

Form 56-1

As of December 31, 2014

PTT Exploration and Production Public Company Limited

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Information Certification**Attachments**

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1. Policy and Business Operations Overview

1.1 Vision, Mission, Objective and Strategy

PTTEP Group is one of the leading E&P companies in Thailand, exploring for sustainable sources of petroleum for the country and other countries in which the Company has invested. This role is increasingly demanding as the energy risk that the country is facing seemingly can only be offset by increases in reserves and production capacity. This is, of course, not to mention generating return that would satisfy the shareholders and stakeholders in the midst of ever-increasing competition within the industry and external complexities as a result of a rapidly changing environment, fewer available hydrocarbons, and geographical complexity. More advanced technology and higher capabilities are required, and so is the need to maintain environmental and social equilibrium. So far, the Company's mission and vision have been up to the test.

Mission: PTTEP operates globally to provide reliable energy supply and sustainable value to all stakeholders.

Vision: Leading Asian E&P company driven by technology and green practices

Goal and Objective: PTTEP Group has consistently tracked economic trends domestically and internationally. The country's energy situation is therefore well understood, and only the most effective corresponding actions are taken. The Company's objective is to create a point of balance between production (Big), reserves (Long), and return on investment (Strong) according to the following goals:

- **Production (Big):**

PTTEP Group's operating plan is to maintain and increase the production of its current domestic and overseas projects, respectively. The Company also has a clear and focused strategic plan to support its future growth. The Company has a target of 600,000 BOED by 2020, an operational level viewed currently as the most suitable for the sustainability and stability of its growth.

- **Reserves (Long):**

PTTEP Group plans to maintain the proved reserves to production ratio (R/P Ratio or 1P/Production) at no less than 10 years, and proved and probable reserves and best estimate contingent resources to production ((2P+2C)/Production) at no less than 40 years.

- **Return on Investment (Strong):**

PTTEP Group plans to have a Return on Capital Employed (ROCE) higher than the industry's average while maintaining the Company's credit rating at an appropriate level.

Strategy: To attain the above, PTTEP Group has formulated its strategic directions as follows:

1) **Current Assets Management:** Current assets are grouped into the following phases and managed with the aim of increasing production capacity and reserves.

1.1) **Producing Assets:** PTTEP Group focuses on maintaining the production level of our current domestic and overseas assets, both those operated by the Company and by joint ventures, by enhancing its operational efficiency and reliability through technological advancement. In addition, the Company focuses on exploration and development in the concession areas to increase petroleum reserves and sustain production. This effort is to satisfy domestic petroleum demand and generate the Company's present and future revenues.

1.2) **Development Assets:** These projects will generate income and add value to the Company in the near future. Moreover, they will replace projects that are declining in production. The Company remains focused on managing these projects, ensuring that they are being implemented as planned in order to start producing as scheduled and under the allocated budget.

1.3) **Exploration Assets:** These projects are essential for PTTEP Group's sustainable growth as they will increase reserves and production rates in the future. The Company emphasizes the management of the exploration portfolio and selective explorations to assess resource potential to justify development schemes.

2) **Investment for Sustainable Growth:** Growth continues to be driven further as PTTEP Group is able to find the balance between meeting the demands of the stakeholders while being highly responsible to the society and environment. Good Corporate Governance also continues to be practiced and followed. Growth investment through new exploration acreage and Merger and Acquisition (M&A) is consistently sought. The Company specifically searches for new projects which are ready to yield and therefore increase productivity and reserves.

3) **Organizational Capability Development:** To increase our value, reduce lifting, finding and development costs, and therefore increase return on investment, PTTEP Group has enhanced our organizational capabilities and developed new capability enablers in the following areas:

3.1) Funding and Financial Risk Management: Fund mobilization and investment are managed with the aim to maintain PTTEP Group's credit rating at the same level with other Thai public companies through maintaining financial ratios, debt-to-shareholders' equity ratio, and debt-to-reserves ratio at appropriate levels. In addition, currency risk, interest rates, and liquidity are always watched carefully. The aim of the Company's finances, in other words, is to be able to stand shoulder to shoulder with world-class companies, for example, as the newly established Treasury Center and In-House Financial Academy continue to mature.

3.2) Acceleration of Knowledge Base, Technology and Research Capability: PTTEP Group's capability and technology development roadmap is written specifically to support our growth strategy and is being progressively implemented. The Company's Research and Development Technology Center is therefore developed.

3.3) System Development: PTTEP Group's operational procedure and corporate structure are designed to be more in line with the Company's business and investment plans where a greater emphasis has been increasingly more on investments and operations abroad.

3.4) Human Resources Management and Organizational Capability Development: To be able to compete internationally, PTTEP Group not only needs to have sufficient qualified personnel, but the Company also must constantly further staff capabilities, enhance leadership skills as well as the level of commitment and sense of belonging. Work structures and patterns across the organization have also been designed and standardized to support the Company's future growth and sustainability domestically and internationally. In addition, the Company's corporate values which have been molded around *EP SPIRIT* are being constantly cultivated. It is a key to development and foundation of growth for the PTT group.

