsidiary in polymer marketing business).

EBITDA in 2010 increased by 171 million baht or 15.9% from 1,077 million baht in 2009 to 1,248 million baht, resulted from the increase in PTTPM's gross margin. EBIT in 2010 was 882 million baht, decreased by 19 million baht or 2.1% from 2009.

### International Investment Business Coal Business

On April 28, 2009, PTT International Company Limited (PTTI) (a wholly owned subsidiary of PTT) via its wholly owned subsidiary PTT Mining Limited (PTTML) acquired major stakes in Strait Asia Resources Limited (SAR), which operates coal mines in Indonesia. Therefore, the revenues, EBITDA and EBIT in 2009 were partially recognized.

In 2010, sales revenue was 24,652 million baht, increased by 4,452 million baht or 22.0% mainly due to the increase in sales volume while the average selling price decreased.

EBITDA in 2010 decreased by 1,886 million baht or 25.8% from 7,317 million baht in 2009 to 5,431 million baht in 2010. EBIT in 2010 was 4,005 million baht, decreased by 1,689 million baht or 29.7% from the decreased average selling price as well as higher operating cost from higher strip ratio, higher fuel cost and additional cost from temporary loading facility in Jembayan mine.

## Net income was 83,088 million baht in 2010, increased by 23,540 million baht or 39.5% from 2009.

In 2010, net income of PTT and its subsidiaries was 83,088 million baht or 29.26 baht per share, increased by 23,540 million baht or 39.5% from 2009 due to the performance of each business group, subsidiaries, and the joint ventures as mentioned, including the following reasons;

• In 2010, PTTEP recorded other income from additional insurance claims recognition amounting to 1,369 million baht while in 2009, PTTEP recognized Montara incident expenditures (net insurance claim revenue) amounting to 9,086 million baht.

- The share of net income from investments in associates increased by 225 million baht or 1.2% from 18,767 million baht in 2009 to 18,992 million baht in 2010 mainly due to;
- The lower performance of refining associates resulted from the lower stock and hedging gain when compared with previous year. In addition, aromatics business's performance also decreased, mainly due to the lower spread margins, especially Paraxylene.
- The higher performance of olefins petrochemical associates resulted from the increase

in spread margins of almost all products, resulted from the increasing demand following the world economic recovery.

- In 2010, the gain from exchange rate of PTT and its subsidiaries was 11,855 million baht, increased from 2009 by 7,172 million baht resulted from the baht appreciation.
- In 2010, the finance costs of PTT and its subsidiaries was 16,043 million baht, increased from 2009 by 1,824 million baht.
- The corporate income taxes increased by 5,792 million baht resulted from the increased operating income.

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

Unit: Million Baht

	2009	2010	Increase (Decrease)
Refining associates	15,742	12,435	(21.0%)
Petrochemical associates	3,322	6,296	89.5%
Oil associates	441	409	(7.3%)
Gas associates	(1,144)	(114)	90.0%
Other associates	406	(34)	(108.4%)
Total	18,767	18,992	1.2%



## The Analysis of PTT and its subsidiaries' consolidated Financial Status as at December 31, 2010, compared with December 31, 2009.

Unit: Million Baht

	Consolidated financial statements			
	Dec. 31, 2009	Dec. 31, 2010	Increase (Decrease)	
Assets				
Current assets	294,151	364,341	23.9%	
Investments in associates and other long-term investments	204,577	222,295	8.7%	
Property, plant and equipment, net	474,587	526,796	11.0%	
Non-current assets	129,229	135,716	5.0%	
Total assets	1,102,544	1,249,148	13.3%	
Liabilities				
Current liabilities	188,284	241,933	28.5%	
Long-term loans (including current portion)	354,888	370,989	4.5%	
Non-current liabilities	61,281	64,913	5.9%	
Total liabilities	604,453	677,835	12.1%	
Shareholders' equity				
PTT shareholders' equity	429,180	490,925	14.4%	
Minority interests	68,911	80,388	16.7%	
Total shareholders' equity	498,091	571,313	14.7%	
Total liabilities and shareholders' equity	1,102,544	1,249,148	13.3%	

#### Assets

Total assets as at December 31, 2010 was 1,249,148 million baht, increased by 146,604 million baht or 13.3% from the end of 2009 mainly due to the followings:

• Current assets increased by 70,190 million baht or 23.9% resulted mainly from the increase in cash and cash equivalents including current investments by 44,557 million baht as well as the increase in inventories and trade accounts receivable by 18,150 million baht and 11,517 million baht, respectively. While other accounts receivable, advances and short-term loans decreased by 5,927 million baht, mainly due to the decrease in accrued receivable from the Oil Fund.

• Investments in associates and other long-term investments increased by 17,718 million baht or 8.7% resulted from the share of net income from investments in associates for 2010 amounting to 18,992 million baht. In addition, there were IRPC's common stock acquisitions and additional investments in Energy and Petrochemical Index Fund (FAM EPIF) amounting to 2,520 million baht and 1,250 million baht, respectively. Moreover, there was the allowance for changes in value of long-term investments amounting to 3,849 million baht while there was dividend received from associates amounting to 8,714 million baht.

- · Property, plant and equipment increased by 52,209 million baht or 11.0% mainly from (1) the increase in net assets on petroleum exploration and production (oil and gas preperties) by 19,268 million baht, resulted from oil and gas properties of the Bongkot project, Arthit project and the PTTEP Australasia project (2) the increase in PTT's other projects amounting to 13,645 million baht which included the construction of the sixth gas separation plant, the Ethane Separation Plant and the fourth Transmission pipeline amounting to 3,149 million baht, 2,933 million baht and 1,816 million baht, respectively (3) the construction of LNG Receiving Terminal of PTTLNG amounting to 10,535 million baht (4) the construction of Acrylonitrile (AN) and Methyl Methacrylate (MMA) of PTTAC amounting to 3,874 million baht and (5) the construction of Ammonia Storage Tank and Facilities of PTT TANK amounting to 2,810 million baht.
- Other non-current assets increased by 6,487 million baht or 5.0%, mainly from, in 2010, the increase in advanced payments of PTTEP amounting to 10,312 million baht resulted from signing agreement of the Partnership Unit Sale Agreement with Statoil Canada Ltd. and Statoil Canada Holding Corp. in order to invest in Oil Sands Kai Kos Dehseh (KKD) with 40% share holding. In addition, deferred tax asset increased by 5,170 million baht, despite the advances for gas purchased decreased by 8,931 million baht.

#### Liabilities

Total liabilities as at December 31, 2010 was 677,835 million baht, increased by 73,382 million baht or 12.1% from the end of 2009, mainly from the increase in current liabilities by 53,649 million baht or 28.5%, mainly resulted from the increase in trade accounts payable by 35,166 million baht, short-term loans increased by 9,579 million baht, short-term liabilities for decommissioning costs increased by 3,092 million baht, and income tax payable and accrued expenses increased by 3,293 million baht, respectively.

Long-term loans (including the current portion due within a year) were 370,989 million baht, increased by 16,101 million baht or 4.5% due mainly to the Thai Baht debentures issuance of PTT and the USD loans amounting to 20,636 million baht and 9,802 million baht, respectively and the US dollar debenture issuance of PTTEP amounting to 700 million US\$ or equivalent to 20,928 million baht, as well as, a long-term loan of PTTAC amounting to 2,792 million baht. However, there were the redemption of PTT's bonds amounting to 9,000 million baht and the repayment of PTTEP's debentures amounting to 9,500 million baht and The maturities of loans are as follows:

Unit: Million Baht

Maturity (si December 3 2010)		PTTEP	PTTNGD	EnCo	PTTI	TTM (T)	TTM (M)	DCAP	PTTAC	НМС	Total
Within 1 year											
(December 31,											
2011)	27,006.65	-	100.80	230.00	-	681.67	49.79	-	-	274.84	28,342.75
Over 1 year,											
but not over											
2 years	30,180.85	21,787.71	100.80	230.00	-	681.67	49.79	37.41	590.67	395.47	54,054.37
Over 2 years											
but not over											
5 years	87,133.14	37,614.27	277.20	960.00	7,483.61	1,970.82	134.27	224.44	1,797.74	1,661.30	139,256.80
Over 5 years	121,864.48	10,491.30	-	3,580.00	-	5,955.25	206.69	336.66	2,989.84	3,184.16	148,608.37
Total	266,185.12	69,893.28	478.80	5,000.00	7,483.61	9,289.41	440.54	598.51	5,378.25	5,514.77	370,262.29

Note: Liabilities from finance leases are excluded.

The loans outstanding (including long-term loans and bonds due within 1 year and later than 1 year) as at December 31, 2010 consisted of loans in baht currency and foreign currencies, details of which are as follows:

Unit: Million Baht

Long-term loan	s PTT	PTTEP	PTTNGD	EnCo	PTTI	TTM (T)	TTM (M)	DCAP	PTTAC	НМС	Total
Baht currency	197,877.05	48,965.26	478.80	5,000.00	-	-	-	598.51	-	2,900.99	255,820.61
Foreign currencies	68,308.07	20,928.02	-	-	7,483.61	9,289.41	440.54	-	5,378.25	2,613.78	114,441.68
Total	266,185.12	69,893.28	478.80	5,000.00	7,483.61	9,289.41	440.54	598.51	5,378.25	5,514.77	370,262.29
Portion of long-term foreign currency loans to total long-term loans (%)	25.66%	29.94%	0.00%	0.00%	100.00%	100.00%	100.00%	0.00%	100.00%	47.40%	30.91%

As at December 31, 2010, the loans amounting to 18,576 million baht were guaranteed by the Ministry of Finance.

Other non-current liabilities increased by 3,632 million baht or 5.9% mainly due to the increase in liabilities from accrued interest payable from make-up right of gas amounting to 1,751 million baht resulted from the obligation which will be paid to the parties who paid for interest of advance payments of Yadana and Yetagun gas fields, as well as the deferred tax liabilities increased by 1,719 million baht.

#### Shareholders' Equity

Total shareholders' equity as at December 31, 2010 was 571,313 million baht, increased from the end of 2009 by 73,222 million baht or 14.7%, resulted from the un-appropriated retained earnings which increased by 56,820 million baht, mainly from PTT and its subsidiaries' net income in 2010 amounting to 83,088 million baht while there were dividend payment for 2H/2009 and 1H/2010 performances in this period amounting to 26,251 million baht. In addition, unrealized gain on available-for-sale securities increased by 2,739 million baht and loss on the currency translation differences increased by 1,198 million baht.

During 2010, 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 February, March, May, June, August and September. As a result, paid-up capital increased by 152.57 million baht (15,257,200 shares) and premium on ordinary shares increased by 3,032.76 million baht. As at December 31, 2010, there were unexercised warrants outstanding in the total amount of 8.20 million units which consisted of 0.59 million units of PTT-W1, being expired and unable to exercise (issued and offered on September 1, 2005), and 7.61 million units of PTT-W2, issued and offered on September 29, 2006 (the last exercise date is on September 28, 2011).

Minority interests increased by 11,477 million baht or 16.7% mainly due to net income from 2010 performances of minority interests amounting to 16,842 million baht, despite PTTEP's and PTTNGD's paid out of dividends amounting to 4,306 million baht and 294 million baht, respectively.

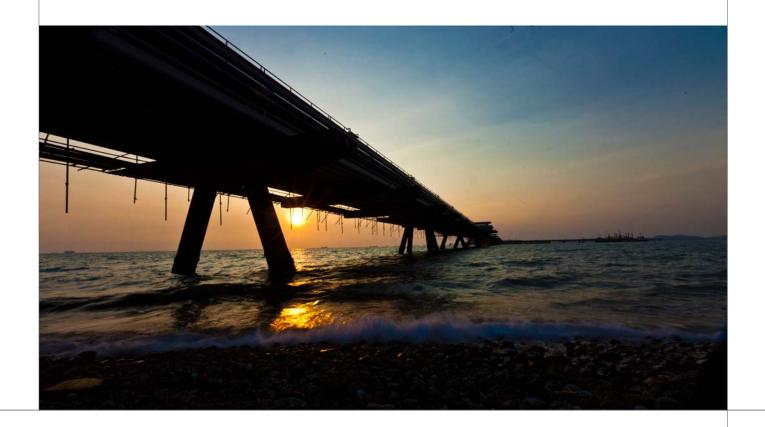
#### Liquidity

For the year ended December 31, 2010, net increase in cash and cash equivalents of PTT and its subsidiaries was 31,576 million baht, while cash and

cash equivalents at the beginning of the period was 104,056 million baht. As a result, cash and cash equivalents as at the end of the period was 135,632 million baht. Details of cash flow by activities are as follows:

	Amount (Million Baht)
Net Cash provided by operating activities	152,783
Net Cash used in investing activities	(123,810)
Net Cash provided by financial activities	3,761
Effects of exchange rates on cash and cash equivalents	(729)
Currency translation differences	(429)
Net increase in cash and cash equivalents during the period	31,576
Cash and cash equivalents at beginning of the period	104,056
Cash and cash equivalents at end of the period	135,632

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



### **PTT and Its Affiliates**

E&P Business Group Pe						
PTT Exploration and Production Plc.	PTTEP	65.34				
Gas Business Group	Pe	rcentage				
Trans Thai-Malaysia (Thailand)	TTM (T)	50.00				
Co., Ltd. Trans Thai-Malaysia (Malaysia)	TTM (M)	50.00				
Sdn. Bhd.						
PTT Natural Gas Distribution Co., Ltd.	PTTNGD	58.00				
PTT Utility Co., Ltd.	PTTUT	40.00				
District Cooling System and Power	DCAP	35.00				
Plant Co., Ltd.	TD	00.00				
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 CHPP	100.00				
Combined Heat and Power Producing Co., Ltd.	СПРР	100.00				
B.Grimm BIP Power Ltd.	B.Grimm BIP	23.00				
International Investment Busines	SS Group Pe	rcentage				
PTT International Co., Ltd.	PTTI	100.00				
PTT Green Energy Pte. Ltd.	PTTGE	100.00				
Oil Business Group	Pe	rcentage				
PTT (Cambodia) Co., Ltd.	PTTCL	100.00				
Subic Bay Energy Co., Ltd.	SBECL	100.00				
PTT Retail Business Co., Ltd.	PTTRB	100.00				
Retail Business Alliance Co., Ltd.	RBA	49.00				
Vietnam LPG Co., Ltd.	VLPG	45.00				
Thai Lube Blending Co., Ltd.	TLBC	48.95				
KELOIL-PTT LPG Sdn. Bhd.	KPL	40.00				
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 Trading Business Gr	oup P	ercentage
PTT International Trading Pte. Ltd.	PTTT	100.00
Petrochemical Business Group	P	- ercentage
PTT Chemical Plc. PTT Phenol Co., Ltd. PTT Polymer Marketing Co., Ltd. PTT Asahi Chemical Co., Ltd. HMC Polymers Co., Ltd. PTT Polymer Logistics Co., Ltd. PTT Maintenance & Engineering Co., Ltd.	PTTCH PPCL PTTPM PTTAC HMC PTTPL PTTME	48.68 40.00 50.00 48.50 41.44 100.00 40.00
PTT Tank Terminal Co., Ltd.  Refining Business Group	PTT TANK	100.00 ercentage
Thai Oil Plc. IRPC Plc. PTT Aromatics and Refining Plc. Star Petroleum Refining Co., Ltd. Bangchak Petroleum Plc.	TOP IRPC PTTAR SPRC BCP	49.10 39.02 48.60 36.00 28.29
Other Business Group	P	ercentage
Business Services Alliance Co., Ltd. Energy Complex Co., Ltd. PTT ICT Solutions Co., Ltd. Dhipaya Insurance Plc.	BSA EnCo PTTICT TIP	25.00 50.00 20.00 13.33