3.5) Sustainable Development Management: PTTEP's sustainability requires an integration of environmental and social aspects into our business decisions, as we are striving to make PTTEP the company of choice for business partners, host governments, communities, and employees. The Company has therefore continued to cultivate Governance Risk Compliance and Corporate Social Responsibility (CSR) to create values which are to be shared with and among our stakeholders. Meanwhile, the Company has simultaneously improved our SSHE management system, reinforcing while making it even more robust in order to pave the way for a sustainable future as well as to gain acceptance and earn social license to operate from the public, local community surrounding all operating areas, and society at large. One of PTTEP Group's goals is to become and maintain our membership in the Dow Jones Sustainability Index (DJSI) World Oil and Gas Industry, an internationally accepted measurement for sustainability, a goal which we successfully achieved in 2014.

Strategy Adjustment under Decreasing Oil Prices

The crude oil price in the world market has dropped from USD 95 -105 per barrel in June to USD 60 - 85 per barrel, and the downward trend in the oil prices is set to continue in 2015. Given this outlook, PTTEP Group has developed the following new strategies and initiatives in order to maintain the balance between business growth and sustainable performance in the long run.

- For producing assets, there is no plan for cost reduction so as to maintain the current production level.
- For development assets, the Company will re-evaluate the “Final Investment Decision” for projects with high development costs.
- For exploration assets, the Company will invest only in low risk areas and focus on meeting obligations of governments of every country in which we operate.
- For M&A, the Company will mainly invest in producing or near-producing projects with the aim to increase the reserves and revenues of the Company in the short term.
- In order to cope with decreasing oil prices, PTTEP Group has also developed the “SAVE...to be SAFE” initiative for long term cost reduction. The measures to reduce costs include standardization of tools and equipment, work integration, optimization, and adoption of new technologies. All corporate expenses will be reduced, including consulting fees, and travelling as well as information technology expenses.

Procedure to Set the Company's Vision and Mission

The PTTEP Board of Directors (the Board) considers and approves the vision and mission of the Company every year to review Company's short-, medium- and long-term strategy and work plan. The vision, mission, and strategy of the Company are reviewed during the Board Offsite Meeting through a systematic planning process. In the early stage, the Board considers current and future trends of the business environment, including changes in opportunities, and risks in the petroleum exploration and production industry and their impact on the Company. PTTEP Group's responsibility as a national oil company to provide a reliable energy supply for Thailand's energy sustainability is also emphasized. In addition, the Company's investment portfolios, both in Thailand and overseas, are analyzed in terms of the ratio of Thailand and international investments, returns, risks and balance, in order to make informed decisions on the vision, mission, and both short- and long- term strategic planning. These can empower the Company to achieve sustainable growth and be consistent with business changes. The executive management will then develop the company's work plan, budget, and Key Performance Indicators (KPI) based on the policy, which all are then to be presented to the Board for approval prior to implementation.

In addition, after the Board has approved the vision, mission, and corporate strategy, executive management will communicate the approved strategic direction and corporate target to all management and employees in order to promote a better understanding about corporate vision, mission, and strategy. This will lead to the sub work plan setting and implementation which align with the corporate target, corporate work plan, and corporate core values to achieve long-term goals of the Company.

1.2 PTTEP Sustainability Management

(a) PTTEP Materiality Assessment

PTTEP's materiality assessment for 2014 includes a structured review of current and future business risks and opportunities based on the framework developed by the Global Reporting Initiative (GRI G4), as well as aspects that reflect significant economic, environmental and social impacts for PTTEP. The materiality analysis is conducted on a yearly basis as part of the reporting cycle. PTTEP follows the GRI G4 guidelines by using the process of identifying, defining reporting boundaries, prioritizing, validating, and reviewing and continuous development of issues. The details of PTTEP materiality assessment process are summarized as follows:

1. Identifying material issues by addressing the full scope of sustainability issues from the perspective of PTTEP's business operations and stakeholders. The process is based on consideration of PTTEP's strategy and activities, risks and challenges, expectations from the society, applicable laws and regulations, future trends, and stakeholder feedback.

2. Defining Reporting Boundaries: For each Material Aspect, PTTEP considers whether the impact of that particular issue lies inside or outside the organization, assess and describe where the impact ends by considering the relevance to different stakeholders.

3. Prioritize issues by assessing the level of significance and ranking issues using agreed criteria such as (magnitude of impact, importance to investors, society, and business). Each issue is prioritized as low, moderate, or high for current or potential impact on the Company in a 2014 year timeframe, and degrees of concern to stakeholders. In addition, this is arranged through focus group meetings with relevant functional groups and stakeholders.

4. Validation: The identified material issues are reviewed and validated during the SD Working Team meetings and finally approved by the SD council. All identified material issues are assessed against the Reporting Principle of 'Completeness' prior to gathering the information to be reported. The aspects identified in the prioritization step are checked against the dimensions of Scope, Boundary, and Time.

5. PTTEP's review and continuous development process applies the principles of 'Stakeholder Inclusiveness' and 'Sustainability Context' to ensure continuous improvement of information disclosure by engaging internal and external stakeholders to check whether the report content provides a reasonable and balanced picture of the organization's sustainability performance.

In conclusion, the material aspects that have been identified as relevant issues for 2014 materiality assessment include the following: business growth, climate change management, risk and crisis management, human capital development, business ethics, capital project development, social and community, occupational health and safety, and supply chain management; of which some have also been set as the Company key performance indicators for 2014.

(b) Contribution in Sustainable Development

PTTEP's mission is to operate globally to provide reliable energy supply and sustainable value to all stakeholders, with a vision to become a leading Asian E&P company driven by technology and green practices.

We believe that by providing society with a cleaner and reliable source of energy through the supply of natural gas which is predominantly reflected in our reserve and production portfolio by 69%. The natural gas supplied by PTTEP is used for power generation, resulting in lower greenhouse gas emission than the traditional coal-fired power plant while providing greater energy security than crude oil import. In 2014, PTTEP supplied natural gas at approximately 214,554 Barrels of Oil Equivalent per Day (BOED), or a total of 78,312,261 Barrels of Oil Equivalent per year, or 23.3 percent of Thailand's total natural gas demand during which period. Natural gas sale generated THB 122,804.96 million for PTTEP in 2014.

(c) Benefits to Society

PTTEP's environmental and social initiatives are laid out in our sustainable development roadmap. In 2014, key environmental initiatives include flare gas recovery and utilization, heat recovery steam generator phase 1, and methane (CH₄) emissions reduction at the S1 Project, Flash Gas Recovery Unit (FGRU) at the Greater Bongkot South Field, logistics fleet management, startup operation of salt water pump at the Arthit Project, and PTTEP's reforestation campaign. These 2014 greenhouse gas emissions initiatives reduced approximately 230,000 tonnes of carbon dioxide equivalent per year while reducing THB 523,600,000 or USD 17 million in operating cost. Meanwhile, these projects which include flare gas recovery and utilization, methane emissions reductions from the S1 Project, and the Greater

Bongkot South's flash gas recovery unit generated a revenue of approximately THB 316,400,000 or USD 10.5 million. PTTEP's reforestation project, on the other hand, which was initiated in 2013 with objectives to mitigate global warming and maximize values for all stakeholders both inside and outside of the organization, has selected areas for reforestation by taking into account communities located nearby. This creates benefits for the community such as creating jobs in the area to stimulate the local economy by hiring local people to work for the project as tree growers and maintainers. This project managed to enhance economic value in the local communities surrounding the reforestation area by generating an income of THB 245,000,000 for approximately 288 newly-employed local villagers. The project will also help offset approximately 620,000 tonnes of carbon dioxide equivalent by 2022. In addition, our petroleum exploration and production operation is conducted in accordance with local regulations, including our operating procedure which is in line with various international standards to prevent impacts on communities, i.e., the International Finance Corporation (IFC). PTTEP believes that these efforts will provide the Company with a social license to operate which helps to prevent operation disruption from community protest which, in turns, can potentially lead up to impacts on the society and higher operating cost for PTTEP.

1.3 Development and Significant Changes in 2014

Significant changes and developments in 2014 for the Company and its subsidiaries include the operational success of existing projects, investments in new projects, and changes in participating-interests of projects carried out per the Company's portfolio management strategy. The following are the highlights of these developments and changes by region.

Thailand

In April 2014, PTTEP acquired subsidiaries of Hess Corporation which hold interests in the following concessions;

- Block B12/27 (covering areas in the Pailin, Morakot and Ubon petroleum fields) and Block G7/50 of the Contract 4 Project.
- Block EU-1 and Field E5 North of the Sinphuhorm Project.

As a result, PTTEP increased its participating interest in the Contract 4 from 45% to 60%, and in the Sinphuhorm Project from 20% to 55%. PTTEP has also become the operator of the Sinphuhorm Project.

In addition, PTTEP relinquished block L21/48, an onshore exploration field in Thailand in which PTTEP held 70% interest.

In December 2014, PTTEP also submitted documents for the relinquishment of block A4/48 & A5/48, which are deep water exploration fields in Andaman Sea in which PTTEP holds 100% interest. The relinquishment is pending official approval from the DMF.

South East Asia

In March 2014, the Zawtika Project delivered natural gas for domestic use in the Republic of the Union of Myanmar (Myanmar), and began exporting gas to Thailand in August 2014 via gas sales to PTT Plc. The project's total production rate is currently over 300 million standard cubic feet per day (MMSCFD).

In August 2014, PTTEP signed a Production Sharing Contract (PSC) with the Myanmar Oil and Gas Enterprise (MOGE) for exploration and production rights in block MOGE 3 in Myanmar. PTTEP holds an 85% participating interest and is the operator of the project.

In October 2014, the Myanmar government approved the divestment of JX Nippon Oil & Gas Exploration (Myanmar) Limited from the Myanmar M11 Project, resulting in increased participating interest of PTTEP and TOTAL E&P Myanmar (TEPM) from 45% to 52.9412% and from 40% to 47.0588%, respectively.

In November 2014, PTTEP submitted documents for the relinquishment of its entire 28.30% participating interest in the Indonesia Semai II Project, an offshore exploration block located southwest of West Papua Island in the Republic of Indonesia (Indonesia). The relinquishment is currently awaiting official approval from the Indonesian government.

Africa and the Middle East

In May 2014, PTTEP received official approval from the government of Kenya to withdraw its 15% participating interest in the Kenya L10B Project, located in offshore of the Republic of Kenya (Kenya).