### **Revenue Structure of PTT and Subsidiaries** by Product Line

Decident 16	% Share- 2008 (Audited) rvice Operated by holding of		udited)	2009 (Au	udited)	2010 (Audited)		
Product / Service	Operated by	the Company	Million Baht	%	Million Baht	%	Million Baht	9
Natural Gas	PTT Plc. (Gas Business)		282,735.39	14.04	285,937.35	17.63	328,457.44	16.90
Products	PTT Plc. (Oil Business							
	and International Trading							
	Business)		41,182.40	2.05	46,584.41	2.87	68,409.13	3.5
	PTT Exploration and							
	Production Plc. (PTTEP)	1/	57,587.36	2.86	62,539.22	3.86	73,576.89	3.7
	PTT Natural Gas Distribution							
	Co., Ltd. (PTTNGD)	58.00	4,184.08	0.21	4,195.75	0.26	5,739.38	0.3
	Combined Heat and Power							
	Producing Co., Ltd. (CHPP)	100.00	-	-	-	-	149.58	0.0
	Less PTTEP's gas revenue		(57.404.04)	(0.05)	(50.474.05)	(0.50)	(74.050.45)	/0.7
	paid by PTT Plc.		(57,434.24)	(2.85)	(58,174.95)	(3.59)	(71,950.15)	(3.7
Total Revenue from	Natural Gas Products		328,254.99	16.31	341,081.78	21.03	404,382.28	20.8
2. Oil Products	PTT Plc. (Oil Business Unit							
	and International Trading							
	Business)		1,448,998.97	71.96	1,024,379.96	63.15	1,212,017.53	62.
	PTT Exploration and							
	Productinon Plc. (PTTEP)	1/	75,033.30	3.74	53,008.30	3.27	64,897.05	3.
	Less PTTEP's crude revenue							
	paid by PTT Plc.		(59,712.98)	(2.97)	(39,106.85)	(2.41)	(50,034.25)	(2.5
	PTT International Trading Pte. Ltd.							
	(PTTT)	100.00	43,332.14	2.15	51,842.74	3.20	77,084.47	3.
	PTT (Cambodia) Co., Ltd. (PTTCL)	100.00	4,282.10	0.21	3,079.58	0.19	4,246.83	0.
	Retail Business Alliance Co., Ltd.							
	(RBA)	49.00	412.28	0.02	0.28	-	-	
	Subic Bay Energy Co., Ltd. (SBECI		22,599.67	1.12	16,364.34	1.01	22,853.01	1.
	PTT Retail Business Co., Ltd. (PTTF	RB) 100.00	27,857.03	1.38	27,951.25	1.72	32,418.84	1.
Total Revenue from	Oil Products		1,562,802.51	77.62	1,137,519.60	70.13	1,363,483.48	70.
3. Petrochemical	PTT Plc. (Oil Business and							
Products	International Trading Business)		62,379.59	3.10	43,226.07	2.66	48,674.18	2
	PTT Polymer Marketing Co., Ltd.							
	(PTTPM)	2/	28,339.45	1.41	26,068.02	1.61	39,295.41	2.
	HMC Polymers Co., Ltd. (HMC)	41.44	7,854.08	0.39	6,232.21	0.38	6,760.58	0
Total Royanua from	Petrochemical Products		08 573 12	4.00	75 526 30	1 66	04 730 17	4.
Total Revenue from	Petrochemical Products		98,573.12	4.90	75,526.30	4.66	94,730.17	4

	oduct / Service		Share- lding of	2008 (A	udited)	2009 (A	udited)	2010 (Audited)	
PI	oduct / Service			Million Baht	%	Million Baht	%	Million Baht	%
4.	Coal Products	PTT International Co., Ltd. (PTTI)	3/	-	-	20,200.25	1.25	24,652.15	1.27
5.	Utilities Products	District Cooling System and Power Plant Co., Ltd. (DCAP) Energy Complex Co., Ltd. (EnCo) Combined Heat and Power Producing Co., Ltd. (CHPP)	35.00 50.00 100.00	574.41 - -	0.03	566.85 0.59 114.47	0.03	586.68 27.35	0.03
	Total Revenue from	Utilities Products		574.41	0.03	681.91	0.04	614.03	0.03
6.	Other Products	PTT Green Energy Pte., Ltd. (PTTGE)	100.00	-	-	106.22	0.01	151.28	0.01
7.	Revenue from Non-Core Business	PTT Plc. (Oil Business and International Trading Business) PTT Retail Business Co., Ltd. (PTTRB)	100.00	889.12 3,703.39	0.05 0.18	1,161.78 3,952.43	0.08 0.24	1,490.78 4,125.87	0.08 0.21
	Total Revenue from	Non-Core Business		4,592.51	0.23	5,114.21	0.32	5,616.65	0.29
8.	Revenue from Services	PTT Exploration and Production Plc. (PTTEP)  Trans Thai-Malaysia (Thailand) Co., Ltd. (TTM (T))  Trans Thai-Malaysia (Malaysia) Sdn. Bhd. (TTM (M))  PTT Natural Gas Distribution Co., Ltd. (PTTNGD)  PTT Polymer Logistics Co., Ltd. (PTTPL) Retail Business Alliance Co., Ltd. (RBA) Energy Complex Co., Ltd. (EnCo) Business Services Alliance Co., Ltd. (BS) PTT Retail Business Co., Ltd. (PTTRB)	49.00 50.00	4,131.14 1,474.42 79.44 62.06 62.09 31.00 - - 178.14	0.21 0.07 - - - - - - 0.01	3,762.60 1,603.74 88.47 - 121.65 55.24 1.53 109.69 201.26	0.23 0.10 0.01 - 0.01 - 0.01 0.01	3,504.18 1,449.67 86.16 - 399.55 - 352.58 347.17 235.21	0.18  0.07  -  0.02  -  0.02  0.02  0.01
	Total Revenue from	Services		6,018.29	0.28	5,944.18	0.37	6,374.52	0.32
	Total Revenue from	Products and Services		2,000,815.83	99.36	1,586,174.45	97.79	1,900,004.56	97.74
9.	Others 9.1 Other Revenue 9.2 Gain (loss) from	Foreign Exchange		19,081.99 -	0.95	12,454.05 4,682.72	0.77 0.29	13,006.28 11,855.37	0.67 0.61
	Total Other Revenue	•		19,081.99	0.95	17,136.77	1.06	24,861.65	1.28
10.	Share of net income under Equity method	(loss) from investment		(6,250.68) 2,013,647.14	(0.31)	18,766.83 1,622,078.05	1.16	18,992.42 1,943,858.63	0.98

**Notes:** 1/ PTT owned 65.54%, 65.43%, and 65.34% equities in PTTEP in 2008, 2009, and 2010 respectively.

<sup>2/</sup> On August 27, 2008, PTT disposed 25% common shares of PTTPM to IRPC. Therefore, PTT's shareholding in PTTPM decreased from 75% to 50%.

<sup>3/</sup> On April 28, 2009 PTT Mining Limited (PTTML), a subsidiary of PTTI, took over PTT Asia Pacific Mining Pty. Ltd. (PTTAPM).

#### **Connected Transactions**

## 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 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 PTTEP Plc.

#### Transaction

PTTEP and its subsidiaries produce and sell crude oil, natural gas, condensate, and LPG. For 2010, PTT was the major buyer of these, accounting for 88% by volume. As for natural gas, the two reached a long-term (25 - 30 year) deal, stipulating annual 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 associates

#### Transaction

PTT signed crude oil and petroleum product supply 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 buys 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 13<sup>th</sup> year from the date of completion of its refinancing 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 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 imported 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 under regular market prices.

#### Agreement with PTT Aromatics and Refining Plc. (PTTAR)

Listed on the Stock Exchange of Thailand (SET) on December 27, 2007, PTTAR resulted from the amalgamation between Aromatics (Thailand) Plc. (ATC) and Rayong Refinery Plc. (RRC). By law, as of December 31, 2008, PTTAR inherited the properties, liabilities, privileges, obligations, and responsibilities of both companies. The contracts between PTT and PTTAR consisted of the following:

#### Refining business:

PTT secures crude oil 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 needed 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 Offtake 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.

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

#### Aromatics business:

PTT also 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 AR2 is due to expire in June 2015; the agreement to supply the gas to 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 sales volumes for the products and obtains marketing fees from PTTAR. Note that these agreements specify the offtake volumes guaranteed 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 condition after 2007, that is, the

agreement would be regarded as automatically extended unless otherwise notified in advance.

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

The shareholders of SPRC are required to secure crude oil and take delivery of refined products from SPRC at no less than 70% of its 126,000-bbl/day (or 88,200-bbl/day) capacity at domestic market prices. For any surplus volume, PTT, Chevron (Thai) Co., Ltd. and Chevron (USA) 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 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 offtake 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 output at market prices.

On February 25, 2008, both companies signed a power purchase agreement, whereby PTT agreed to invest in a steam and electricity plant with 90 tons per hour and 19.7 megawatts in capacity for sale to BCP. The plant started its commercial operation on June 3, 2010.

#### Agreement with IRPC Plc. (IRPC)

PTT secures crude oil at market prices for IRPC under a one-year feedstock supply agreement, effective from January 1, 2009. The contract is to be made year by year.

PTT prepared a contract for refined products with IRPC at the latter's Chumphon Depot under market prices, effective January 1, 2009, for three years.

PTT also made another agreement for the service of the depot for loading, storage, and distribution of oil, effective January 1, 2009, for three years.

PTT prepared a gas sales agreement with IRPC for the consumption of gas in combined-cycle gas turbine engines, effective June 9, 2009, for 12 years at market prices.

### Transactions between PTT and Petrochemical affiliates

 Transactions and agreement with PTT Chemical Plc. (PTTCH)

PTT Chemical resulted from the December 7, 2005, merger between Thai Olefins Plc. (TOC) and National Petrochemical Plc. (NPC) under the Public Company Limited Act of 1992. The new company assumed all the assets, liabilities, privileges, obligations, and responsibilities of the two, and all contractual obligations binding TOC and NPC.

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

In 1999, ATC transferred to PTT its privileges and obligations under a 15-year light naphtha and raffinate supply agreement with PTTCH. PTT later concluded 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 1999, PTT signed a natural gasoline (NGL) supply agreement with PTTCH, effective for 15 years from the plant's start-up.

In 2000, 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 per year. Due to expire on May 31, 2021, the agreement is extendable for five years.

In 2006, PTT concluded an LPG supply agreement with PTTCH, whereby PTT would supply an additional 13,000 tons per month of LPG as feedstock for the olefins capacity expansion project managed by PTTCH, which completed the upgrading in 2007.

Also 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 film-grade 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 contract 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 per month, with effect from June 1, 2010, for one year. PTT also made an LPG supply agreement with PTTCH for 28,000 tons per month, with effect from November 25, 2010, for one year (extendable for one year).

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

PTT concluded a feedstock supply agreement with HMC since 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 Chemicals 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 (expected for the second quarter of 2011) 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

These 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 Profession.

#### **Business Assets Review**

As of December 31, 2010, the core assets used by PTT and its subsidiaries in conducting their businesses had a net value after accumulated depreciation and allowance for impairment consisting of property, plant and equipment-net of 526,796 million baht, mining properties-net of 32,699 million baht, intangible assets-net with a value after accumulated amortization of 18,943 million baht.

Details appear in the notes to financial statements for PTT and its subsidiaries ended December 31, 2010: item 12, property, plant, and equipment-net, item 14, mining properties-net, and item 13, intangible assets-net.



#### **Risk Factors**

Implementing its continued risk management efforts, PTT managed its risk factors reasonably well in the past year. New risk factors have been identified and managed under the current year's risk management plan. Therefore, PTT continues to improve this Risk Factors section to better reflect risks apparent to investors. The main risk factors are described below.

#### 1. Strategic Risks

## 1.1 Risks from business strategy implementation

With a vision that emphasis on continuous and sustainable business growth, PTT has set a goal of becoming a Thai premier multinational energy company, as well as its international-business goals. 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, as well as investment in new related businesses.

There are fierce competition, global and domestic economic recovery still fraught with uncertainty, oil price volatility, investors' expectations, and the diverse needs of its

stakeholders. These could put PTT at risk at attaining the setting goals and business strategies while confronting 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. These could impact PTT's overall performance and return on investment alike.

To cope with this, the Company has initiated a so-called Top Executive Thinking Session (TTS) among top management and a Strategic Thinking Session among senior PTT executives to define and review the vision, direction, and business strategies to be in line with economic and energy circumstances. Furthermore a business plan is conducted in the form of scenario planning, in which assumptions were made for different economic growth figures and oil prices for PTT to be prepared for future changes and uncertainty. In addition, monthly performance monitoring is mandate, and at least every quarter,



senior executives of PTT Group meet to monitor performance and exchange 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

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

To mitigate 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 as the first, which is supervised by a career advisory panel. 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

During the past year, PTT kept up its sourcing negotiation efforts for additional gas supplies from domestic sources and Myanmar, as well as negotiations for supply of LNG (liquefied natural gas) from sellers in assorted regions to meet the projected gas demand. These contracts are made

in advance and incorporated the demand to sustain the economic situation and the expansion of petrochemical business, which rely on feedstock from gas separation plants.

Each gas sales agreement (GSA) specifies a minimum annual contractual quantity to be taken by PTT as the buyer; otherwise, PTT is required to pay in advance for the volume not taken during that contract year under the so-called take-or-pay condition. However, the Company may take this pre-paid gas in later years without paying. However, the minimum volume make-up for the year in question has to be fullfilled first. 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 may arise 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 concerning the supply and demand for natural gas while closely coordinating with the sellers and the buyers on preparing 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 so-called "carry forward" gas, specified in certain GSAs. As for the "make up" gas volume from Yadana and Yetagun, for which PTT has paid, this portion of gas cost less than the current prices; such price margin has alleviated the resulting interest burden.

## 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 world market prices. However, the recent world

prices of natural gas, condensate, crude oil, petroleum products, and petrochemicals have proved highly 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.

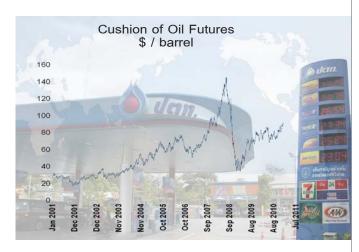
To lower these risks, PTT Group management has focused on optimizing risk management for feedstock and product prices, including buying and selling prices for crude oil and petroleum products, by appointing the Group's price risk management team. Today, to manage price risks, the group is engaged in 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 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, by virtue 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 assorted measures for the sales 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 constant 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, 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 leakages, the down cycles of petrochemical and refining businesses, competitors from the Middle East with lower production costs, risks from changes in laws and regulations, and delays of projects in Map Ta Phut Industrial Estate as a result of the Central Administrative Court's injunctions. 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 (SCM). The Company 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 alleviate 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 instituted 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. Project Execution Risks

# 3.1 Risks from development of gas transmission systems, gas separation plants, and petrochemical plants

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 environmental and health impact assessments (EHIAs). Therefore if projects are delayed, PTT's financial standing and performance could be affected.

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. Operation Risks

#### 4.1 Risks from operations

Hazards are inherent to the exploration, 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.

The Company therefore values risk management by taking due measures for all its production facilities, which include preventive maintenance of petroleum pipelines and machinery of all operating units, application of security systems, and institution of emergency and crisis response preparation measures, as well as the formulation of strategic and operating plans to support business continuity management. Like other companies in the petroleum and petrochemical industries, it has taken out insurance policies to protect its major operating assets against risks and business interruption.

## 4.2 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 the Company's operation or significantly raise operating costs. Besides, risks could arise in the time required and conditions for the approval of EHIAs, including the participation process and community acceptance, which may cause project delays including community acceptance of PTT's business in all its operation 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.

#### 5. Financial Risks

#### 5.1 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 alleviate this risk, PTT has balanced its foreign loans in proportion to its revenue from foreign currencies (in short, 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 for use as a common guideline for PTT Group, which includes terms of reference for instituting assorted risk management.



## 5.2 Risks from financial support to affiliated companies

In the past and during the recent Asian economic crisis, the Company 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 the Company'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 members of 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. Hence, such consolidation may affect PTT's overall financial status.

## 5.3 Acquisition of funds for plan execution

The businesses of PTT - in particular, petroleum exploration and production, natural gas transmission system, gas separation plant, as well as the petrochemical and refining businesses - require huge capital investments that are paid in advance. Although the Company 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.

Owing 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 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.



### **Capital Structure**

#### PTT's Securities

#### Common shares

As of year-end 2010, PTT commanded 28,572,457,250 baht in registered capital, consisting of 2,857,245,725 common shares at 10 baht per share. Of these, issued and paid-up capital amounted to 28,490,420,250 baht, consisting of 2,849,042,025 common shares.

#### **Bonds and debentures**

As of year-end 2010, PTT had secured domestic loans of 18,000 million baht in the form of PTT bonds, guaranteed by the Ministry of Finance, together with bonds and debentures not guaranteed by the ministry, worth 160,161 million baht, for a total of 178,161 million baht. Foreign loans were in the form of PTT debentures of US dollar and yen denominations, not guaranteed by the ministry, equivalent to 43,220 million baht. These bonds and debentures are summarized below.

Bond and Debenture	Amount (Million Baht)	Redemption Date	Guarantee
Ministry of Finance-guaranteed PTT bonds			
Domestic bonds	18,000	2011 - 2020	None
PTT bonds not guaranteed by the Ministry of Finance			
<ul> <li>Domestic bonds</li> </ul>	-	-	-
<ul> <li>Domestic debentures<sup>1/4/</sup></li> </ul>	160,161	2011 - 2110	None
<ul> <li>Foreign debentures<sup>2/3/4/</sup></li> </ul>	43,220	2011, 2014,	None
		2017, 2022, 2035	
Total	203,381		
Grand total	221,381		

- 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 A3 with a stable credit outlook and then reduced to A3 with a negative outlook on October 28, 2010.
- 3/ S&P's international rating of foreign PTT debentures at BBB+ with a stable credit outlook and then reduced to BBB+ with a negative outlook on December 10, 2010.
- 4/ See details of domestic and foreign PTT debentures.

#### Domestic, unsecured, unsubordinated debentures

Debenture Code	Amount (Million Baht)	Annual Interest Rate (%) (Payment Frequency)	Maturity Period (Years) / Redemption Schedule
PTTC11DA	3,356.50	6.7 (every six months)	Six / 2011
PTTC11DB	4,000	6.7 (every six months)	Six / 2011
PTTC11OA	4,000	5.53 (every six months)	Five / 2011
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
PTTC13OA	7,450	(Year 1 - 3) 5, (Year 4 - 5) 5.50 (every six months)	Five / 2013
PTTC13OB	5,400	(Year 1 - 3) 5, (Year 4 - 5) 5.50 (every six months)	Five / 2013
PTTC14DA	2,946	(Year 1 - 3) 5, (Year 4 - 7) 5.95 (every six months)	Seven / 2014
PTTC15OA	2,550	(Year 1 - 3) 5, (Year 4 - 5) 5.50, (Year 6 - 7) 6 (every six months)	Seven / 2015
PTTC15OB	2,600	(Year 1 - 3) 5, (Year 4 - 5) 5.50, (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) <sup>1/</sup>	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
PTTC16OA	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

Debenture Code	Amount (Million Baht)	Annual Interest Rate (%) (Payment Frequency)	Maturity Period (Years) / Redemption Schedule
PTTC195A	1,000	5.90 (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) 6.20, (Year 9 - 15) 6.80 (every six months)	Fifteen / 2024 (redeemable after Year 8)
PTTC127A	8,500	3.20 (every six months)	Three / 2012
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) 5.50, (Year 11 - 15) 5.75 (every six months)	Fifteen / 2024 (redeemable after Year 10)
PTTC14DB	6,000	3.20 (every six months)	4 years and 15 days / 2014
PTTC17DB	4,000	(Year 1 - 4) 3.20, (Year 5 - 6) 4.20, (Year 7) 5 (every six months)	7 years and 15 days / 2017
PTTC10DA	4,000	5.90 (every six months)	100 years / 2110

1/ On January 12 - 13, 2010, PTT entered into an interest rate swap (agreement) for 4,040 million baht of the baht-denominated debentures due for principal repayment on June 20, 2015, under which the interest rate was modified from 4.75% per year to a floating rate of 6M THBFIX + 0.89-1.19% per year. A part of this agreement contained conditions for revoking the agreement ahead of schedule by the contract partners.

In May, PTT revoked its commitment to pay the burden under the above-mentioned agreement for 2,040 million baht's worth of baht debentures, entitling it to derive compensation from its contract partners (financial institutions). In December, these contract partners revoked all commitments for baht denominations worth 4,040 million baht, resulting in a return of the former interest rate conditions for the debentures at 4.75% until maturity.