Australasia

In October 2014, the Company relinquished the AC/P4 concession permit after writing-off the Dillon South-1 exploration well which did not show commercial prospects. The relinquishment is pending official approval from the Australian government.

Americas

In April 2014, PTTEP acquired a 25% participating interest in the Barreirinhas AP1 Project which comprises concession blocks BAR-M-215, BAR-M-217, BAR-M-252 and BAR-M-254, located in the Federal Republic of Brazil (Brazil). The farm-in received official approval from Brazil's National Agency of Petroleum in August 2014.

In May 2014, the conditions precedent prescribed in the Partnership Unit Redemption Agreement (PURA) with Statoil Canada Limited (SCL) to restructure the ownership of the five areas of the Canada Oil Sands KKD Project were completed, and resulted in PTTEP holding 100% ownership of the Thornbury, Hangingstone and South Leismer fields, and receiving USD 419 million in cash. PTTEP also changed the project name from the Canada Oil Sands KKD Project to the Mariana Oil Sands Project.

In September 2014, PTTEP farmed-in to the Brazil BM-ES-23 Project to hold a 20% participating interest. The farm-in received official approval from Brazil's National Agency of Petroleum in November 2014.

1.4 Shareholding Structure of PTTEP Group

1.4.1 Business Overview

PTTEP's core business is exploration and production of petroleum in Thailand and foreign countries. As of December 31, 2014, PTTEP Group had 43¹ petroleum exploration and production projects in 11 countries. 19 projects were under the exploration phase, 2 projects were under the development phase, and 22 projects were under the commercial production phase.

No.	Project Name	Phase	Location	Participation Interest	Operator
Thailand: 15 projects					
1.	Bongkot Project	Production	Gulf of Thailand	44.4445%	PTTEP
2.	S1 Project	Production	North	100%	PTTEP
3.	PTTEP 1 Project	Production	Central	100%	PTTEP
4.	B6/27 Project	Production	Gulf of Thailand	60%	PTTEP
5.	Arthit Project	Production	Gulf of Thailand	80%	PTTEP
6.	L22/43 Project	Development	North	100%	PTTEP
7.	L53/43 & L54/43	Production	Central	100%	PTTEP
8.	L28/48 Project	Exploration	North East	70%	PTTEP
9.	E5 Project	Production	North East	20%	ExxonMobil
10.	Contract 3 Project	Production	Gulf of Thailand	5%	Chevron
11.	Contract 4 Project	Production	Gulf of Thailand	60%	Chevron
12.	G4/43 Project	Production	Gulf of Thailand	21.375%	Chevron
13.	Sinphuhorm Project	Production	North East	55%	PTTEP
14.	B8/32 & 9A Project	Production	Gulf of Thailand	25%	Chevron
15.	G4/48 Project	Production	Gulf of Thailand	5%	Chevron
Overlapping Area: 2 projects					
1.	G9/43 Project	Exploration	Thailand-Cambodia	100%	PTTEP
2.	MTJDA-B17 Project	Production	Thailand-Malaysia	50%	CPOC

¹Excluding Indonesia Sadang, Indonesia Semai II and A4/48 & A5/48 projects which PTTEP has submitted relinquishment documents to the respective governments of each project and been waiting for the official approval.

No.	Project Name	Phase	Location	Participation Interest	Operator
Overseas: 26 projects					
Myanmar					
1.	Myanmar M3 Project	Exploration	Gulf of Moattama	80%	PTTEP
2.	Myanmar M11 Project	Exploration	Gulf of Moattama	52.9412%	PTTEP
3.	Zawtika Project	Production	Gulf of Moattama	80%	PTTEP
4.	Yadana Project	Production	Gulf of Moattama	25.5%	TOTAL
5.	Yetagun Project	Production	Gulf of Moattama	19.31784%	Petronas
6.	Myanmar PSC G & EP 2 Project	Exploration	Onshore	90%	PTTEP
7.	Myanmar MD-7 and MD-8 Project	Exploration	Andaman Sea	100%	PTTEP
8.	Myanmar MOGE 3 Project	Exploration	Onshore	85%	PTTEP
Vietnam					
9.	Vietnam 9-2 Project	Production	Offshore	25%	HV JOC
10.	Vietnam 16-1 Project	Production	Offshore	28.5%	HV JOC
11.	Vietnam B & 48/95 Project	Exploration	Offshore	8.5%	Chevron
12.	Vietnam 52/97 Project	Exploration	Offshore	7%	Chevron
Indonesia					
13.	Indonesia Malunda	Exploration	Offshore	100%	PTTEP
14.	Indonesia South Mandar Project	Exploration	Offshore	50.75% ²	PTTEP
15.	Natuna Sea A Project	Production	Offshore	11.5%	Premier Oil
Oman					
16.	Oman 44 Project	Production	Onshore	100%	PTTEP
Algeria					
17.	Algeria Hassi Bir Rekaiz Project	Exploration	Onshore	24.5%	PTTEP

² Waiting for the official approval from Indonesian government to change the participation interest resulting from Talisman's withdrawal from the project. After the approval, PTTEP will hold 50.75% participation interest (increasing from 34%) and TOTAL will hold 49.25% participation interest of the project.