#### Foreign, unsecured, unsubordinated debentures

Debenture Code	Amount (Million Baht)	Annual Interest Rate (%) (Payment Frequency)	Maturity Period (Years) / Redemption Schedule
USD bond, 2004	12,067.16	5.75 (every six months)	Ten / 2014
USD bond, 2005	10,278.83	5.875 (every six months)	Thirty / 2035
Samurai bond, 2007	8,801.371/	2.71 (every six months) <sup>2/</sup>	Ten / 2017
PTTC11DA swapped to USD	3,286.60 <sup>2/</sup>	5.44 on average (every six months)	Six / 2011
PTTC14DA swapped to USD	2,726.67 <sup>3/</sup>	4.74 on average (every six months)	Seven / 2014
PTTC172DA swapped to USD	1 2,406.904/	LIBOR plus 1.04% (every six months)	Seven / 2017
PTTC222A swapped to USD	3,652.36 <sup>5/</sup>	LIBOR plus 1.05% (every six months)	Twelve / 2022

- 1/ PTT entered into a cross-currency swap from yen-denominated debentures worth 36,000 million yen to dollar-denominated ones worth 290.51 million US\$ and used financial derivatives to conduct a switchable swap and a cross-currency swap linked to LIBOR as follows: 96.84 million US\$ at a fixed rate of 4.975% per year, convertible by a derivative into a floating rate at LIBOR + 0.65% per year; another 96.84 million US\$ at a floating rate of LIBOR + 0.20% per year if LIBOR exceeds 4.25% per year, or 5.50% per year if LIBOR is up to 4.25% per year; and another 96.84 million US\$ 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 3,643.50 million baht to dollar-denominated ones worth 108.48 million US\$ at a fixed rate averaging 5.44% per year. The principal amount fell from 7,000 million baht to 3,643.50 million baht because, on November 1, 2010, PTT agreed to revoke its cross-currency swap burden for 100 million US\$, thus returning 3,356.50 million baht of its loans to baht-denominated ones.
- 3/ PTT entered into a cross-currency swap from baht-denominated debentures worth 3,054 million baht to dollar-denominated ones worth 90 million US\$ at a fixed interest rate averaging 4.74% per year, thus leaving 2,946 million baht in baht-denominated loans.
- 4/ PTT entered into a cross-currency swap from baht-denominated debentures worth 2,636 million baht to dollar-denominated ones worth 79 million US\$ at a floating interest rate of 6mLIBOR + 1.04%.
- 5/ PTT entered into a cross-currency swap from baht-denominated debentures worth 4,000 million baht to dollar-denominated ones worth 121 million US\$ at a floating interest rate of 6mLIBOR + 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 governing 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. Here is a detailed summary of the allocation:

Portion	Units	Life (Years)	Value (Baht)	Ratio of Warrants Exercised (Common Shares)	Exercisable Period Details
1.	10,000,000	5	183	1:1	<ul> <li>First exercisable date was August 31, 2006, then every last operating date of every three months from the above-mentioned date through the life of the warrants.</li> <li>The last exercise date is September 28, 2010.</li> </ul>
2.	10,000,000	5	183	1:1	<ul> <li>First exercisable date was August 31, 2007, then every last operating date of every three months from the above-mentioned date through the life of the warrants.</li> <li>The last exercise date is September 28, 2010.</li> </ul>
3.	10,000,000	5	183	1:1	<ul> <li>First exercisable date was August 31, 2008, then every last operating date of every three months from the above-mentioned date through the life of the warrants.</li> <li>The last exercise date is September 28, 2010.</li> </ul>
4.	10,000,000	5	183	1:1	<ul> <li>First exercisable date was August 31, 2009, then every last operating date of every three months from the above-mentioned date through the life of the warrants.</li> <li>The last exercise date is September 28, 2010.</li> </ul>

All PTT-W1 warrants expired on August 31, 2010. From their dates of issue and offer to the last exercise date of August 31, 2010, a total of 39,407,300 units were exercised.

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 11, 2006, the 2006 AGM approved the issuance and offer of all PTT-W2 units governing 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. Here is a detailed summary of the allocation:

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, 2007, then every last operating date of every three months from the above-mentioned date through the life of the warrants.  The last exercise date is September 28, 2011.
2.	5,000,000	5	234	1:1	First exercisable date was September 28, 2008, then every last operating date of every three months from the above-mentioned date through the life of the warrants.  The last exercise date is September 28, 2011.
3.	5,000,000	5	234	1:1	• First exercisable date was September 28, 2009, then every last operating date of every three months from the above-mentioned date through the life of the warrants.  The last exercise date is September 28, 2011.
4.	5,000,000	5	234	1:1	First exercisable date was August 31, 2010, then every last operating date of every three months from the above-mentioned date through the life of the warrants.  The last exercise date is September 28, 2011.

From their first date of issue and offer to December 30, 2010, a total of 12,389,000 units were exercised.

Notes: • 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.

#### PTT Plc.'s Equity Structure

Below is the equity structure of PTT as of September 10, 2010.

Item	Shares (in million)	Value (Million Baht)	%
Registered Capital	2,857	28,572	-
Paid-Up Capital as of September 10, 2010	2,842	28,424	100.000
Ministry of Finance	1,460	14,599	51.360
<ul> <li>Vayupak Fund 1 by MFC Asset Management Plc.</li> </ul>	218	2,179	7.666
<ul> <li>Vayupak Fund 1 by Krung Thai Asset Management P</li> </ul>	lc. 218	2,179	7.666
<ul> <li>Institutional and Public Investors</li> </ul>	946	9,467	33.308
Unpaid Capital	15	148	

Its top 10 sha	reholders as	of September 10, 2010.	were as follows:

Item	Name	Shares	%
1.	Ministry of Finance	1,459,885,575	51.360
2.	Vayupak Fund 1 by MFC Asset Management Plc.	217,900,000	7.666
3.	Vayupak Fund 1 by Krung Thai Asset Management Plc.	217,900,000	7.666
4.	Thai NVDR Co., Ltd.	87,699,856	3.085
5.	Chase Nominees Limited 42	65,606,001	2.308
6.	HSBC (Singapore) Nominees Pte. Ltd.	50,018,609	1.760
7.	State Street Bank and Trust Company	42,167,848	1.484
8.	Nortrust Nominees Ltd.	30,422,534	1.070
9.	Social Security Office (2 cases)	27,911,400	0.982
10.	The Bank of New York Mellon	17,301,143	0.609
	Total	2,216,812,966	77.990

- Notes: 1. Numbers 5, 6, and 8 were nominee accounts. PTT's investigation at Thailand Securities Depository Co., Ltd., 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, exercised no influence over PTT's management policy formulation by 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 amounting to no less than 25% of its net income after deducting all provisional reserves defined by law and the Company based on the net income in its consolidated financial statements. Such dividend payment, however, is subject to future investment plans, necessity, and suitability. After deciding on dividend payment, the Board must propose the payment for approval by a shareholders' meeting. The Board may also approve an interim dividend payment and then report to the shareholders at their next meeting.

#### Subsidiaries' dividend policy

Each subsidiary bases its dividend payment on the cashflow balance relative to its investment outlay. If the cashflow balance proves adequate after legal reserve provisioning, the subsidiary may consider paying dividends on a case-by-case basis.

#### PTTEP Plc.'s dividend policy

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

### **Management Structure and Corporate Governance**



PTT constantly recognizes that all shareholders own this company. What gives the shareholders trust and confidence in your 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 team member and the rank and file to sign, acknowledge and comply with. The 2001 handbook was the first and the Board of Directors have continually improved on two more handbooks in 2005 and 2008 in line with the changing business and social environment, so as to align with the SET principles of good corporate governance, 2006 version, for listed companies as well as the Organization for Economic Co-Operation and Development (OECD) Principles of Corporate Governance in five sections, namely the rights of shareholders, equitable treatment of shareholders, roles of stakeholders, information disclosure and transparency and the responsibility of the Board. New topics - respect for human rights and for consumers' rights - were added to suit business circumstances and laws. Such handbooks were regarded as a code of ethics under the Thai constitution of B.E. 2550 (2007). The revised 2009 Handbook and the Code of Conduct were disseminated on PTT's intranet and website. Below are the essences of PTT's corporate governance practices:

#### 1. Shareholders' Rights

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 therefore 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' interest or involve conditions, regulations and laws that require the shareholders' approval, it calls an extraordinary meeting of the shareholders. In 2010, the AGM fell on April 9 with the venue being Queen Sirikit National Convention Center 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., 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 advisor 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 resolved to change the order of the agenda, it would need at least two-thirds of the vote of the shareholders in attendance. Or 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 2010 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 2010 began at 9.30 a.m., and was adjourned at 1.11 p.m., with the following attendees:

# The list of board and executives attending 2010 AGM

Board of Directors	Position
1. Dr. Norkun Sittiphong	Chairman
2. Mr. Chakramon Phasukavanich	Independent Director / Chairman, Audit Committee / Chairman, Nominating Committee
3. Khun Pornthip Jala	Independent Director / Member, Audit Committee
4 Mr. Chaikasem Nitisiri	Independent Director / Chairman, Corporate Governance Committee
5. Mr. Chulayuth Hirunyavasit	Independent Director / Member, Audit Committee / Member, Nominating Committee
6. Mr. Surachai Phuprasert	Independent Director / Member, Remuneration Committee
7. Mrs. Benja Louichareon	Director
8. Dr. Naris Chaiyasoot	Director
9. Mr. Anuwat Maytheewibulwut	Independent Director
10. Dr. Surapon Nitikraipot	Independent Director / Member, Corporate Governance Committee
11. Mr. Watcharakiti Watcharothai	Independent Director / Member, Corporate Governance Committee
12. Mr. Pichai Chunhavajira	Director
13. Mr. Prasert Bunsumpun	Director & Secretary to the Board / President & CEO
Executives	Position

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

COO, Downstream Petroleum Business Group

EVP, Corporate Communications & Socail Responsibility

Ex	kternal Auditors	Position
1.	. Ms. Chalalai Suksatith	Office of the Auditor General of Thailand
2.	Ms. Mayuree Chantamart	Office of the Auditor General of Thailand
3.	Ms. Phissamai Chalamket	Office of the Auditor General of Thailand
4.	. Ms. Jintana Chayakul	Office of the Auditor General of Thailand

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

1.	Mr. Visitsak Arunsurat	Weerawong, Chinnavatra & Peangpanor Ltd.
2.	Mr. Akraphol Phichedvanitchok	Allen & Overy (Thailand) Co., Ltd.
3.	Ms. Manunya Thitinuntawan	Allen & Overy (Thailand) Co., Ltd.

CFO

### Number of shareholders (at meeting end)

1. Mr. Tevin Vongvanich

3. Mr. Attapol Rerkphiboon

2. Dr. Prajya Phinyawat

4,357 shareholders registered, holding the total of 2,383,437,384 shares, accounting for 84.07% of the total shares sold.

# 1.4 Practical Guidelines for Reporting Conflicts of Interest

As specified by the Corporate Governance Handbook, all directors, management team members, and the rank and file 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. 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, take care of, and provides convenience adequately. Meeting venues are well-chosen to facilitate the elderly and those in 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 disclosed 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 Stakeholders

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:

For Thailand: We are committed to continuing fostering long-term energy security through supplying

sufficient volumes of products of world-class quality and at fair prices to grow the economy.

For society and We are committed to being a good corporate citizen by preventing adverse environmental communities:

impacts while operating with world-class standards and taking part in improving lives for

communities and society.

For the shareholder: We are committed to running commercial business for profits and healthy returns.

For the customer: We are committed to bolstering customers' satisfaction through offering products

and services of world-class quality at fair prices.

For business partners: Together, we are committed to engaging ourselves in fair competition and fostering

positive relationship and cooperation to strengthen our potential and efficiency for

long-term business enterprise.

For employees: We are committed to continuously encouraging professionalism and bolstering

confidence in their quality of life on par with employees of peer companies to

produce employee engagement.

# 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 adequate address the needs of the country while accommodating the 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 business consists of procurement and supply, transportation, distribution, gas processing, and investment in NGV service stations, in addition to businesses that exploits and adds 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. In 2010, 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. In 2010, PTT distributed over 13,925 million liters and constantly promoted bio-fuels-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.

For details about performance in 2010 and other business details, refer to "Performance Review 2010".

### 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 in 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.

In 2009 and 2010, PTT prepared an approach for executing Group social responsibility and implemented it in pilot volunteer areas, and then assessed the alignment of actual execution against the CSR framework, or the Gap Assessment. The findings serve as data for the preparation of enterprise action plans. And to show responsibility to stakeholders and society in tandem with business efficiency and growth enhancement, apart from getting ready to move into international standards, PTT encouraged Khanom Gas Separation Plant to join the project. The plant won certification for conforming to the Standard for Corporate Social Responsibility-Department of Industrial Work: (CSR-DIW,) following in the footstep of Rayong GSP in 2008.



Debenture holder joined patisserie class.

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 proceeding with social and community development work continually, 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 the "Power for Sustainable Future".

For details of 2010 activities, please refer to the "Power for Sustainable Future" and the CSR Report of PTT Group.

#### 3.1.3 Shareholders

The Sustainable Growth Strategy finds application in PTT management to achieve a high-performance organization 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

In 2010, PTT invited shareholders to visit Rayong GSP and the Princess Maha Chakri Sirindhorn Herb Garden. These 480 visitors were minor shareholders, divided into three batches of 160 each. Their visits on November 29 - 30 and December 1 enabled them to see PTT's operations, get information, and meet PTT executives, in addition to participation in social responsibility activities for the benefit of Rayong communities and environment.

PTT mailed invitations and reply letters to the shareholders whose name appeared on the roster on the registration book closing for interim dividend of 2010 on September 10, 2010. With an overwhelming response from more than 2,600 investors, PTT drew lots to decide the actual visitors' names, witnessed by the media on November 1 and announced the results on its website on November 3. In addition, PTT officers phoned the winners to confirm their interest. This year, the winners also got free saplings under the "One Million Trees for the King", a social, community, and environmental responsibility designed to foster awareness of environmental preservation.

Those interested in visiting PTT's operations in 2011 can follow project updates and details on PTT's website. Things get started around early November, and only those that have never taken part in this activity are eligible.



The Infinite Miracle concert for debenture holders

PTT the Infinite Miracle concert was organized at Muang Thong Thani as an activity to entertain 14,000 PTT debenture holders and their guests. At the concert, PTT Volunteer Club also opened a donation counter for those who wish to donate money for blind students as their educational fund. PTT debenture holders can follow up activities as well as getting updated with interesting information of knowledge or lifestyle through PTT's quarterly magazine "Happiness".

#### Activities for Institutional Investors

In 2010, PTT organized regular company visits and meetings with its executives for institutional investors and securities analysts in January and organized a visit to Lampang Petroleum Terminal. There such visitors learned about PTT's business direction from executives directly and also had an opportunity to be involved in PTT's social responsibility activities, including donation of educational tools and scholarships to schools in Lampang.

#### 3.1.4 Customers

PTT takes customers' satisfaction seriously. 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 customers' and consumers' 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, 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 key to consumers' decisions. Yet, as a rule, PTT is the last company that raises domestic retail prices so as to ease consumers' burdens.



PTT Service Station Dealer Seminar

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 address consumers' diverse needs. New products were introduced in 2010, 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.

(Details for 2010 appear under "Sustainable Energy for Thailand" and "Performance Review 2010".)

### 3.1.5 Business Partners

PTT values its business partners because they are key to business success through mutual support, ranging from sourcing to further business details. Therefore, PTT must treat business partners on the same footing and on the basis of fair competition and mutual respect. 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' operation 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.

In 2010, 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.



PTT Group Sports Day

### 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 the law governing labor unions and state enterprise relations. PTT will not obstruct labor union's activities unless they are in serious violation of the law and business ethics, or will seriously harm PTT's interests.

Convinced that the quality of its people is the key to its high performance, PTT has committed to the development of human resource management system 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 on the employees that PTT focuses on its development towards a high-performance organization to increase competitiveness and respond to the changes in the organization.







PTT executives and employees gathered to make merit on PTT Establishment Day (2010).

#### Number of Personnel and Compensation

As of December 31, 2009, the PTT employee head count (including those who were seconded in PTT's affiliates) stood at 3,681, rising through 2010 to 3,800. Throughout the year 2010, PTT continued to set its manpower plan to align with its operation under the uncertainty of economic conditions, with the focus on allocating resources where

significant value supplementation was likely or where continuing investment was needed. PTT formulated human resource plans and earnestly developed the potential of its employees at all levels as well as streamline its business procedures.

The head counts for each business unit from 2007 to 2010 were as follows:

Unit: Persons

Positioned Hotel	20	007	20	008	20	009	20	010
Business Unit	PTT	PTT Group	PTT	PTT Group	PTT	PTT Group	PTT	PTT Group
1. Gas	1,108	-	1,162	-	1,196	-	1,206	-
2. Oil	1,254	-	1,234	-	1,199	-	1,182	-
3. Petrochemicals and Refining	75	-	70	-	72	-	61	-
Support Staff / Secondees to     PTT Affiliates	851 <sup>1/</sup>	256 <sup>2/</sup>	8991/	271 <sup>2/</sup>	9381/	276 <sup>2/</sup>	1,077 <sup>1/</sup>	274 <sup>2/</sup>
5. Subsidiaries and Jointly Controlled Entities	-	7,086	-	7,718	-	7,676	-	8,743
Total	3,288	7,342	3,365	7,989	3,405	7,952	3,526	9,015

Notes: 1/ Excludes PTT secondees
2/ Includes PTT secondees



PTT Group's employees joined 2010 family rally.

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

Unit: Baht

Compensation	2007	2008	2009	2010
Salary	2,523,442,073	2,775,721,471	2,900,872,989	2,976,806,620
Bonus	1,263,194,610	1,258,216,945	1,336,855,751	1,482,437,324
Provident Fund Contribution	249,207,450	274,276,975	280,726,154	284,638,508
Others (If Applicable)	1,104,896,055	1,376,170,707	1,346,214,160	1,592,691,853
Total	5,140,740,190	5,684,386,099	5,864,669,055	6,336,574,305

#### 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 rent allowance, relocation and overtime pay. In 2005 and 2006, PTT allocated 60 million units of warrants or the rights to purchase common shares twice, to

the President, the management, employees and employees from affiliated companies serving PTT as an incentive 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".



PTT President & CEO gave information regarding operating policy to employee.

# Human Resource System Development and Improvement

To become a high-performance organization, in 2010, PTT improved the process and mechanism for human resource management to ensure higher efficiency and realize the full potential of its employees. PTT employees would be able to fully demonstrate their competence, advance in their career and continue to grow with PTT. The elements of PTT's success included:

# 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 as this is a cornerstone to a high-performance organization. Below was an excerpt of the CEO/President's view on the Learning Organization:

"To become a Learning Organization, we rely on human intelligence. Learning is an ongoing, lifelong process".

# 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 while observing Corporate Governance principles. PTT was convinced that achievement of competence and righteousness will foster sustainable growth for the Company.

In 2010, knowledge and experiences were shared on human resource management system and a compensation survey was jointly undertaken with cooperation from Thailand's seven leading companies and companies dealing in the oil and gas business.



Top Executive signed the MOU on the Company 2010 Operating Result and KPI

# 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, as 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 defined vision and direction 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.

In 2010, all PTT employees defined individual objectives and Key Performance Indicators (KPIs) cascaded through the ranks from the corporate, department down 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 the handbook and introduced various systems to increase efficiency in human resource management such as the competency

of the 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

At the heart of human resource management is human resource development. PTT has developed career management processes for greater efficiency by dividing employees into two groups with clear and efficient linkage: senior management and the rank and file.

- Senior management (from vice presidents upward): It is in the form of Group Leader Development which sustains the needs of high-level executives in both quantity and quality with a recruitment, assessment, and development system in place. This is under the auspices of the PTT Group Human Resources Management and Development Committee (PTTGMC).
- Staff: This internal management is specific to PTT or a PTT Group company. A Career Management Counseling Committee (CMCC) and 14 Career Counseling Teams (CCT) are appointed to take charge of defining and developing individuals to be properly knowledgeable and competent to sustain future business directions. Career



PTT Outstanding Employee Award (2010)

management is designed for individuals to accumulate maximum knowledge and skills for their career paths and prepare them for future senior management roles. Each department, its management and the rank and file staff jointly dictate the approach for staff development through proper training by competency and career profile. Job rotation provides staff with new responsibilities to 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.

In 2010, PTT defined a Group Leadership Development Program (GLDP), Leadership Development Program (LDP) for the management levels 10 - 12 and prepared Individual Competency Development Program (ICDP) which brought out the potentials of the leaders and the staff to drive PTT toward the organization's 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. In 2010, 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 lead to positive relations too, which will lead the organization toward the same goals. Moreover, PTT surveyed the basic human resource needs of the management and staff through the operations of numerous committees such as the human resource management committee, PTT labor relations committee, and career path management committee. The survey of the staff's opinion was undertaken once by an external human resource management advisor. 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 encouraged Core Values through "PTT SPIRIT" activities

### PTT Group Core Values

In 2008, core values known as "PTT Group Core Values" or simply **SPIRIT** were coined. The intent of these values is to forge belief, decision-making and behavior that align with the vision of PTT Group and promote a quality of life for the employees.

**S** = Synergy

**P** = Performance Excellence

= Innovation

**R** = Responsibility for Society

I = Integrity & Ethics

**T** = Trust & Respect

In 2010, the practical directions of the main behavior of SPIRIT were set forth by focusing on strategies, communication, leadership, networking system within the organization, culture and employee engagement, as well as the image of the organization through interviews, questionnaires and focus group meetings for the management in PTT Group.

#### 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 had 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 person for more than two consecutive terms.

PTT has continually taken development steps to nominate the next President & CEO, and to prepare for the retirement of senior management team members in 2007 - 2012 under succession planning under PTT Group's policy/guidelines. A management pool has been developed, consisting of 350 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 Human Resources Management and Development Committee (PTTGMC)
- PTT Group Executive Counseling Team (ECT)
- Corporate Human Resources Committee (HRC)
- SEVP, Human Resources and Organization Excellence or equivalent in PTT Group
- EVP, Corporate Human Resources of PTT
- Human Resources Strategy Policy Department
- Leadership & Talent Management Department
- Human Resources Management Department of each business group
- · Learning & Development Center 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:

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

#### Performance in 2010

- Selection of SEVP pool members from EVPs
  - 52 pool members (as of December 1)
  - 9 pool members already promoted (2007 2010).
- Selection of EVP pool members from VPs
  - 73 pool members (as of December 1)
  - 7 pool members already promoted (2008 2010).
- Selection of VP pool members from PTT division managers
  - 106 pool members (as of December 1)
  - 14 pool members already promoted (2009 2010)
  - Prepared an SEVP Career Path for PTT Group.

# 3.2 Respect for International Human Rights Principles

PTT requires that all of its directors, the management and employees observe laws, customs, and culture which differ in each country PTT invests in and strictly respect the international human rights principles under the Universal Declaration of Human Rights. Nor does it condone its violation. Details on its 2010 actions on this matter appear in the PTT Group's CSR Report.

# 3.3 Significant Disputes with Stakeholders

In 2009, the Company was engaged in no dispute with significant stakeholders.

# 4. Disclosure of Information and Transparency

Disclosure of information is a key index of transparency, an important factor to create confidence to investors and all 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, campaigns for directors, the management team and employees to be aware 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 Other 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 otherwise. 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.

And in response to the expectation for additional information by stakeholders, PTT prepares the PTT Group CSR Report 2009 in line with the Global Reporting Initiative (GRI), assessed at the B level as targeted. It has also evolved a system for data compilation and prepared performance indicators of a uniform standard among PTT Group for the benefit of PTT Group reporting.



A similar report for 2010 has been prepared, containing economic, social, and environmental information for the year, which will be delivered along with the annual report to the shareholders and will be accessible to those interested.

#### 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 reports. 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 statement by the management
- Implementation of government policies
- Kev plans
- Corporate governance policies and promotional activities
- · Financial performance
- Other 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. Analysts, investors and interested parties also pay visits to meet our management and inquire about our updates at all times.

### In 2009 and 2010, these activities took place:

Activity	2009 (Times)	2010 (Times)	
International roadshows	10	13	
Domestic roadshows	5	4	
Analyst meetings	5	4	
Credit rating reviews	5	5	
Company visit / conference calls	189	178	
e-mail / phone calls	6 - 8 times daily	6 - 8 times daily	
Joint activities with SET and other agencies to meet investors	3	3	
Trip for institutional investors to visit and meet management team members	1	1	
Trip for minor investors to visit and meet management team members	1 (3 trips)	1 (3 trips)	
Relations activities with debenture holders	2	3	

- · 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 the www.pttplc.com website.
- · 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 of 2010 appear as follows:



Activities	2009	2010
e-mails	165	224
News / photo releases	165	224
Press conferences	36	51
Media visits to operations (domestic and international)	6 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*

<sup>\*</sup> Fewer during the latter half of the year because of construction work at PTT

# 4.3 Complaint Filing and Access to Information

PTT favors no particular group of stakeholders, giving all 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. Contact Investor Relations, Office of the President and Corporate Secretary, Corporate Communications, or the Ordering & Customer Relations Center. Below are the channels:

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

Directly relevant agencies are 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

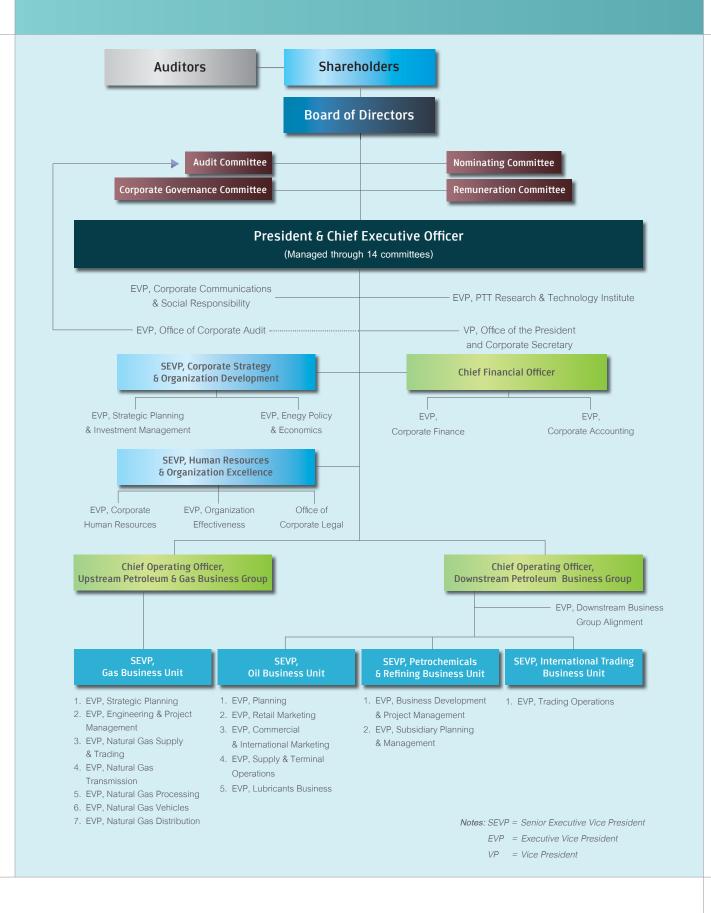
contact persons, with another follow-up to find out about their satisfaction with the services of the call center officers, which will help improve information system management. The management tracks all information every month to detect trends and apply them as the approach for refinement of processes, products, and services to respond to all stakeholders.

PTT offers the opportunity for the general public to file complaints on the improper behaviors 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 will receive all complaints on the basis of equality, transparency, and fairness to all concerned. The appropriate timeframe to consider the complaints is set and the secrecy and the protection of those who file the complaints will be observed.

# Responsibilities of the Board of Directors

The organization structure of PTT Plc. as of February 1, 2011.

# The Organization Structure



## 5.1 Composition of the Board of Directors

According to PTT regulations, the Board consists of

- · At least five and no 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, 2011, consists of 14 directors:

- 13 non-management directors (eight of whom are independent directors, which exceeded half of the Board)
- One management director

As of February 1, 2011, the Board consisted of:

No.	Name	Position	Appointed
1.	Dr. Naris Chaiyasoot	Acting Chairman (since December 24, 2010)	April 11, 2008
2.	Dr. Norkun Sittiphong	Director	April 10, 2007
3.	Dr. Ampon Kittiampon	Independent Director	April 11, 2008
4.	Mr. Chaikasem Nitisiri	Independent Director	September 22, 2008
5.	Mr. Nontigorn Kanchanachitra <sup>2.1</sup>	Independent Director	April 9, 2010
6.	Mr. Surachai Phuprasert	Independent Director	April 10, 2009
7.	Dr. Surapon Nitikraipot	Independent Director	April 10, 2009
8.	Mr. Watcharakiti Watcharothai	Independent Director	April 10, 2009
9.	Mr. Anuwat Maytheewibulwut	Independent Director	November 21, 2008
10.	Dr. Bhusana Premanode <sup>2,2</sup>	Independent Director	November 26, 2010
11.	Mr. Krairit Nilkuha <sup>2.3</sup>	Director	April 9, 2010
12.	Mrs. Benja Louichareon	Director	April 9, 2010
13.	Mr. Pichai Chunhavajira	Director	April 9, 2010
14.	Mr. Prasert Bunsumpun	Director and Secretary (President & CEO)	Second term began on April 10, 2009

**Notes:** 1. Mr. Piyawat Niyomrerks, who was appointed on April 9, 2010, to replace Khun Pornthip Jala, who had completed her term, resigned from the Board on January 1, 2011.

- 2. To replace directors who resigned in 2010, the Board appointed new directors as follows:
  - 2.1 Mr. Nontigorn Kanchanachitra, replacing Khunying Jada Wattanasiritham, who resigned on January 28, 2010, ahead of term completion on April 9, 2010, because she had reached 65 years of age and no longer qualified under the standard qualifications for directors and employees of state enterprises act of B.E. 2518 (1975).
  - 2.2 Dr. Bhusana Premanode, replacing Mr. Chulayuth Hirunyavasit, who resigned from the Board on September 1, 2010.
  - 2.3 Mr. Krairit Nilkuha, replacing Mr. Chakramon Phasukavanich, who completed his term on April 9, 2010.

# 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

The Board is to:

- 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 high-quality 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. Presert Bunsumpun, President & CEO, authorized to sign and affix the Company's seal or (2) Mr. Norkun Sittiphong, Mr. Anuwat Mayteewibulwut, Mr. Surapon Nitikraipot, Mr. Surachai Phuprasert; two of these four Directors, 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 no more than 15 persons elected at the 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, which remains in effect today. As of January 4, 2011, it had eight Independent Directors, all of whom were domiciled in Thailand. Four Directors are experts in accounting and finance: Mrs. Benja Louichareon, Mr. Pichai Chunhavajira, Dr. Ampon Kittiampon, and Dr. Bhusana Premanode.

- 2. The shareholders' meetings are to elect qualified directors who have previously been elected and 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 han 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 had no forbidden characteristics under the Public Company Limited Act and Article 5 of the Standard Qualifications for Directors and State Enterprise Officers Act (No. 6) of 2007, including:

- Age up to 65
- Maximum of three state enterprise directorships
- 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 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 ensures 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 Mr. Attapol Rerkphiboon 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 highly 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-management directors as required by SET, with clearly written roles and responsibilities in a charter.

In 2009, the duties of the Corporate Governance Committee were expanded to cover additional policy, implementation and monitoring of the operations on the responsibilities toward society, community and 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 the Accounting Department 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, examined, 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 SET. The Committee must consist of at least three Members. As of February 1, 2011, it consisted of three Independent Directors as follows:

Name	Position	Remark
Dr. Ampon Kittiampon	Chairman	Independent Director
2. Mr. Chaikasem Nitisiri	Member	Independent Director
3. Mr. Surachai Phuprasert	Member	Independent Director

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

#### Duties and Responsibilities of the Audit Committee

- Ensure the suitability and effectiveness of the internal control and internal audit procedures and consider the adequacy of budget, 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 the compliance with SET's laws and regulations.
- Ensure compliance with securities and exchange laws, SET regulations, policies, regulations, rules, stipulations, cabinet resolutions and relevant laws to PTT's business.
- Role 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 the fees for the external auditor.
- Deliberate accurate and complete disclosure of PTT's information for connected transactions or potential conflicts of interest.
- Regularly ensure PTT's risk management system and recommend the improvement.
- 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 standard.

- 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 report on the performance as set by the criteria.
- May seek independent opinion from other professional advisors, when deemed necessary, paid by PTT with the approval of PTT's Board.
- The Chairman or members of the Audit Committee must attend the meetings of shareholders.
- Attend meeting with the external auditor without the management at least once a year.
- Hold a formal meeting with the management at least once a year.
- Review and improve the criteria and guideline of the Audit Committee's 2009 version.
- Perform other Board-assigned tasks within the duties and responsibilities of the Committee.

In 2010, the Committee held 12 meetings with 11 regular meetings and one extraordinary meeting and duly reported its findings to the Board. In addition, it participated in quarterly financial audits along with the external auditor and the Corporate Finance and Accounting Department.

#### 5.10.2 The Nominating Committee

The Board appointed the Nominating Committee on October 1, 2001, made up of three of its Directors. As of February 1, 2011, it consisted of three Independent Directors as follows:

Name	Position	Remark
Dr. Ampon Kittiampon	Chairman	Independent Director
Mr. Watcharakit Watcharothai	Member	Independent Director
3. Mr. Surachai Phuprasert	Member	Independent Director

# Duties and Responsibilities of the Nominating Committee

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

The recruitment procedures for Directors are 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 also 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.

In 2010, the Committee held three meetings and duly reported its findings to the Board.

#### 5.10.3 The Remuneration Committee

The Board appointed the Remuneration Committee on October 1, 2001, by appointing three Directors. As of February 1, 2011, it consisted of the three following Independent Directors:

Name	Position	Remark
Mr. Nontigorn Kanchanachitra	Chairman	Independent Director
2. Mr. Surachai Phuprasert	Member	Independent Director
3. Mr. Krairit Nilkuha	Member	Director

# Duties and Responsibilities of the Remuneration Committee

- Define compensation guidelines for Directors and the President & CEO
- Define procedures and criteria for fair and reasonable compensation paid to Directors and the President & CEO for approval at the shareholders' meetings.

In 2010, the Committee held one meeting and duly reported its findings to the Board.

#### 5.10.4 The Corporate Governance Committee

The Board appointed the Corporate Governance Committee on June 24, 2004, consisting of three Independent Directors. As of February 1, 2011, the names were as follows:

Name	Position	Remark
1. Mr. Chaikasem Nitisiri	Chairman	Independent Director
2. Mr. Watcharakiti Watcharothai	Member	Independent Director
3. Dr. Surapon Nitikraipot	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 as compared with 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 to the Board.

In 2010, the Committee held three meetings and duly reported to the Board.

# **5.11 Board Meetings**

Board meetings are planned for the entire year - in 2010, the third 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 the 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' meeting appear as follows.

# Summary of PTT Board of Meeting Attendance in 2010

	1/2010	2/2010	3/2010	4/2010	Extra Ordinary 1/2010	5/2010	6/2010	7/2010	8/22010	Extra Ordinary 2/2010	9/2010	10/2010	Extra Ordinary 3/2010	Extra Ordinary 4/2010	11/2010	12/2010
1. Dr. Norkun Sittiphong	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2. Mr. Chakramon Phasukavanich	/	/	/					Сс	mple	ted te	rm					
3. Mr. Krairit Nilkuha		oointed hareho		/	/	/	/	Х	/	/	/	/	/	/	/	/
4. Mr. Watcharakiti Watcharothai	/	/	/	/	/	/	/	/	/	/	/	/	/	/	Х	/
5. Mr. Ampon Kittiampon	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6. Khunying Jada Wattanasiritham	/			'		Re	signe	d on i	eachi	ng 65	years	of ag	ge			'
7. Mr. Nontigorn Kanchanachitra		oointed hareho		Х	/	/	/	/	/	/	/	/	/	/	/	/
8. Khun Pornthip Jala	/	/ / / Completed term														
9. Mr. Piyawat Niyomrerks*		oointed hareho		/	/	/	/	/	/	/	/	/	X	/	/	/
10. Mr. Chaikasem Nitisiri	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11. Mr. Chulayuth Hirunyavasit	/	/	/	/	/	/	/	/	/	/		ı	Resig	gned		ı
12. Dr. Bhusana Premanode						Re	eplace	ement	appo	intme	nt					/
13. Mr. Pichai Chunhavajira	/	/	/	/	/	/	/	/	/	X	/	/	/	/	Х	/
14. Dr. Surapon Nitikraipot	/	/	/	/	/	/	/	/	/	/	/	/	/	X	/	/
15. Dr. Naris Chaiyasoot	/	/	/	/	/	/	/	/	/	/	/	Х	/	/	/	/
16. Mr. Anuwat Maytheewibulwut	/	/	/	/	/	/	/	X	/	/	/	/	/	/	/	/
17. Mrs. Benja Louichareon	/	Х	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18. Mr. Surachai Phuprasert	/	/	/	/	X	X	/	/	/	/	/	/	/	/	/	/
19. Mr. Prasert Bunsumpun	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Total attendance	15	13	14	14	14	14	15	13	15	14	14	13	13	13	12	15
Total directors	15	14	14	15	15	15	15	15	15	15	14	14	14	14	14	15

Note: \* Mr. Piyawat Niyomrerks resigned on January 1, 2011.