No.	Project Name	Phase	Location	Participation Interest	Operator
18.	Algeria 433A & 416B Project	Development	Onshore	35%	GBRS
Australia					
19.	PTTEP Australasia Project	Production	Offshore	20 - 100% ³	PTTEP
Canada					
20.	Mariana Oil Sands Project	Exploration	Onshore	100%	PTTEP
Mozambique					
21.	Mozambique Rovuma Offshore Area 1 Project	Exploration	Offshore	8.5%	Anadarko
22.	Mozambique Rovuma Onshore Project	Exploration	Onshore	10%	Anadarko
Kenya					
23.	Kenya L10A Project	Exploration	Offshore	31.25%	BG
24.	Kenya L5, L7, L11A, L11B & L12 Project	Exploration	Offshore	10%	Anadarko
Brazil					
25.	Barreirinhas AP1 Project	Exploration	Offshore	25%	BG Brasil
26.	Brazil BM-ES-23 Project	Exploration	Offshore	20%	Petrobras

Principal Projects in Operation

The following is a summary of key project activities undertaken during 2014. Production and sales figures disclosed hereunder are total production and sales figures for the respective projects.

1) **Highlights of Project Activity in Thailand:** PTTEP has 17 projects in Thailand including projects in the overlapping claims area. Most of the projects are in the production phase, and are located in both the Gulf of Thailand and onshore. The following are highlights key project activities in Thailand during 2014.

³ PTTEP Australasia Project holds many petroleum blocks which have various participation interests from 20 – 100%.

Bongkot Project

The Bongkot Project is the largest gas field in the Gulf of Thailand, located in the southern part of the Gulf. The Company holds 44.4445% interest and is also the operator of the project. The project has been in production since 1993. All of the natural gas and condensate produced from the Bongkot Field is sold to PTT, under a take-or-pay basis.

In the year 2014, the project drilled exploration, appraisal, and development wells and also installed production platforms in order to maintain steady production levels. Sales volume from the project averaged 862 million standard cubic feet per day (MMSCFD) of natural gas (equivalent to 141,045 barrels of oil equivalent per day (BOED)) and 28,817 barrels per day (BPD) of condensates. 2014 production volume from the Bongkot Project represents approximately 20% of Thailand's natural gas supply. This is an achievement for PTTEP as the company continues to fulfil Thailand's increasing energy demand.

S1 Project

S1 Project is the largest onshore crude oil field in Thailand, with an area covering parts of the Kamphaengphet, Sukhothai and Phitsanulok provinces. PTTEP is the sole owner and operator of the project. The project marked its 30th anniversary in 2012. Production from the S1 Project consists of crude oil, natural gas, and liquefied petroleum gas (LPG). Crude oil produced at S1 is sold to PTT and transported via truck and rail to Thai Oil Public Company Limited and Bangchak refineries as well as PTT Global Chemical Public Company Limited and IRPC Public Company Limited. Produced gas undergoes a gas plant to secure LPG, before being sold to PTT and partially directed to EGAT as fuel for power generation, as well as partially used for production of CNG for natural gas vehicles (NGV).

In the year 2014, the project has continuously drilled additional exploration, appraisal and production wells as well as carried out additional 3D seismic studies at the main Sirikit Field and the Sarabop Field. Environment impact assessments were also undertaken in both existing production areas and new production areas such as the S1 Field and the Bueng Chang Field, respectively. The project's average crude oil sales during the year was 27,828 BPD, while sales of natural gas averaged 27 MMSCFD (equivalent to 5,149 BOED), and average LPG sales was 256 metric tons per day (equivalent to 2,123 BOED). The S1 Project is able to maintain crude oil production at this level as a result of new wells and Artificial Lifting and Waterflooding techniques.

PTTEP1 Project

PTTEP 1 Project is located in the Suphan Buri and Nakhon Pathom provinces. PTTEP1 is the sole owner and operator of the project. Crude oil produced at PTTEP 1 is transported to the Bangchak refinery.

In 2014, the project increased its crude oil production levels by implementing Pilot Enhanced Oil Recovery at U-Thong area. The project's average crude oil sales rate during the year was 268 BPD.

B6/27 Project

The B6/27 Project is located in the Gulf of Thailand. The Company holds a 60% interest and is the operator of this concession. In 2009, the project re-started exploration studies after having stopped crude oil production in 2007 due to declining production rates.

In 2014, the project finished drilling an exploration well (NKW-N01) in the Nok Kaew Field with no commercial discovery, and the project currently continues to study the petroleum geology.

Arthit Project

The Arthit Project is located in the southern part of the Gulf of Thailand. The Company has 80% interest in the project and is also the operator. From 2010 to 2011, in accordance with the terms and conditions of the Gas Sale Agreement (GSA), the project reassessed field reserves with production levels revised accordingly to suit the reassessed reserve figures and prolong the production plateau. As such, with PTT's acknowledgment, a new DCQ of 220 MMSCFD was agreed upon, and came into effect on December 30, 2011.

In 2014, the project continued to carry out exploration and development activities, with 7 appraisal wells and 61 production wells drilled. The project also constructed and installed wellhead platforms and gas pipelines in order to maintain production levels. Average natural gas sales in 2014 from the project was 218 MMSCFD (equivalent to 33,972 BOED) and average condensates sales was 9,456 BPD.

Project G8/50

The project is located north of the Arthit field, with the company having 80% interest and operatorship. The Department of Mineral Fuels (DMF), in March 2012, approved the development area together with the associated development plans. The project is currently in the development phase for production via Arthit's Central Processing Platform, and expects to begin the production in 2016.

L22/43 Project

The L22/43 Project is located in the Phitsanulok and Pichit provinces. The Company owns and operates 100% of the project.

In 2014, the project began producing from the Wang Pai Sung – A field, and continued to drill exploration wells in the Wang Pai Sung field as well as carried out additional 3D seismic survey.

L53/43 and L54/43 Project

L53/43 and L54/43 Project are located in Suphan Buri, Kanchana Buri, Ayutthaya and Ang-Thong provinces. The company owns 100% interest in the project and is also the operator. Production commenced in 2010 with crude oil produced sold to the Bangchak refinery.

In 2014, the project's average crude oil sales rate was 125 BPD.

L28/48 Project

The L28/48 Project is located in the Chaiyaphum, Khon Kaen and Udonthani provinces in north-eastern Thailand. The company owns 70% of the project is the operator.

In 2014, the project assessed geological studies to ascertain petroleum potential around the Rattana geological structures.

E5 Project

The E5 Project is located in the Khon Kaen Province. The Company holds 20% interest in the project with ExxonMobil as the operator. The project began production since late 1990, and all of the natural gas produced by the E5 project is sold to PTT on a take-or-pay basis pursuant to a long-term gas sales agreement. PTT then transports the gas to an EGAT power plant.

In 2014, average natural gas sales volume for the project amounted to 12 MMSCFD (equivalent to 1,911 BOED).

Contract 3 Project

The Contract 3 Project, (inclusive of the G6/50 block which is in the exploration phase), is located in the Gulf of Thailand, off the coast of Surat Thani Province. The Company holds a 5% interest in the project with Chevron as the operator. All of the natural gas and condensate produced from Contract 3 is sold to PTT on a take-or-pay basis pursuant to long-term gas sales agreement.

In 2014, the project continued development drilling in order to maintain production levels. The project sold natural gas at an average rate of 606 MMSCFD, equivalent to 99,140 BOED, crude oil at an average rate of 21,231 BPD and condensates at an average rate of 16,897 BPD.

Contract 4 Project

The Contract 4 Project (inclusive of the G7/50 block which is in the exploration phase) is located in the Gulf of Thailand, off the coast of Songkhla Province. The Company holds 60% interest (formerly 45%) in the project, with Chevron as the operator. The change of the participating interest is the result of PTTEP's acquisition of Hess Corporation's subsidiaries which was completed on 22 April 2014. All of the natural gas and condensate produced from Contract 4 is sold to PTT on a take-or-pay basis pursuant to a long-term GSA and condensate agreements.

In 2014, the project continued drilling additional exploration and development wells in order to maintain the production plateau. Moreover, the project also completed the Front End Engineering Design (FEED) for the development of the Ubon oil field. The project sold natural gas at an average rate of 374 MMSCFD (equivalent to 62,654 BOED) and condensates at an average rate of 17,415 BPD.

G4/43 Project

The G4/43 Project is located in the Gulf of Thailand. The Company holds a 21.375% interest in the project with Chevron as the operator. The project signed long-term GSAs with PTT, and crude oil sales agreements under spot cargo with other purchasers.

In 2014, the sales volume of crude oil and natural gas averaged to 6,478 BPD and 4 MMSCFD (equivalent to 761 BOED), respectively.

Sinphuhorm (EU- 1and E5-North)

The project is located in the Udon Thani and Khon Kaen provinces. The Company owns a 55% interest (formerly 20%) in the project and is the operator. The increase in participating interest is the result of PTTEP's acquisition of Hess Corporation's subsidiaries which held stakes in the Sinphuhorm Project. The acquisitions were completed on 22 April 2014. The Sinphuhorm Project has long-term GSAs with PTT.

In 2014, sales volume of the project averaged 106 MMSCFD for natural gas (equivalent to 17,346 BOED) and 415 BPD for condensates.

B8/32 & 9A Project

The B8/32 & 9A Project is located in the Gulf of Thailand, off the coast of Chumporn province. The Company holds 25% interest in the project with Chevron as the operator. The project currently has long-term GSAs with PTT and sale agreements for crude oil under spot cargo with other purchasers.

In 2014, the B8/32 & 9A project continued to carry out development drilling and implemented Waterflooding in order to maintain the crude oil production levels. Sales volume averaged 27,985 BPD for crude oil and 93 MMSCFD for natural gas (equivalent to 17,194 BOED).

G4/48 Project

The G4/48 Project is located in the Gulf of Thailand, offshore from Surat Thani Province. PTTEP holds 5% interest in the project with Chevron as the operator.

In 2014, sales volume from the G4/48 project averaged 9 MMSCFD for natural gas (equivalent to 1,528 BOED) and 1,729 BPD for crude oil.

Projects located in overlapping claims areas

G9/43 Project

The G9/43 Project is located in the Gulf of Thailand, with the company having 100% ownership and operatorship of the project. Activities at this project have been suspended pending the resolution of the boundary dispute between the governments of Thailand and Cambodia.