The Independent Directors also held a meeting in the absence of the management (No. 1/2553, October 22, 2010), on Independent Directors and stakeholder management. They provided recommendations on such management to address the needs of stakeholders and their roles for further development.

# Attendance Record of the Board's and the Committees' Meetings in 2010 $\,$ as of February 1, 2011

Unit: Times

		Meeting	Attendance			
Name	Board of Directors (Total 16)	Audit Comm. (Total 12)	Corporate Governance Comm. (Total 3)	Nomina- ting Comm. (Total 3)	Remunera- tion Comm. (Total 1)	Appointment during the Year
Dr. Naris Chaiyasoot	15/16	-	-	-	-	-
2. Dr. Norkun Sittiphong	16/16	-	-	-	-	-
3. Dr. Ampon Kittiampon	16/16	9/10	-	3/3	1/1	-
4. Mr. Chaikasem Nitisiri	16/16	9/10	3/3	-	-	-
5. Mr. Nontigorn Kanchanachitra	12/13	-	-	-	-	April 9, 2010
6. Mr. Surachai Phuprasert	14/16	5/6	-	2/2	1/1	-
7. Dr. Surapon Nitikraipot	15/16	-	3/3	-	-	-
8. Mr. Watcharakiti Watcharothai	15/16	-	3/3	-	-	-
9. Mr. Anuwat Maytheewibulwut	15/16	-	-	-	-	-
10. Dr. Bhusana Premanode	1/1	-	-	-	-	November 26, 2010
11. Mr. Krairit Nilkuha	12/13	-	-	-	-	April 9, 2010
12. Mrs. Benja Louichareon	15/16	-	-	-	-	-
13. Mr. Pichai Chunhavajira	14/16	-	-	-	-	-
14. Mr. Prasert Bunsumpun	16/16	-	-	-	-	-

### Directors who completed their terms or resigned during 2010

Unit: Times

		Meeting	Attendance			
Name	Board of Directors (Total 16)	Audit Comm. (Total 12)	Corporate Governance Comm. (Total 3)	Nomina- ting Comm. (Total 3)	Remunera- tion Comm. (Total 1)	Appointment during the Year
Khunying Jada     Wattanasiritham	1/1	1/1	-	-	1/1	Resigned on reaching 65 years of age on January 28 and no longer qualified under the standard qualifications for directors and employees of state enterprises act
2. Mr. Chakramon Phasukavanich	3/3	1/1	-	1/1	-	Completed his term on April 9, 2010
3. Khun Pornthip Jala	3/3	1/2	-	-	-	Completed her term on April 9, 2010
4. Mr. Chulayuth Hirunyavasit	10/10	6/6	-	1/1	-	Resigned on September 1, 2010
5. Mr. Piyawat Niyomrerks	12/13	-	-	-	-	Resigned on January 1, 2011

Note: Sixteen of the Board meetings consist of 12 regular meetings and four extraordinary meetings

## 5.12 Self-assessment of the Board

By the resolution of Board meeting No. 11/2010 of November 26, 2010, it approved self-assessment forms proposed by the Corporate Governance Committee, relying on the same approach as the one used in 2006. The form was to be used to conduct self-assessment of the Board's performance in 2009, a vital tool for improving its performance and reference data for corporate governance rating. Three types of self-assessment were applied, whereby the percentages corresponded to the following levels of performance achieved in each area 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%	=	Need improvement

The findings from the self-assessment were as follows:

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

The results indicated excellent/most suitable overall performance with an average score of 94.52%.

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 98.10%.

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

Cross-assessment results in these six categories indicated excellent conformance by most Directors, with an average score of 98.44%.

In the assessment form, several directors gave additional and useful opinions on considering various issues, enabling more prudent thoughts. The Secretariat coordinated and prepared document/information for the directors with efficiency. From the exclusive Independent Directors' meeting, the directors recommended PTT's operation visits so as to develop the Directors' potential to understand the nature of business operation which would be useful for them in considering other matters.

### 5.13 Corporate Management

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

Under PTT's regulations, the President has the authority and duties to manage the Company's business as assigned by the Board. 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 interest of PTT and its shareholders. The President's authority and duties include the following matters and activities:

- · Operate and/or manage 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 dismiss employees or contractors under the Board's regulations. For vice presidents or equivalent upward, prior approval of the Board is required.
- 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 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 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 it 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 or the President are invalid for conflicts of interest with PTT in any form resulting from the President'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 February 1, 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, Human Resources & Organization Excellence	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	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. In 2010, there were altogether 32 meetings.

# Duties and Responsibilities of the Management Committee

- Provide advice and recommendations to the President & CEO on significant issues on corporate strategy and business direction, investment plans, budgeting, 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 decide 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
- 9. Upstream Petroleum and Gas Business Group Synergy Management Committee

- 10. Downstream Petroleum Business Group Synergy Management Committee
  - 11. Oil Business Strategic Plan Committee
  - 12. Gas Business Strategic Plan Committee
- 13. Petrochemicals and Refining Strategic Plan Committee
- 14. International Trading Business Unit Risk Management Committee

#### 5.13.3 Current Management Team Members

No.	Name	Position
1.	Mr. Prasert Bunsumpun	President & CEO
2.	Mr. Tevin Vongvanich	Chief Financial Officer
3.	Dr. Prajya Phinyawat	Chief Operating Officer, Downstream Petroleum Business Group and Senior Executive Vice President, Oil Business Unit
4.	Mr. Pitipan Tepartimargorn*	Senior Executive Vice President, Human Resources & Organization Excellence
5.	Mr. Sukrit Surabotsopon	Senior Executive Vice President, Petrochemicals & Refining Business Unit
6.	Mr. Nuttachat Charuchinda	Senior Executive Vice President, Corporate Strategy
7.	Mr. Wichai Pornkeratiwat	Senior Executive Vice President, Gas Business Unit
8.	Mr. Sarakorn Kulatham	Senior Executive Vice President, International Trading Business Unit
9.	Dr. Pailin Chuchottaworn	Senior Executive Vice President, seconded to Chief Execulive Officer, IRPC Public Company Limited
10.	Mr. Bowon Vongsinudom	Senior Executive Vice President,
		seconded to President & CEO,
		PTT Aromatics and Refining Public Company Limited
11.	Mr. Veerasak Kositpaisal	Senior Executive Vice President, seconded to President & CEO,
		PTT Chemical Public Company Limited
12.	Mr. Anon Sirisaengtaksin	Senior Executive Vice President,
		seconded to President & CEO,
		PTT Exploration and Production Public Company Limited
13.	Mr. Surong Bulakul	Senior Executive Vice President,
		seconded to Chief Executive Officer, Thai Oil Public Company Limited
14.	Mr. Chatchawal Eimsiri**	Executive Vice President, Corporate Finance
15.	Mrs. Prisana Prahankhasuk	Executive Vice President, Corporate Accounting

- Notes: 1. One executive (Mr. Maroot Mrigadat) resigned before reaching retirement age of 60, effective January 1, 2010.
  - 2. \* Appointed on April 1, 2010, to replace the late Mr. Songwut Chinnawat.
  - 3. \*\* Appointed on February 1, 2011, to replace Ms. Penchun Jarikasem, on secondment to PTT Exploration and Production Public Company Limited.

# 5.14 Compensation Paid to Directors and the Management

With the oversight of the Remuneration Committee, PTT fairly and logically 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 was approved at the AGM of April 9, 2010, for the Board:

- 1. Meeting fee (no change from 2009)
  - 1.1 Board Meeting compensation, the same as in 2009, consisted of:
    - Retainer allowance of 30,000 baht per month
    - Meeting allowance of 20,000 baht each time (for those in attendance only).
  - 1.2 Compensation for meetings of Committees consisted of:
    - 1.2.1 Audit Committee
      - · Monthly allowance of 15,000 baht each
      - · Meeting allowance of 15,000 baht each time (for those in attendance only) and the Secretary received a monthly allowance of 7,500 baht.
    - 1.2.2 Compensation for the Nominating, Remuneration, and Corporate Governance Committees consisted of: Meeting allowance of 24,000 baht each time (for those in attendance only).
  - 1.3 Compensation for the Chairman of each committee was 25% higher than for others.
- Directors' Bonuses in 2010 (no change from 2009): The bonus payout 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 per year was made. The bonus was prorated to each director's term, with the Chairman receiving 25% more than Individual Directors.



# Compensation Paid to Individual Directors

Unit: Baht

No.	Name	Days of Service	Bonus	Board Meeting Allowance	Committee Meeting Allowance	Total Meeting Allowance	Total Compensation
1.	Dr. Naris Chaiyasoot*	365	2,010,958.90	660,000	-	660,000	2,670,958.90
2.	Dr. Ampon Kittiampon	365	2,000,000	830,000	301,500	1,131,500	3,131,500
3.	Mr. Chaikasem Nitisiri	365	2,000,000	800,000	210,000	1,010,000	3,010,000
4.	Mr. Nontigorn Kanchanachitra	267	1,463,013.70	502,000	-	502,000	1,965,013.70
5.	Mr. Surachai Phuprasert	365	2,000,000	674,838.71	147,000	821,838.71	2,821,838.71
6.	Dr. Surapon Nitikraipot	365	2,000,000	660,000	72,000	732,000	2,732,000
7.	Mr. Watcharakiti Watcharothai	365	2,000,000	660,000	72,000	732,000	2,732,000
8.	Mr. Krairit Nilkuha	267	1,463,013.70	502,000	-	502,000	1,965,013.70
9.	Mr. Anuwat Maytheewibulwut	365	2,000,000	660,000	-	660,000	2,660,000
10.	Dr. Bhusana Premanode	36	197,260.27	55,000	-	55,000	252,260.27
11.	Dr. Norkun Sittiphong*	365	2,490,410.96*	850,000	-	850,000	3,340,410.96
12.	Mrs. Benja Louichareon	365	2,000,000	660,000	-	660,000	2,660,000
13.	Mr. Pichai Chunhavajira	365	2,000,000	640,000	-	640,000	2,640,000
14.	Mr. Prasert Bunsumpun	365	2,000,000	680,000	-	680,000	2,680,000
Total			25,624,657.53	8,833,838.71	802,500	9,636,338.71	33,396,271.93

Note: \*Dr. Norkun Sittiphong served as Chairman of the Board until December 24, 2010. His post was taken on an interim basis by Dr. Naris Chaiyasoot.

### Retired and Resigned Directors in 2010

Unit: Baht

No.	Name	Days of Service	Bonus	Board Meeting Allowance	Committee Meeting Allowance	Total Meeting Allowance	Total Compensation
1.	Khunying Jada Wattanasiritham	28	153,424.66	68,750	42,750	111,500	264,924.66
2.	Mr. Chakramon Phasukavanich	99	542,465.75	202,125	48,750	250,875	793,340.75
3.	Khun Pornthip Jala	99	542,465.75	208,500	15,000	223,500	765,965.75
4.	Mr. Chulayuth Hirunyavasit	243	1,331,506.85	560,000	114,000	674,000	2,005,506.85
5.	Mr. Piyawat Niyomrerks	267	1,463,013.70	502,000	-	502,000	1,965,013.70
Total			4,032,876.71	1,541,375	220,500	1,761,875	5,794,751.71

- Notes: 1. Khunying Jada Wattanasiritham resigned on reaching 65 years of age on January 28 and no longer qualified under the standard qualifications for directors and employees of state enterprises act. She was replaced by Mr. Nontigorn Kanchanachitra on April 9 the same year.
  - 2. Mr. Chakramon Phasukavanich completed his term on April 9 and was replaced by Mr. Krairit Nilkuha on the same day.
  - 3. Khun Pornthip Jala completed her term on April 9 and was replaced by Mr. Piyawat Niyomrerk on the same day.
  - 4. Mr. Chulayuth Hirunyavasit resigned from the Board on September 1 and was replaced Dr. Bhusana Premanode on November 26 the same year.
  - 5. Mr. Piyawat Niyomrerks resigned from the Board on January 1, 2011.

# Compensation to Independent Directors Serving as an Independent Director in Subsidiaries

In fiscal year 2010, Dr. Bhusana Premanode had served as an Independent Director in PTT Exploration and Production Plc., a subsidiary of PTT, before taking up the same post in PTT. He received the following compensation from that company.

Unit: Baht

				Com						
	Name		Board	Audit Comm.	Corp. Gov. Comm.	Remun. Comm.	Nomin. Comm.	Risk Mgt. Comm.	Directors' 2009 bonus T paid in 2010	Total
	Meeting fee	Retainer fee	Meeting fee	Meeting fee	Meeting fee	Meeting fee	Meeting fee			
	1. Dr. Bhusana Premanode	450,000	450,000	-	75,000	-	-	-	2,766,068.30	3,741,068.30

## Directors' Compensation Profile of 2007 - 2010 (ended on December 31, 2010)

Unit: Baht

		2007		2008		2009	2010				
Compensation	Per- sons	Baht	Per- sons	Baht	Per- sons	Baht	Per- sons	Baht			
Meeting Allowance	15	11,764,919.36	15	10,470,258.07	15	10,863,879.03	15	11,398,213.71			
Total Bonus	15	30,294,520.55	15	25,852,400.09	15	29,173,972.62	15	29,657,534.24			
Total		42,059,439.91		36,322,658.16		40,037,851.65		41,055,747.95			

#### 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 defined Key Performance Indicators (KPI) for framing PTT's business each year and for assessing the performance of the President & CEO and his team. Each person's compensation is measured against the performance management and the performance of leading industry

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

As of December 31, 2010, the President & CEO and his management team members, in total seven persons, received 75,579,339 baht in compensation (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), detailed as follows:

## Total Compensation Paid to the Management

Unit: Baht

		2007		2008		2009	2010						
Compensation	Per- Baht Per- sons sons		Baht	Per- sons	Baht	Per- sons	Baht						
Salary	7	51,815,390	8	53,415,360	8	52,677,119	7	50,470,620					
Total Bonus	7	22,572,960	8	24,624,681	8	24,143,679	7	22,183,379					
Total		74,388,350		78,040,041		76,820,798		72,653,999					

## Provident Fund Contribution to the Management

Unit: Baht

		2007		2008		2009	2010			
Compensation	Per- sons	Baht	Per- sons	Baht	Per- sons	Baht	Per- sons	Baht		
Provident Fund	6	3,659,601	7	3,629,844	7	3,384,852	7	2,925,340		

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.
- 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 46 affiliated companies, eight of which are listed on 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 aligning with PTT's policy 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.
- 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 PTT group and the resulting application of the knowledge and expertise gained from serving in such leading companies will enrich the benefit for 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 among 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 another state enterprise's affiliates. This is designed to lower the risks of conflicts of interest and ensure conformance to applicable laws.

## 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). 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. In 2010, the following directors underwent training and seminars.

Name	Course
1. Dr. Ampon Kittiampon	<ul> <li>Innovation for Economic Development (IFED) and study trip on energy and green technology of Harvard Kennedy School</li> </ul>
2. Mrs. Benja Louichareon	Successful Formulation and Execution Strategy (SFE 7/2010), IOD
3. Mr. Watcharakiti Wacharothai	<ul> <li>Governance for Directors and Senior Executives of State Enterprises and Public Organizations, Class 5, King Prajadhipok's Institute</li> <li>Senior Executives Judicial Process Management, Class 15, Judicial Training Institute, Office of the Courts of Justice</li> </ul>
4. Mr. Chaikasem Nitisiri	Governance for Directors and Senior Executives of State Enterprises and Public Organizations, Class 6, King Prajadhipok's Institute
5. Dr. Naris Chaiyasoot	Governance for Directors and Senior Executives of State Enterprises and Public Organizations, Class 6, King Prajadhipok's Institute
6. Dr. Surapon Nitikraipot	National Defence College (Public/Private), Class 23, National Defence College

## Training / Seminars by Directors Who Completed Their Terms and Resigned in 2010

Name	Course
Mr. Chakramon Phasukavanich	<ul> <li>Monitoring the Internal Audit Function (MIA 7/2010), IOD</li> <li>Monitoring Fraud Risk Management (MFM 2/2010), IOD</li> <li>Monitoring of the Quality of Financial Reporting (MFR 10/2010), IOD</li> </ul>
2. Mr. Chulayuth Hirunyavasit	Governance for Directors and Senior Executives of State Enterprises     and Public Organizations, Class 5, King Prajadhipok's Institute

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, in 2010, PTT organized the following trips:

- PTT Research and Technology Institute: This took place after one Board's meeting to monitor the progress of the institute.
- PTT's and PTTEP's overseas investment to monitor progress on investment, success, problems and obstacles, as well as exchanging views and experience with relevant parties and multinational energy companies.

## 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
- 3. 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

- 1. Overview business presentation of PTT by the President & CEO
- 2. List of directors and management structure
- 3. Information on the roles of the Board
- 4. PTT Plc. Company Profile
- 5. Annual Report and Financial Report (Thai Version) in hard copy and CD
- 6. PTT Group's Sustainability Report
- 7. PTT The S-Curve Story
- 8. Director Fiduciary Duty Check List
- 9. Corporate Governance principles for listed companies
- 10. Connected Transactions of listed companies
- 11. It user guideline for executives
- 12. Petroleum Encyclopedia
- 13. PTT Spirit, an internal magazine

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 a clear view of the business operation and performance. At the same time, the above-mentioned documents and handbook for new directors are handed over together with a personal computer for use in studying the information before Board meetings.