MTJDA –B17 Project

In 1994, PTTEPI, (wholly-owned subsidiary of the Company), entered into a joint operating agreement (JOA) with Carigali, a wholly-owned subsidiary of PETRONAS, the Malaysian state oil company, and formed Carigali-PTTEPI Operating Company Sdn. Bhd., to explore and develop Blocks B-17 and C-19. PTTEPI owns 50% interest in this special purpose company which is the operator of Blocks B-17 and C-19. Carigali assigned all of its interests under the JOA to PC JDA Ltd. PTTEPI, PC JDA Ltd. and the Malaysia-Thailand Joint Authority (MTJA) signed a production sharing contract for the right to explore and produce petroleum in the concession blocks, with the contractors and MTJA sharing any potential production. PTTEPI, PC JDA and MTJA executed a GSA for the sales of the natural gas from the MTJDA-B17 Project to PTT.

In 2014, sales volume from the project averaged 332 MMSCFD (equivalent to 53,049 BOED) for natural gas and 8,413 BPD for condensates.

2) **International Projects:** PTTEP has 26 projects overseas, broken down into the following regions.

2.1) **Project Activity Highlights in South East Asia:** PTTEP has 15 projects in this region which are located in the Union of the Republic of Myanmar (Myanmar), Vietnam and Indonesia. The following section highlights the key project activities.

Myanmar M3 Project

The Myanmar M3 project is located in the Gulf of Moattama, Myanmar. PTTEPI is the operator, and holds 80% participating interest in the project. In 2013, the project completed drilling for all 4 appraisal wells with gas and condensate discoveries.

The Myanmar M3 project is currently drilling 6 additional appraisal wells which commenced during the third quarter of 2014 and is expected to complete during the first half of 2015.

Myanmar M11 Project

The Myanmar M11 Project is located in the Gulf of Moattama, Myanmar. PTTEPI holds 52.9412 % (formerly 40 %) interest in the project and is the operator.

The project is currently assessing the potential in the nearby areas in order to plan for further activities after the completing the Manizawta-1 (MNZ-1) exploration well which found no hydrocarbon potential for commercial development.

The government of Myanmar, has however, extended the exploration period from the original expiry in October 2014 by 2 years and 6 months. Additionally, JX Nippon Oil & Gas Exploration (Myanmar) Limited (JX Myanmar), withdrew from the joint venture resulting in changes to ownership interest of the project, with the Company now owning 52.9412% (formerly 45%) and Total E&P Myanmar (TEPM) holding 47.0588% (formerly 40%), since October 2014.

Zawtika Project

The Zawtika Project is located in the Gulf of Moattama, Myanmar. The Company owns 80% interest and is the operator of the project, with MOGE holding the remaining 20%. The Company entered into a 30-year GSA with PTT and MOGE at a daily contract quantity of 300 MMSCFD, of which 240 MMSCFD will be sold to Thailand and 60 MMSCFD will be sold to Myanmar. To transport natural gas from Zawtika to Thailand, the Company and the joint venture partners established a gas transportation company called Andaman Transportation Limited (ATL) to construct and operate an offshore and onshore pipeline from the project to the Thai border.

In 2014, the project began delivering natural gas to MOGE for domestic use in Myanmar in March; and began delivering natural gas to PTT Plc. for use in Thailand in August. The project maintained the planned production rate of approximately 311 MMSCFD (equivalent to 46,520 BOED).

Additionally, the project is in the process of constructing additional wellhead platforms to maintain the production plateau, and began a campaign, during the third quarter for 2014, to drill 10 additional appraisal wells to increase petroleum reserves and support long term production. The drilling of these wells is expected to complete within 2015.

Yadana Project

The Yadana Project is a large gas project located in the Gulf of Moattama, Myanmar. The Company holds 25.5% interest with Total E&P Myanmar (TEPM) as the operator. Natural gas produced from the project is sold to PTT on a take-or-pay basis pursuant to a 30-year GSA, and a certain portion is sold to MOGE for domestic use in Myanmar. To transport natural gas from Yadana to Thailand, the Company and its joint venture partners established a gas transportation company, called Moattama Gas Transportation Company (MGTC), to construct and operate an offshore and onshore pipeline from the Yadana project area to the Thai border. Consequently, PTT completed an onshore pipeline section from the Thai border to the EGAT power generation plant in Ratchaburi Province.

In 2014, the project carried out and studied 3D seismic data in the southeastern area of the project connecting from Block M3, in order to assess the potential of exploration drilling in the aforementioned area, and expects to drill 3 exploration wells in early 2016. In 2015, the project plans to drill one exploration well in the southeastern area of Block M6. During 2014, total natural gas sales volume averaged 757 MMSCFD (equivalent to 91,053 BOED), of which 570 MMSCFD was sold to PTT and 187 MMSCFD was sold to MOGE.

Yetagun Project

The Yetagun Project is a natural gas and condensates producing project located in the Gulf of Moattama, Myanmar. The Company holds 19.3% interest in the project with PC Myanmar (Hong Kong) Limited as the operator. All natural gas from the Yetagun Project is sold to PTT on a take-or-pay basis pursuant to a 30-year agreement. To transport natural gas from Yetagun to Thailand, the company and the joint venture partners established a gas transportation company called Taninthayi Pipeline Company (TPC) to construct and operate an offshore pipeline and an onshore pipeline (parallel to the Yadana pipeline) from the project to the Thai border.