## 5.18 Succession Planning

Because PTT is a state enterprise, the nomination and appointment of the President 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 had 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 person for more than two consecutive terms.

## 5.19 Internal Control System

PTT consistently values the internal control system, particularly one 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 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 internal control assessment, annually conducted by the management and the Office of Corporate Audit, 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.

## 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 them 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 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.
- The Board must undergo annual selfassessment 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. To receive 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 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.

Below are the essences of the code:

- 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
- 9. 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 properties and properly apply information technology.

#### · Conflicts of Interest

PTT requires information disclosure to prevent conflicts of interest and illegal, improfer 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 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 with interests or related businesses to a matter requiring 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 with it through a disclosure form. In addition, any approval of such items must not contain special conditions or specifications that are out of the ordinary. 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. In 2010, however, no such case has arisen.

# Reporting Vested Interests of Directors, the Management and Related Parties

In each first quarter of the year, PTT required the reporting of 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 matter 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)

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 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.

# Report on Directors' Securities Portfolio in 2009 and 2010

No.	Name	Sha	ires	Change during	Note
No.	Name	Dec. 31, 2009	Dec. 31, 2010	the Year	Note
1.	Dr. Naris Chaiyasoot	-	-	-	-
2.	Dr. Ampon Kittiampon	-	-	-	-
3.	Mr. Chaikasem Nitisiri	-	-	-	-
4.	Mr. Nontigorn Kanchanachitra	-	-	-	-
5.	Mr. Surachai Phuprasert	-	-	-	-
6.	Dr. Surapon Nitikraipot	-	-	-	-
7.	Mr. Watcharakiti Wacharothai	-	-	-	-
8.	Mr. Krairit Nilkuha	-	-	-	-
9.	Mr. Anuwat Maytheewibulwut	-	-	-	-
10.	Dr. Bhusana Premanode	-	-	-	-
11.	Dr. Norkun Sittiphong	-	-	-	-
12.	Mrs. Benja Louichareon	-	-	-	-
13.	Mr. Pichai Chunhavajira	22,000	34,400	-	Increase of 12,400 shares due to his exercising of warrant ESOP as a PTT officer.
14.	Mr. Prasert Bunsumpun	-	-	-	A report appears in the management section.

# Securities Portfolio for Directors Who Completed Their Terms and Resigned during 2009 and 2010

No.	Name Shares		ares	Change during	Note
NO.	Name	Dec. 31, 2009	Dec. 31, 2010	the Year	Note
1.	Khunying Jada Wattanasiritham	-	-	-	Resigned before term completion on April 9 on reaching 65 years of age on January 28 and no longer qualified under the standard qualifications for directors and employees of state enterprises act, B.E. 2518 (1975).
2.	Mr. Chakramon Phasukavanich	-	-	-	Completed his term on April 9, 2010
3.	Khun Pornthip Jala	-	-	-	Completed his term on April 9, 2010
4.	Mr. Chulayuth Hirunyavasit	-	-	-	Resigned on September 1, 2010
5.	Mr. Piyawat Niyomrerks	-	-	-	Resigned on January 1, 2011

# Management's Ownership of Shares as of December 31, 2010

			Shares		Warra	nt # 1	Warra	nt # 2	
No.	Name	Dec. 31, 2009	Dec. 31, 2010	Incre- ment	Allocated in 2005		Allocated in 2006		Remark
1.	Mr. Prasert Bunsumpun	80,000	121,500	41,500	243,000	0	119,000	59,600	-
2.	Mr. Tevin Vongvanich	40,200	40,200	0	40,300	0	21,000	15,800	-
3.	Dr. Prajya Phinyawat	71,380	107,980	36,600	88,300	0	45,900	0	-
4.	Mr. Pitipan Tepartimargorn	N/A	13,334	0	38,500	0	20,400	0	Appointed on April 1, 2010
5.	Mr. Sukrit Surabotsopon	N/A	2,000	0	0	0	0	0	Appointed on January 1, 2010
6.	Mr. Nuttachat Charuchinda	N/A	28,863	0	60,800	0	31,800	21,800	Appointed on January 1, 2010
7.	Mr. Wichai Pornkeratiwat	N/A	46,659	0	46,900	0	25,200	8,900	Appointed on October 1, 2010
8.	Mr. Sarakorn Kulatham	N/A	60,800	0	40,000	0	20,800	0	Appointed on October 1, 2010
9.	Dr. Pailin Chuchottaworn and Spouse	41,300	41,300	0	52,600	0	27,600	20,700	-
10.	Mr. Bowon Vongsinudom	N/A	0	0	0	0	12,100	12,100	Appointed on October 1, 2010
11.	Mr. Veerasak Kositpaisal	5,000	31,400	26,400	0	0	26,400	0	-
12.	Mr. Anon Sirisaengtaksin	140,230	125,200	(15,030)	79,800	0	41,900	16,500	-
13.	Mr. Surong Bulakul	77,683	77,683	(15,700)	63,300	27,700	33,000	24,800	-
14.	Ms. Penchun Jarikasem*	12,000	12,000	0	34,000	0	18,300	0	On secondment to PTT Exploration and Production Plc. on February 1, 2011
15.	Mrs. Prisana Prahankhasuk	78,263	78,263	0	35,100	0	18,400	0	-

Note: \* Mr. Chatchawal Eimsiri was appointed to replay Ms. Penchun Jarikasem on February 1, 2011.

Securities Portfolio of Executives Transferred	Resigned, Retired	. and Passed away in 2010

			Shares		Warra	nt # 1	Warra	nt # 2	
No.	Name	Dec. 31, 2009	Dec. 31, 2010	Incre- ment	Allocated in 2005		Allocated in 2006		Remark
1.	Mr. Maroot Mrigadat	33,700	N/A	N/A	67,300	0	35,100	26,400	Resigned on Jan. 1, 2010, before reaching retirement age.
2.	Mr. Songwut Chinnawat	30,500	N/A	N/A	61,000	0	32,400	24,300	Passed away
3.	Mr. Permsak Shevawattananon	72,900	72,900	0	64,000	0	33,300	8,400	Retired on Sep. 30, 2010.
4.	Mr. Chainoi Puankosoom	49,700	71,400	21,700	43,100	0	33,200	24,900	Retired on Sep. 30, 2010.

 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 the list of their own assets and debts, including that of their spouse and children not yet of legal age, to the NACC Board every time they take up a position, every three years during their term and when they no longer have the 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 says 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 to the Board along with items of conflicts of interest, which have been scrutinized for conformance to SET's criteria. Such transactions are 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.

- 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 e-mailnewsletters 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 (2<sup>nd</sup> Revision) to investors, international interested parties and stakeholders for their reference. This will also be posted at 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 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
- Below are some activities in promotion of corporate governance for PTT Group:
- 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 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.
- 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 Communication
   Department as the main responsible unit. The Department acts as a focal point to respond to complaints within a suitable. Issues are regularly compiled, managed, and presented to the management for organization improvement and development in all aspects.

#### 5.19.2 Risk Management

Corporate risk management is vital to business execution, which PTT recognizes all along by proceeding under 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 Committee - consisting of executive vice presidents and vice presidents from all business units - overseeing and framing risk management and internal controls for the Company as a whole. It reports the outcomes to the PTT Management Committee and the Audit Committee every quarter of the year. A Corporate Risk Management Department was appointed specifically for this matter.

The risk management process at PTT is linked to strategic planning processes. A Strategic Thinking Session (STS) gather 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 aspiration. 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 affects PTT.

In 2010, key corporate risks consisted of the project delays in the Map Ta Phut Industrial Estate, management of the supply and competition in the natural gas industry, LPG and NGV price control, oil refinery management during the down cycle of the petrochemical business, operation risks for Oil and Gas Business Units, overseas investment expansion, and human resource administration in PTT Group. PTT ensured that these risks were, at a minimum, 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 overview and regularly reviews to ensure conformance to regulations and job manuals.

PTT has defined policies and procedures in writing, identifying actions where major risks exist and defining control mechanisms to prevent and reduce errors such as financial transactions, procurement, and general management. Systematic separation of duties is in place for groups of personnel for authorization, data processing, recording of items or accounting entries, cash receipt and disbursement, review of inspection, and stewardship of properties. Also, actions are specified for elements of key risks and mechanisms defined to prevent and reduce errors. The management regularly reviews performance and requires performance indices for all employees across the organization to make management control suitable and adequate.

If PTT enters into transaction 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 item. PTT also closely monitors the action.

The Board looks after, monitors, and provides recommendations on QSHE standards applied as part of the control activities through the Corporate Governance Committee, the Audit Committee in reviewing business

execution, and the Management Committee headed by the President & CEO. The responsible units are the QSHE and Corporate Quality Management Departments.

In 2009 and 2010, PTT undertook QSHE activities in an attempt to reach excellence. PTT implemented the policy framework with the following important operations:

- Management according to the criteria of the Thailand Quality Award (TQA).
- Use of QSHE management tools from both international standards and its own development.
- Improvement on SHE implementation and preparation of PTT Group SHE Strategic Direction 2009 2013 with three main programs, namely.
- Development of the PTT Group SSHE Management Standard as an operation standard to manage SSHE risk management covering all activities.
- Preparation of PTT Group SHE Performance Measurement. And Reporting System with a handbook, measurement form and report of SHE performance in PTT Group report and test was performed in a pilot area. In 2010, the report will cover all operating areas and all companies in PTT Group.
- Preparation of PTT Group Volatile Organic Compounds Management System to study and prepare the list of volatile organic compounds (VOCs) of PTT Group situated in the pollution control area in Rayong. The information will be used to formulate strategies for the systematic management of VOCs.
- Appointment of the Corporate SHE Programs PTT Group task force to drive the operation of the main programs to reach the Strategic Direction.

Operation details appear under "Power for Sustainable Future".

## 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 PTT Group, a cost-saving idea that cuts down on infrastructural spending and IT redundancies for each company while adding bargaining power for PTT Group. To date, PTTICT has performed its role consistently well and is PTT Group's major force in IT.

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.

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. In 2010, PTT further improved the Business Information Warehouse (BW) system used to file information and prepare reports for proper and quick decision-making. Today there exist related systems, including Business Consolidation System (BCS), E-Planning, and Credit Rating system to accommodate executives' needs for incorporating key information in their job execution, monitoring of performance, decision-making, and situation 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, the Key Performance Index (KPI), and the Variable Bonus processing systems - to reward employees for their actual performances.

#### 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 examines financial accounts, information technology, safety, health, and environment, including those of subsidiaries and associated companies so that they meet the high standard of internal audit.

The office audits annual operating plans and the long-term advanced audit of three years, which are consistent with the findings of the corporate risk assessment, and reports them to the Audit Committee for consideration and to the Board for acknowledgment every quarter. Urgent matters are also reported to the Board.

If the Audit Committee finds a defect, it will immediately order remedial actions and also follows up on such actions. The Audit Committee reports each quarter's findings to the Board in the Report of the Audit Committee.

#### 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 control at the activity level with a focus on process control; assessment outcomes and plans to improve internal controls must have the buy-ins 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, provide their views, and issue approaches for responsible units to proceed with corrective actions every year. In addition, the Office of Corporate Audit reviews to ensure that the existing internal controls are adequate for handling risk management and consistently conformed to.

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.

Regularly reviewing the assessment outcomes conducted by executives and the Office of Corporate Audit, the Audit Committee this year found 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



(%) Share Possession

#### None

#### Educations

- B.A. (Economics) (Hons.), Thammasat University, Thailand
- · M.A. (Economics, English Program), Thammasat University, Thailand
- · Ph.D. Economics, University of Hawaii, U.S.A.

#### ertifications.

- The National Defense Course, National Defense College, (Class of 39<sup>th</sup>), Thailand
- Capital Market Academy Leadership Program, (Class of 4<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DAP 32/2005, FND 19/2005, DCP 82/2006 and R-CDC 3/2008

#### Work Experiences

2004 - 2006 : Director General, The Fiscal Policy Office, Ministry of Finance

2006 - 2008 : Inspector General, Ministry of Finance
2008 - 2009 : Inspector Chief General, Ministry of Finance
2009 - 2010 : Deputy Permanent Secretary, Ministry of Finance

2010 - Present : Director General, The Fiscal Policy Office, Ministry of Finance Relevant Important Positions

None

**Dr. Naris Chaiyasoot**Acting Chairman

Age 55

Age 55

# Dr. Ampon Kittiampon

Independent Director, Chairman of the Remuneration Committee and Chairman of the Nominating Committee

#### (%) Share Possession

#### Educations

. B.A., Kasetsart University, Thailand

- M.S. (Economics), Northeastern University Boston, U.S.A.
- Ph.D. (Applied Economics), Clemson University, South Carolina, U.S.A.

#### Certifications

- Senior Information Technology Officer Program, (Class of 3<sup>rd</sup>), Thailand
- The National Defense Course, National Defense College, (Class of 45<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DCP 80/2006
- Innovation for Economic Development (IFED) Program, Harvard Kennedy School, U.S.A.

## Work Experiences

2002 / 2004 : Deputy Permanent Secretary of the Ministry of Agriculture

and Cooperatives

2003 : Director of the National Bureau of Agriculture Commodity

and Food Standards (ACFS)

2006 - 2008 : Member of the National Legislative Assembly2004 - 2010 : Secretary General, Office of National Economic

and Social Development Board

2010 - Present : Deputy Secretary-General of the Cabinet

#### Relevant Important Positions

Director, PTT Aromatics and Refining Public Company Limited

None



Mr. Chaikasem Nitisiri

the Remuneration Committee

Independent Director, Chairman of the Corporate Governance Committee and Member of the Audit Committee

(%) Share Possession

None

None

#### Educations

- · LL.B. (Second Class Hons.), Chulalongkorn University, Thailand
- Barrister at Law, Institute of Legal Training of the Bar Association of Thailand
- LL.M., Columbia University, U.S.A.
- · Honorary Doctor of Laws, Ramkhamhaeng University, Thailand
- Honorary Doctor of Laws, North-Chiang Mai University, Thailand

- · International Procurement Program, Georgetown University, U.S.A.
- The National Defense Course, National Defense College, (Class of 38th), Thailand
- Democratic Politics and Governance for Senior Executive Program, King Prajadhipok's Institute, (Class of 9th), Thailand
- Capital Market Academy Leadership Program, (Class of 5<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DCP 8/2001, RCP 16/2007 and FSD 5/2009
- Public Director Certification Program, Public Director Institute (PDI), (Class of 6<sup>th</sup>)

#### Work Experiences

2001 - 2002 : Director General, Dept. of Litigation of the Attorney General

2002 - 2003 : Director General, Dept. of Legal Counsel,

Office of the Attorney General

2003 - 2007 : Deputy Attorney General 2007 - 2009 : Attorney General

2009 - Present : Senior Public Prosecutor / Advisor to the Attorney General

#### Relevant Important Positions

Independent Director and Member of the Audit Committee, Thai Oil Public Company Limited



# (%) Share Possession

- · B.A. (Political Science), Chiang Mai University, Thailand
- · Master of Public Administration, Middle Tennessee State University, U.S.A.

- Public Personnel Management, International Training Institute, Sydney, Australia
- Seminar in Public Human Resource Management, JICA, Japan
- Job Evaluation, OPM, U.S.A.
- The National Defense Course, National Defense College, (Class of 48<sup>th</sup>),
- Capital Market Academy Leadership Program, (Class of 9<sup>th</sup>), Thailand
- Thai Institute of Director Association (IOD), DCP 102/2008, ACP 102/2008, FSD 1/2008 and RCC 6/2008

#### Work Experiences

: Senior Advisor, Office of the Civil Service Commission 2003 - 2006 2006 - 2008 : Director of Position Classification and Compensation

Development Bureau, Office of the Civil Service Commission

2008 - 2010 : Deputy Secretary-General of Office of the Civil Service

Commission

2010 - Present : Secretary-General, Office of the Civil Service Commission

#### Relevant Important Positions

· Chairman, PTT Chemical Public Company Limited



Mr. Surachai Phuprasert

Age 59

Independent Director, Member of the Audit Committee, Member of the Remuneration Committee and Member of the Nomination Committee

#### (%) Share Possession

#### Educations

· LL.B., Thammasat University, Thailand

#### Certifications

- The National Defense Course, National Defense College, (Class of 42<sup>nd</sup>), Thailand
- Senior Executive Officers Program, Office of the Civil Service Commission, (Class of 19<sup>th</sup>), Thailand

#### Work Experiences

1997 - 2001 : Assistant Secretary General to the Cabinet
2001 - 2007 : Deputy Secretary General to the Cabinet
2007 - 2010 : Secretary General to the Cabinet
2010 - Present : Advisor of the Prime Ministed DG.

Relevant Important Positions None

# Dr. Surapon Nitikraipot Age 50

Independent Director, Member of the Corporate Governance Committee

# (%) Share Possession

#### Educations

None

None

- Bachelor of Laws (Second Class Hons.), Thammasat University, Thailand
- Barrister at Law, (Class of 35<sup>th</sup>), 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 Decentralization and Local Government, International Institute of Public Administration, Paris, France
- Thai Institute of Directors Association (IOD), DCP 102/2008
- The Joint State-Private Sector Course, National Defense College, (Class of 23<sup>rd</sup>) (Program started: October 2010 - October 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. Watcharakiti Watcharothai Age 50

Independent Director,
Member of the Corporate Governance Committee
and Member of the Nomination Committee

#### (%) Share Possession

#### 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 4<sup>th</sup>), Thailand
- Capital Market Academy Leadership Program, (Class of 9<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DCP 121/2009
- Public Director Certification Program, Public Director Institute (PDI), (Class of 5<sup>th</sup>)
- Study in The Programme for Senior Executives on Justice Administration Batch, National Justice Academy, (Class of 15<sup>th</sup>) (Program started: October 1, 2010 - September 30, 2011)

#### Work Experiences

2001 - 2007 : Assistant Lord Chamberlain 2007 - Present : Grand Chamberlain

Relevant Important Positions None



Mr. Krairit Nilkuha Age 59

Director, Member of the Remuneration Committee

#### (%) Share Possession

#### Educations

- B.Sc. in Mechanics Engineering, Kasetsart University, Thailand
- New Mexico Institute of Mining and Technology, U.S.A.

#### Certifications

- The National Defense Course, National Defense College, (Class of 48<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), ACP 24/2008, UFS 6/2006, DAP 53/2006, and R-SS 1/2009
- Capital Market Academy Leadership Program, (Class of 8<sup>th</sup>), Thailand

## 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

None

None



Mr. Anuwat Maytheewibulwut Age 59

Independent Director

# (%) Share Possession

#### Educations

- · LL.B. (Second Class Hons.), Chulalongkorn University, Thailand
- M.A. (Public Administration), Chulalongkorn University, Thailand

#### Certifications

- The National Defense Course, National Defense College, (Class of 45<sup>th</sup>), Thailand
- Certificate of Senior Administrator Program, Ministry of Interior, (Class of 36<sup>th</sup>), Thailand
- Study in The Programme for Senior Executives on Justice Administration Batch, National Justice Academy, (Class of 15<sup>th</sup>) (Program started: October 2010 - September 2011)

#### Work Experiences

2004 - 2005 : Governor of Phang-nga Province
2005 - 2006 : Governor of Samut Songkhram Province
2006 - 2008 : Governor of Samut Prakan Province
2008 - Present : Director General of Department of Lands,

Ministry of Interior

Relevant Important Positions

None

None

None



Dr. Bhusana Premanode

Independent Director

Age 56

# (%) Share Possession

#### Educations

- M.Sc. Computing Science, Imperial College, University of London, UK
- M.M. Sasin Graduate Institution of Business Administration of Chulalongkorn University, Thailand
- Ph.D. in Bioengineering, Imperial College, University of London, UK
- D.B.A. in Finance, Somerset University, UK

#### Certifications

 The National Defense Course, National Defense College, (Class of 39<sup>th</sup>), Thailand

## Work Experiences

Present : Visiting Professor, Imperial College, University of London, UK Relevant Important Positions

Director, PTT Exploration and Production Public Company Limited

None



Director

Director

## (%) Share Possession

#### 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 47<sup>th</sup>), Thailand
- Capital Market Academy Leadership Program, (Class of 4<sup>th</sup>), 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 Aromatics and Refining Public Company Limited
- · Chairman, IRPC Public Company Limited

# Mrs. Benja Louichareon Age 57

#### (%) Share Possession

#### 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)
- Certificate of Public Director Certification Program, Public Director Institute (PDI), Thailand
- Capital Market Academy Leadership Program, (Class of 8<sup>th</sup>), 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 Department2004 - 2005 : Principal Advisor on Tax Base Management,

Revenue Department

2005 - 2008 : Inspector General, Office of Permanent Secretary for Finance

2008 - Present : Deputy Permanent Secretary of Ministry of Finance

Relevant Important Positions None

None



Mr. Pichai Chunhavajira
Director

Age 61

# (%) Share Possession

#### Education

- · B.A. (Accounting), Thammasat University, Thailand
- M.B.A. (Business Administration), Indiana University of Pennsylvania, U.S.A.
- Honorary Degree Doctor of Philosophy (Accounting), Thammasat University, Thailand
- Doctor of Philosophy (Honorable Financial Management), Mahasarakham University, Thailand

#### Certifications

- Certified Auditor No. 2918
- The Joint State-Private Sector Course, National Defense College, (Class of 13<sup>th</sup>)
- Capital Market Academy Leadership Program, (Class of 5<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DAP 49/2005 and DCP 110/2008

#### Work Experiences

2001 - 2007 : Senior Executive Vice President, Corporate Finance

and Accounting, PTT Public Company Limited

2003 - 2004 : Senior Executive Vice President,

Corporate Finance and Accounting, Acting President, Bangchak Petroleum Public Company Limited

2008 - 2009 : Chief Financial Officer, PTT Public Company Limited

#### Relevant Important Positions

- · Chairman, Thaioil Public Company Limited
- Director, PTT Exploration and Production Public Company Limited



Mr. Piyawat Niyomrerks
Independent Director

(Retired on January 1, 2011)

Age 59

# (%) Share Possession

#### Educations

- · LL.B. (Hons.), Thammasat University, Thailand
- M.A. International Relations, Saint John's University, U.S.A.
- · Master of Comparative Law, George Washington University, U.S.A.

#### Certifications None

#### Work Experiences

2003 - 2006 : Ambassador of Thailand to the Republic of Cambodia,

Phnom Penh

2006 - 2007 : Deputy Permanent Secretary, Ministry of Foreign Affairs

2007 - 2009 : Member of the National Legislative Assembly

2009 - 2010 : Deputy Permanent Secretary, Ministry of Foreign Affairs Relevant Important Positions None

None

0.000121



**Mr. Prasert Bunsumpun**Director and Secretary to the Board

Age 58

## (%) Share Possession

#### E 1 ....

- 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

#### Certifications

- The Joint State-Private Sector Course, National Defense College, (Class of 10<sup>th</sup>)
- · 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 Prajadhipok's Institute, Thailand
- Capital Market Academy Leadership Program, (Class of 3<sup>rd</sup>), Thailand
- Thai Institute of Directors Association (IOD), DAP 26/2004

#### Work Experiences

2001 - 2003 : Senior Executive Vice President, Gas Business Group,

PTT Public Company Limited (PTT)

2003 - 2007 : President, PTT

2006 - 2008 : Member of National Legistration Assembly 2008 - Present : President and Chief Executive Officer, PTT

#### Relevant Important Positions

- Chairman, PTT Exploration and Production Public Company Limited
- Director, IRPC Public Company Limited

0.000426

# **PTT Executives**



(%) Share Possession

#### 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

0.000426

0.000141

#### Certifications

- The Joint State-Private Sector Course, National Defense College, (Class of 10<sup>th</sup>)
- · Advanced Management Program, Harvard Business School, U.S.A.
- High Certificate of Democratic Politics and Governance for Senior Executive Program, (Class of 6<sup>th</sup>), King Prajadhipok's Institute, Thailand
- Capital Market Academy Leadership Program, (Class of 3<sup>rd</sup>), Thailand
- Thai Institute of Directors Association (IOD), DAP 26/2004

#### Work Experiences

2001 - 2003 : Senior Executive Vice President, Gas Business Group,

PTT Public Company Limited (PTT)

2003 - 2007 : President, PTT

2006 - 2008 : Member of National Legistration Assembly 2008 - Present : President and Chief Executive Officer, PTT

#### Relevant Important Positions

- · Chairman, PTT Exploration and Production Public Company Limited
- Director, IRPC Public Company Limited



Mr. Tevin Vongvanich
Chief Financial Officer

Age 52

#### (%) Share Possession

#### Education:

- 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.

#### Certifications

- Program for Global Leadership (PGL), Harvard Business School, U.S.A.
- Democratic Politics and Governance for High-Level Administrators Program, (Class of 10<sup>th</sup>), King Prajadhipok's Institute, Thailand
- Thai Institute of Directors Association (IOD), DCP 21/2002 and FSD 6/2009
- Capital Market Academy Leadership Program, (Class of  $\mathbf{6}^{\text{th}}$ ), Thailand
- The Joint State-Private Sector Course, National Defense College, (Class of 22<sup>nd</sup>)

# Work Experiences

2008 - 2009 : Senior Vice President, PTT Exploration & Production

Public Company Limited (PTTEP), working as Senior Executive Vice President, Corporate Strategy & Development, PTT Public Company Limited (PTT)

2009 - 2010 : Chief Financial Officer and Senior Executive Vice President,

Corporate Strategy, PTT

2010 - Present: Chief Financial Officer, PTT

#### Relevant Important Positions

- · Director, Thai Oil Public Company Limited
- Director, PTT Chemical Public Company Limited
- · Director, PTT Exploration and Production Public Company Limited

0.000379



**Dr. Prajya Phinyawat**Chief Operations Officer,

Downstream Petroleum Business Group and Senior Executive Vice President, Oil Business Unit

#### (%) Share Possession

#### Educations

- · B.Eng. (Civil Engineering), Chulalongkorn University, Thailand
- · M.S. (Civil Engineering), Stanford University, U.S.A.
- · Ph.D. (Civil Engineering), University of Texas at Austin, U.S.A.

#### Certifications

- The Joint State-Private Sector Course, National Defense College, (Class of 15<sup>th</sup>)
- Capital Market Academy Leadership Program, (Class of 7<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DCP 14/2002

#### Work Experiences

2002 - 2003 : Senior Executive Vice President, Corporate Strategy

and Development, PTT Public Company Limited (PTT)

2003 - 2004 : Senior Executive Vice President, Corporate Support, PTT

2004 - 2007 : Senior Executive Vice President,

Petrochemicals & Refining Business Group, PTT

2008 - Present: Chief Operations Officer,

Downstream Petroleum Business Group,

Senior Executive Vice President, Oil Business Unit, PTT

#### Relevant Important Positions

- · Director, PTT Aromatics and Refining Public Company Limited
- · Director, Thai Oil Public Company Limited
- Director, IRPC Public Company Limited



Mr. Pitipan Tepartimargorn Age 54
Senior Executive Vice President,

Human Resources & Organization Excellence

# (%) Share Possession

#### Educations

Age 59

- · B.Eng., King Mongkut's Institute of Technology Ladkrabang, Thailand
- Master of Political Science, (Public Administration),
   Thammasat University, Thailand

#### Certifications

- Senior Executive Program (SEP), Sasin Graduate Institution of Business Administration of Chulalongkorn University, Thailand
- Energy Leadership Program, Institute of the Ministry of Energy
- Strategic Human Resources Management Program, Harvard University
- NIDA Wharton Executive Leadership Program, Wharton School, University of Pennsylvania, U.S.A.

## Work Experiences

2001 - 2003 : Vice President, Corporate Development,

PTT Public Company Limited (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

- · Chairman, Energy Complex Company Limited
- Director, PTT ICT Solution Company Limited

0.000047



Senior Executive Vice President, Petrochemicals & Refining Business Unit

#### (%) Share Possession

Chemical Engineering, Chulalongkorn University, Thailand

- Thai Listed Companies Association, TLCA Executive Development Program
- Thai Institute of Directors Association (IOD), DCP 132/2010

#### Work Experiences

2007 - 2008 : Assistant Managing Director - Business,

Thai Oil Public Company Limited (TOP)

: Assistant Managing Director - Strategic Planning & Business 2008 - 2009

Development, TOP

2009 - 2010 : Senior Executive Vice President, Subsidiary Planing

& Management Petrochemicals & Refining Business Unit,

0.000007

0.000101

PTT Public Company Limited (PTT)

2010 - Present: Senior Executive Vice President - Petrochemicals & Refining

Business Unit, PTT

#### Relevant Important Positions

- · Director, Bangchak Petroleum Public Company Limited
- · Director, Star Petroleum Refining Company Limited

(%) Share Possession

- · B.Eng (Civil Engineering), Chiang Mai University, Thailand
- · M.B.A., Thammasat University, Thailand

- · Program for Global Leadership (PGL), Harward Business School, U.S.A.
- Oxford Energy Seminar, UK
- · Break Through Program for Senior Executives (BPSE), IMD Institute, Switzerland
- Thai Institute of Directors Association (IOD), DCP 129/2010
- The Joint State-Private Sector Cource, National Defence College, (Class of 20<sup>th</sup>)

## Work Experiences

2004 - 2005 : Executive Vice President Supply and Logistics,

PTT Public Company Limited (PTT)

2005 - 2009 : Executive Vice President Natural Gas Vehicle, PTT

2009 - 2010 : Executive Vice President International Trading Business Unit,

2010 - Present: Senior Executive Vice President, Corporate Strategy, PTT

#### Relevant Important Positions

- · Director, Bangchak Petroleum Public Company Limited
- Director, Bangkok Aviation Fuel Services Public Company Limited

Mr. Nuttachat Charuchinda Age 55

Senior Executive Vice President, Corporate Strategy

0.000164

0.000213



Mr. Wichai Pornkeratiwat Senior Executive Vice President,

(%) Share Possession

- B.Eng., (Eletronic Engineering), Khon Khen University, Thailand
- Master of Public Administration, National Institute Development Administration (NIDA), Thailand

- · Asian Executive Program (AEP), GE Management Development Institute
- · Senior Executive Program (SEP), Sasin Graduate Institute of Business Administration, Chulalongkorn University
- · NIDA Wharton Executive Leadership Program, Wharton School, University of Pennsylvania, U.S.A.

#### Work Experiences

2002 - 2008 : Executive Vice President, Project Management,

Exploration, Production and Gas Business Group,

PTT Public Company Limited (PTT)

: Executive Vice President, PTT, working as President, 2008 - 2009

PTT LNG Company Limited

2009 - 2010 : Executive Vice President, Natural Gas Vehicle, PTT 2010 - Present : Senior Executive Vice President, Gas Business Unit, PTT

#### Relevant Important Positions

· Chairman, PTT LNG Company Limited



Mr. Sarakorn Kulatham Senior Executive Vice President, International Trading Business Unit

# (%) Share Possession

- · 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, Wharton School, University of Pennsylvania, U.S.A.

## Work Experiences

2005 - 2006 : Executive Vice President, PTT Public Company Limited (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,

2008 - Present: Senior Executive Vice President,

International Trading Business Unit, PTT

# Relevant Important Positions

- · Director, Bangchak Petroleum Public Company Limited
- Director, Star Petroleum Refining Company Limited
- · Director, PTT International Trading Pte. Ltd.



Mr. Anon Sirisaengtaksin

Age 58

President & CEO,

PTT Exploration and Production Public Company Limited

## (%) Share Possession

#### Educations

· B.Sc. (Geology), Chulalongkorn University, Thailand

- · M.B.A., Thammasat University, Thailand
- Honorary Doctor of Public Administration, Bangkok Thonburi University

#### ertifications

- Project Investment Appraisal and Management and Global Leadership, Harvard University
- Capital Market Academy Leadership Program, (Class of 1<sup>st</sup>), Thailand
- Thai Institute of Directors Association (IOD), DAP 52/2006 and DCP 73/2006

#### Work Experiences

2001 - 2002 : Executive Vice President,

Gas Business Unit, PTT Public Company Limited (PTT)

0.000439

0.000145

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

#### Relevant Important Positions

Director, PTT Exploration and Production Public Company Limited



Dr. Pailin Chuchottaworn

Age 54

Cheif Executive Officer, IRPC Public Company Limited

# (%) Share Possession 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, Wharton School, University of Pennsylvania, U.S.A.
- Industrial Liaison Program (ILP) 2005, Massachusetts Institute Technology, U.S.A.
- Thai Institute of Directors Association (IOD), DAP 24/2004 and DCP 51/2004
- The Joint State-Private Sector Course, National Defense College, (Class of 22<sup>nd</sup>)

#### Work Experiences

2006 - 2008 : Executive Vice President, Petrochemicals & Refining Business Unit,

PTT Public Company Limited (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

and PTT Asahi Chemical Company Limited

2009 - Present : Senior Executive Vice President, PTT,

working as Cheif Executive Officer, IRPC Public Company Limited

#### **Relevant Important Positions**

- Director, Secretary to the Board, IRPC Public Company Limited
- Director, PTT Polymer Marketing Company Limited
- Director, PTT Asahi Chemical Company Limited

0.000011



Mr. Veerasak Kositpaisal

Chief Executive Officer, PTT Chemical Public Company Limited

#### (%) Share Possession

#### Educations

- B.Eng. (Mechanical), Chulalongkorn University, Thailand
- Master of Science (Mechanical Engineering), Texas A&I University, U.S.A.

- Thai Institutes of Directors Association (IOD), DCP 82/2006 and FND 30/2006
- Top Executive Program in Commerce and Trade (TEPCOT) 2/2009
- Capital Market Academy Leadership Program, (Class of 11<sup>th</sup>), Thailand

#### Work Experiences

2006 - 2008 : Executive Vice President, PTT Pubilc Company Limited (PTT),

working as Senior Executive Vice President, Trading Business,

PTT Chemical Pubilc 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 CEO, PTTCH 2009 - Present : Executive Vice President, PTT, working as CEO, PTTCH

#### Relevant Important Positions

- · Director and Secretary of the Board, PTT Chemical Public Company Limited
- · Director, PTT Polymer Marketing Company Limited
- · Director, PTT Phenol Company Limited



Mr. Bowon Vongsinudom

President & CEO, PTT Aromatics and Refining Public Company Limited

#### (%) Share Possession

- · 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

- The Joint State-Private Sector Course, National Defense College,
- · Thai Institute of Directors Association (IOD), DAP 76/2008

#### Work Experiences

2005 - 2006 : Vice President, Product and Quality,

Thai Oil Public Company Limited

2006 - 2007 : President, Rayong Refinery Public Company Limited (RRC) 2007 - 2009 : President, Alliance Refining Company Limited (ARC)

2009 - 2010 : Senior Executive Vice President, PTT Aromatics and Refining

Pubilc Company Limited (PTTAR)

2010 - Present : Senior Executive Vice President, PTT Public Company Limited

(PTT), working as President & CEO, PTTAR

#### Relevant Important Positions

- · Director and Secretary to the Board, PTT Aromatics and Refining Public Company Limited
- · Director, PTT Phenol Company Limited

None



# (%) Share Possession

# 0.000273

#### 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.

#### ertifications

- PMD, Harvard University, Boston, U.S.A.
- Democratic Politics and Governance for High-Level Administrators Program (Class of 8<sup>th</sup>), King Prajadhipok's Institute, Thailand
- The Joint State-Private Sector Course, National Defense College, (Class of 4919)
- Capital Market Academy Leadership Program, (Class of 10<sup>th</sup>), Thailand
- Thai Institute of Directors Association (IOD), DAP 121/2009

#### Work Experiences

2005 - 2008 : Executive Vice President, International Trading,

PTT Public Company Limited (PTT)

2008 - 2009 : Senior Executive Vice President, International Trading, PTT

2009 - Present : Senior Executive Vice President, PTT, working as

Chief Executive Officer, Thai Oil Public Company Limited

#### Relevant Important Positions

- · Director, Thai Oil Public Company Limited
- · Director, Thaioil Power Company Limited
- Director, Independent Power (Thailand) Company Limited

# Positions held by the Management and Authorized Controllers of PTT Plc., Subsidiaries, Associates, and Related Companies

As of December 31, 2010

			ember 31, 2010		1	2	3	4	5 (	6 7	7 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22 :	23 2	4 2	5 26	27	28	3 29
\		_	PTT Ex	ecutive	iiyasoot	ttiampon	m Nitisiri	Mr. Nontigorn Kanchanachitra	Surachai Phuprasert	Dr. Surapon Nitikraipot	kili watararotrar	Mr. Anuwat Maytheewibulwut	Bhusana Premanode	ttiphong	Benja Louichareon	Mr. Phichai Chunhavajira	Piyawat Niyomrerks	Mr. Prasert Bunsumpun	ngvanich	inyawat	Pitipan Tepartimargorn	Sukrit Surabotsopon	Mr. Nuttachat Charuchida	Mr. Wichai Pornkeratiwat	Sarakom Kulatham	Mr. Anon Sirisaengtaksin	Dr. Pallin Chuchottawom	Veerasak Kositpaisai Bowon Vongsiludom	Bulakul	Penchun Jarikasem*	Prisana Prahankhasuk
	•				Dr. Naris Chaiyasoot	Ampon Kittiampon	Chaikasem Nitisiri	Nontigorn	Surachai	Surapon P	Krairit Nilkuha	Anuwat M	3husana F	Norkun Sittiphong	Benja Lo	Phichai C	Piyawat N	Prasert Bi	Mr. Tevin Vongvanich	Prajya Phinyawat	Pitipan Te	Sukrit Sur	Nuttachat	Wichai Po	Sarakom	Anon Siris	Vacanta Cnu	Sowon Vo	Surong Bi	Penchun	Prisana
	Company				<u>P</u>	<u>D</u> .	Mr.	Ā.		בַּ בַ	Ž Ž	Ā.	<u>P</u>	<u>.</u>	Mrs.	Ā.	Ā.	Ā.	Ā.	<u>-</u>	Ā.	Ā.	Ā.	Ā.	Ŗ.	ž	ב <u>ֿ</u>	M. M.			
		PTT	Plc.	PTT	Х	1	1	1	1	1	/ /	1	1	1	1	1	1	*0/	//	//	//	//	//	//	//	// .	1 1	/ //	//	//	//
	E&P	1	PTT Exploration and Production Plc.	PTTEP									/			/		Х	/							*0/					L
		2	PTT Natural Gas Distribution Co., Ltd.	PTTNGD																	/										
	Gas	3	PTT LNG Co., Ltd.	PTTLNG																				Х							
		4	Combined Heat and Power Producing Co., Ltd.	CHPP																											L
		5	Retail Business Alliance Co., Ltd.	RBA																											L
		6	PTT (Cambodia) Co., Ltd.	PTTCL																											
ies	Oil	7	PTT Retail Business Co., Ltd.	PTTRB																											
diar		8	Subic Bay Energy Co., Ltd.	SBECL																											/
Subsidiaries		9	PTT Green Energy Pte., Ltd.	PTTGE																									/		L
Su	Petrochemical	10	PTT Polymer Marketing Co., Ltd.	PTTPM																Х							/ /	/	/		
	& Refining	11	PTT Polymer Logistics Co., Ltd.	PTTPL																Х							/	/			L
	& Reliffing	12	PTT Tank Terminal Co., Ltd.	PTT TANK																Х											L
	Trading	13	PTT International Trading Pte.	PTTT																					/				Х		/
		14	Energy Complex Co., Ltd.	EnCo																	Х										
	Others	15	PTT International Co., Ltd.	PTTI															/											/	/
		16	Business Services Alliance Co., Ltd.	BSA																	Х									/	
		17	PTT Utility Co., Ltd.	PTTUT														П										/			Г
		18	Thailoil Power Co., Ltd.	TP												/		Х											/		
		19	Independent Power (Thailand) Co., Ltd.	IPT														Х											/		Г
	Gas	20	Trans Thai-Malaysia (Thailand) Co., Ltd.	TTM (T)																											
		21	Trans Thai-Malaysia (Malaysia) Co., Ltd.	TTM (M)																											
		22	District Cooling System and Power Plant Co., Ltd.	DCAP																											
		23	Ratchaburi Power Co., Ltd.	RPCL																											Г
		24	B.Grimm Power Ltd.	B.Grimm BIP																											Г
		25	Thai Petroleum Pipeline Co., Ltd.	THAPPLINE																											П
		26	Petro Asia (Thailand) Co., Ltd.	PA (Thailand)																											
sa		27	Bangkok Aviation Fuel Service Plc.	BAFS																			/								Г
ani		28	Intoplane Services Co., Ltd.	IPS																											Г
dwo	0.1	29	Fuel Pipeline Transportation Co., Ltd.	FPT																											Г
O p	Oil	30	Vietnam LPG Co., Ltd.	VLPG																											Г
Related Companies		31	KELOIL-PTT LPG Sdn. Bhd.	KPL																											Г
		32	Petro Asia (Huizhou) Co., Ltd.	PA (Huizhou)																											Г
l an		33	Petro Asia (Maoming) Co., Ltd	PA (Maoming)																											Г
atec		34	Petro Asia (Sanshui) Co., Ltd.	PA (Sanshui)														П													Г
Associated and		35	PTT Chemical Plc.	PTTCH				Х										/	/	/							C	)/			
Ass		36	PTT Aromatics and Refining Plc.	PTTAR		/								Х				/	/	/				T				*0			Г
		37	PTT Phenol Co., Ltd.	PPCL																Х		/						/ /		/	
	Detrock	38	Star Petroleum Refining Co., Ltd.	SPRC																		/			/					/	
	Petrochemical -	39	Thai Oil Plc.	TOP	/		/									Х			/	/									*/		Г
	& Refining	40	Bangchak Petroleum Plc.	BCP							X					/						/	/		/						
		41	IRPC Pic.	IRPC										Х		/		/		/						(	)/				
		42	HMC Polymers Co., Ltd.	HMC																Х		/									
		43	PTT Asahi Chemical Co., Ltd.	PTTAC																Х							/				
		44	PTT Maintenance and Engineering Co., Ltd.	PTTME																		/		1							
	011	45	Dhipaya Insurance Plc.	TIP																											1
	Others																	_		-		_		_				-	-		-

Notes: 1. : Symbol X = Chairman \* = CEO O = President / = Director // = Executive

2. \* Mr. Chatchawal Eimsiri, in place of Ms. Penchun Jarikasem, on February 1, 2011

# **Awards of Success**

# Recognition for PTT in 2010

In 2010, PTT won 41 awards and prestigious ranking from 30 institutions:

- National, 22 organizations, for a total of 29 awards.
- International, 8 organizations, for a total of 12 awards.

# • National (22 organizations, 29 awards)

No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
1.	BrandAge Magazine	Thailand's Most Admired Brand & Why We Buy 2010 Award, PTT was voted # 1 in two categories: • Service Stations • Lubricant Products	January 2010	<ul> <li>Based on a survey among customers on products and services for 2010</li> <li>Service stations - the most favorite brand for seven consecutive years, 2004 - 2010</li> <li>Lubricant products - ranked first, up from third in 2009</li> </ul>
2.	Thai Bond Market Association (Thai BMA)	Best Bond Award 2009  • Best Investor Relations	April 2, 2010	Best Investor Relations in recognition of bond issuer with outstanding information disclosure and efficient, continual investor relations activities





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
3.	Reader's Digest	Trusted Brands 2010 Thailand's Top Brand - Platinum Award for service stations	June 17, 2010	PTT was the only brand awarded     Thailand's Top Brand for 10 consecutive     years (2001 - 2008) with 'Gold' award,     and a 'Platinum' award since 2009.
4.	National Quality Award Committee	Gas Transmission, Gas Business Unit won  Thailand Quality Class: TQC 2009  Thailand Quality Award: TQA 2010 (January 13, 20)	June 21, 2010	<ul> <li>Seven criterias:</li> <li>1. Organizational leadership</li> <li>2. Strategic planning</li> <li>3. Customer and market focus</li> <li>4. Knowledge testing, analysis, and management</li> <li>5. Human resource focus</li> <li>6. Process management</li> <li>7. Business performance</li> <li>Same criteria as those used for world-class awards in the US.</li> <li>Gas Transmission, Gas Business Unit, has won the TQC award for three consecutive years.</li> </ul>





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
5.	Ministry of Labour	National Outstanding Business Operator in Safety, Occupational Health, and Work Environment Award • 30 operation sites (PTT: 27 sites, PTT's affiliates	July 8 - 10, 2010 s: 3 sites)	<ul> <li>Awarded to workplaces with international standards for management and operation of safety, occupational health, and work environment, and compliance with legal requirements set at the 24<sup>th</sup> National Safety Week conference.</li> </ul>
6.	Ministry of Industry	The Prime Minister's Industry Award 2010 for Energy Management Rayong Gas Separation Plant	August 16, 2010	Outstanding performance in energy conservation, efficient energy management with high regard to energy efficiency and benefit derived.





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
7.	Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment	EIA Monitoring Awards 2009     Songkhla Petroleum     Terminal (oil and gas tanker port and jetty)	August 18, 2010	Awarded to operators in the private sector and public sector with serious and continual conformance to EIA measures and environmental management standards
8.	Thailand Greenhouse Gas Management Organization (Public Organization)	Forest Conservation and Restoration Award	August 19, 2010	Presented at the Climate Thailand     Conference 2010 in recognition of     PTT's environmental awareness     and various projects on forest     restoration to decrease greenhouse     gas emission





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
9.	Thailand Management Association (TMA), with Sasin Graduate Institute of Business Administration of Chulalongkorn University	Two awards bestowed by HRH Princess Maha Chakri Sirindhorn: Thailand Corporate Excellence Awards 2009 • Leadership Excellence for the fourth consecutive year • Financial Management Excellence for the first year	August 20, 2010	<ul> <li>Based on a survey among senior executives of 1,000 leading companies in Thailand</li> <li>Based on eight areas of excellence as a role model and a benchmark for others' further development</li> </ul>
10.	Office of Product Value Promotion, Department of Export Promotion, Ministry of Commerce	Prime Minister's Export Award 2010  Best Exporter	August 23, 2010	Based on last five years' data:     export value growth, international     marketing strategies, quality     management and continuous     process improvement, safety     and occupational health management     CG, and CRS activities      This five-year lasting award was first     presented to PTT in 2004.





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
11.	Department of Alternative Energy Development and Efficiency, Ministry of Energy	Thailand Energy Award 2010: Alternative Energy and Energy Conservation • Rayong Gas Separation Plant	August 30, 2010	<ul> <li>Thailand Energy Awards 2010 are given for energy conservation, human resources, creative energy projects, and promotion of energy conservation and alternative energy.</li> <li>PTT commands efficient energy management with consideration for energy efficiency and minimal impact on the environment and global warming.</li> </ul>
12.	Ministry of Finance	Three Outstanding State Enterprise Awards 2010  Best State Enterprise of the Year: Best of the Best for two consecutive years  Outstanding Leadership Award for two consecutive years  Outstanding Innovation for the first year	September 1, 2010	<ul> <li>Best State Enterprise of the Year in all categories is 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 organization restructure adjustment</li> <li>Outstanding leadership award based on the CEO who has had sustainable success through a long-term vision and has efficiently achieved the vision</li> <li>Outstanding innovation based on the support and efforts toward a learning society</li> </ul>





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
13.	Department of Labour Protection and Welfare, Ministry of Labour	Plaque Award - Silver Level • Rayong Gas Separation Plant		Awarded for enrolling in the Zero Accident Campaign sponsored by the Institute of Occupational Safety Rayong Gas Separation Plant operated 8,544,100 man-hours with zero lost-time accident from April 21, 1998 - December 31, 2009
14.	Tourism Authority of Thailand	Thailand Tourism (Kinnaree) Awards 2010 for Eco-Tourism 2010 • Sirinath Rajini Ecosystem Learning Center	2010	Presented at The 8 <sup>th</sup> Thai Tourism Industry Award 2010 event Cited were PTT's quality tourism management and services provided to locals and tourists regarding environmental friendly and social responsibility approaches





13

No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
15.	ADMAN Award & Symposium 2010	Three awards for Outstanding Advertisements for One Million Trees for the King Project  AD That Works (Best of the Best) Silver Level  Integrated Marketing Communication (IMC), Silver Level  Interactive & Digital Media Category: Viral Advertising Campaign, Bronze Level	October 20, 2010	<ul> <li>A contest for marketing media at the ADMAN Award &amp; Symposium 2010</li> <li>The use of integrated media and online media (www.milliontreesforking.com), resulting in the great success of the project and prompting reforestation nationwide</li> </ul>
16.	ADFEST 2010	ADFEST 2010 - Silver Level for Cinematography on Service Station Advertisement ("PTT Life Station" - Destination series)	October 2010	The Asia-Pacific Advertising Festival 2010 (ADFEST) was held in Japan with judges chosen from worldwide advertising executives





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
17.	USGBC (U.S. Green Building Council)	Energy Complex Building won certification for being An Energy and Environmental Conservation Building - Core and Shell Version 2.0 category - Platinum Level, highest level under LEED (Leadership in Energy and Environmental Design) criteria	October 28, 2010	<ul> <li>ENCO is the first building in Southeast Asia and the fifth outside the US to be certified under the standard. The four other countries are India, Brazil, Canada, and Sweden.</li> <li>Platinum certification will be awarded only to those whose design and construction focus on all aspects of details - starting from choice of location, pollution control during construction, choice of equipment that saves energy and water, and good air quality inside for a workplace that is hygienic and safe.</li> </ul>
18.	Stock Exchange of Thailand (SET) with Finance & Banking Magazine	SET Awards 2010  • Top Corporate Governance Report Awards	November 19, 2010	<ul> <li>In recognition of outstanding listed, securities, and mutual fund management companies for their excellence in management</li> <li>Based on corporate governance and code of conduct with explicit references</li> </ul>





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
19.	Stock Exchange of Thailand (SET), Securities and Exchange Commission (SEC), Thai Institute of Directors (IOD)	"Excellent" ranking in the 2010 Survey of Good Corporate Governance of Listed Companies	November 24, 2010	<ul> <li>Cited among 70 companies with "excellent" CG scoring.</li> <li>A total of 480 listed companies (exclusive of companies listed during the year and those under restructuring) joined the survey under the five OECD criterias for corporate governance: <ol> <li>Shareholders' rights</li> <li>Equitable treatment of shareholders</li> <li>Regard for stakeholders' roles</li> <li>Information disclosure and transparency</li> <li>Responsibility of the Board of Directors</li> </ol> </li> </ul>
20.	Securities Analysts Association (SAA)	Best CEO 2010  • Mr. Prasert Bunsumpun	November 30, 2010	<ul> <li>Based on the performance of executives of leading listed companies with competence in analysis and investment, considered vital to the economic and capital market development</li> <li>Presented at the SAA Award for Listed Companies 2010 event</li> </ul>





No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
21.	Thailand Productivity Institute, Ministry of Industry	Thailand Automotive Quality Awards 2010 (TAQA Awards 2010)  • Service stations  • Lubricant products	December 2, 2010 •	Based on a survey among motorists nationwide on the best operator for each service. The award was first given out in 2002 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
22.	Stock Exchange of Thailand (SET)	Outstanding Exhibition Booth • Activities for Investors or Shareholders	December 15, • 2010	Awarded to companies that joined in the "SET in the City" Exhibition





21 22

# · International (eight organizations, 12 awards)

No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
1.	World Finance Magazine	PTT won three awards:  World Finance 100 Achievement: Mr. Prasert Bunsumpun  Best Independent Oil & Gas Company, Asia 2010  Best Oil & Gas Clean Energy Company, Asia 2010	2010	Opinion survey among the readers of the magzine
2.	Forbes Magazine	No. 196 in Forbes Global 2000 Ranking in 2010	April 2010	PTT ranked 196 <sup>th</sup> among the 2,000 large-capital and most powerful listed companies worldwide







No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
3.	Corporate Governance Asia Magazine (Hong Kong-based)	<ul> <li>Recognition Award 2010, The Best of Asia</li> <li>First Asian Corporate Director Recognition Award: Mr. Prasert Bunsumpun</li> </ul>	June 15, 2010	<ul> <li>This was the fifth consecutive year in which PTT was named to the award, based on companies with outstanding corporate governance practices in each Asian country under the following criteria:</li> <li>1. Recognition of publicly outstanding CG performance</li> <li>2. Participation in activities directly related to the promotion of CG practices over the past 12 months</li> <li>3. Outstanding operation improvement of CG</li> <li>The first Asian Corporate Director Recognition Awards were given to corporate leaders and directors of listed companies in Asia with outstanding performance in corporate management and good governance</li> </ul>
4.	Fortune Global 500	Ranked 155 <sup>th</sup> among major companies worldwide  No. 118 in 2009  No. 135 in 2008  No. 207 in 2007  No. 265 in 2006  No. 373 in 2005  No. 456 in 2004	August 2010	<ul> <li>Based on revenue and income generated in 2009</li> <li>PTT remained the sole Thai company among the top 500</li> </ul>



No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
5.	Platts	<ul> <li>2010 Platts Top 250         Global Energy Company         Ranking Awards</li> <li>Ranked 7<sup>th</sup> among Energy         Companies in Asia</li> <li>Ranked 35<sup>th</sup> in Global         Energy Companies</li> </ul>		This is a ranking of leading energy companies Based on assets, income/sales revenue, net profits, and rates of return in the past year
6.	ASEAN Center for Energy	ASEAN Energy Awards 2010 - Outstanding Energy Management for Large Factories (First Runner-up) • Rayong Gas Separation Plant		The awards were announced after AMEM 2010 in Dalat, Vietnam. Thailand won seven awards for winners and four for runners-up. Thailand won most awards in ASEAN through the 16 projects chosen by the Ministry of Energy. This underscored PTT's success in the stewardship of the environment in view of its energy activities - production and utilization, and in reducing global warming and supporting clean mechanisms.







No.	Presented by	Award / Ranking	Date	Notes (Reference / Criteria)
7.	Investor Relations Magazine	Best Investor Relations by a Thai Company 2010 Award	December 14, 2010	<ul> <li>Based on a survey of analysts and institutional investors in Southeast Asia</li> </ul>
8.	The Asset Magazine	The Asset's Platinum Awards for All-round Excellence • Platinum Corporate Award for two consecutive years	2010 (March 1, 2011)	<ul> <li>Based on a survey of leading worldwide institutional investors, analysts, and experts in Asia-based stock markets and self-assessment of each company</li> <li>Based on three-year financial performance, CG, CSR, environmental responsibility, and investor relations</li> </ul>







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