In 2014, the Project carried out the development of the Yetagun-North natural gas field to maintain contractual production rates. An exploration well was drilled but a relatively low quantity of natural gas was discovered; the project therefore plans to drilling 3 additional infill wells in late 2015. For the year, the project's total sales volume averaged 343 MMSCFD (equivalent to 56,575 BOED) for natural gas and 7,930 BPD for condensates.

Myanmar PSC G and EP2 Project

The Myanmar PSC G and EP2 Project is located in onshore Myanmar. The Company has 90% interest in the project and is also the operator.

The project is currently studying the fields' geological structures and drilling the first of 4 planned exploration wells.

Myanmar MD-7 and MD-8 Project

The MD-7 and MD-8 project is located in deep waters of the Gulf of Moattama, Myanmar. The Company has a 100% working interest in the project and is the operator.

The project is currently carrying out 2D seismic acquisition. The data will be used to define exploration prospects in the area.

Myanmar MOGE 3 Project

The Myanmar MOGE 3 Project is an onshore project located in Myanmar. PTTEP holds an 85% interest and is the operator of this project to which it acquired the exploration and production rights in August of 2014 through the signing of a Production Sharing Contract between PTTEP South Asia Limited (PTTEP SA, a subsidiary of PTTEP) and MOGE.

The project is currently carrying out the Environmental Impact Assessment (EIA) which it expects to complete in the first quarter of 2015.

Vietnam 9-2 Project

The Vietnam 9-2 Project is located offshore south-east of Vietnam, and PTTEP has 25% interest in the project. First production commenced in 2008, and the crude oil produced is sold to domestic Vietnamese refineries while the produced natural gas is sold to Vietnam Oil and Gas Group, a state own enterprise, for domestic consumption.

In 2014, the project's sales volume of crude oil averaged 5,765 BPD, while sales volume of natural gas averaged 15 MMSCFD (equivalent to 3,163 BOED).

Vietnam 16-1 Project

The Vietnam 16-1 Project is located offshore, southeast of Vietnam, with PTTEP holding 28.5% interest, and Hoang-Long Joint Operating Company as operator. First production commenced in 2011, and the crude oil production is sold to domestic Vietnamese refineries as well as to an international market through an auction process. The produced natural gas is sold to the Vietnam Oil and Gas Group, a state-owned enterprise, for domestic consumption.

In 2014, the project successfully drilled an appraisal well in the H5 Area of the Te Glac Trang Field (TGT field) to maintain the production plateau, and has prepared for the installation of a well head platform to support production from this area which is expected to begin in 2015. The project's crude oil production rate during the year averaged 34,200 BPD, with natural gas production averaging 26 MMSCFD (Equivalent to 5,516 BOED).

Vietnam B & 48/95 Project and Vietnam 52/97 Project

The Vietnam B & 48/95 and Vietnam 52/97 projects are located offshore of Vietnam. The Company owns 8.5% and 7.0 % interests in the projects, respectively, with Chevron as the operator.

In 2014, the project is currently under negotiations with PetroVietnam (PVN) related to the gas sales agreement as well as other commercial contracts.

Indonesia Malunda Project

The Indonesia Malunda Project is located in the Makassar Straits, in Indonesia. The Company acquired the exploration rights in 2010, and owns 100% interest in project and is the operator.

The project is currently in the early exploration period and is conducting further geological studies to assess petroleum potential.

Indonesia South Mandar Project

The Indonesia South Mandar Project is located offshore in the Makassar Straits, in Indonesia. The Company owns 50.75 % interest (formerly 34%) in the project and is the operator. The project is currently awaiting official approval from the government of Indonesia for the pro-rata transfer of ownership interests from Talisman.

In 2014, the project conducted additional geological studies in order to assess petroleum potential.

Natuna Sea A Project

The Natuna Sea A Project is located in the west of the Natuna Sea in Indonesia. In 2013, PTTEP NH, a subsidiary of PTTEP, jointly signed a share purchase agreement with Pertamina Hulu Energy, a subsidiary of Pertamina, on a 50:50 basis, to acquire subsidiaries of Hess Corporation holding 23% interest in the Natuna Sea A project. As a result, PTTEP holds 11.5% interest in the project, whose operator is Premier Oil.

In 2014, the project installed a natural gas production platform, and is undertaking operations to drill 3 development wells in order to increase production capacity. During the year, the project produced condensates and natural gas at average rates of 1,479 BPD and 219 MMSCFD (equivalent to 38,518 BOED), respectively.

2.2) Project Activity Highlights in Africa and the Middle East: PTTEP has 7 projects in this region, located in Oman, Algeria, Mozambique and Kenya with the following as key highlights:

Oman 44 Project

The Oman 44 Project is located onshore, to the west of Muscat, the Sultanate of Oman. The Company owns 100% of the project and is also the operator. Natural gas and condensate production began from the Shams fields in 2007. The project has a long-term GSA in place with the Ministry of Oil and Gas of Oman.

In 2014, the project progressed with additional exploration and appraisal wells in order to maintain production levels and further assess petroleum potential in the western area of the project. During the year production of natural gas from the project averaged 27 MMSCFD (equivalent to 5,004 BOED), and production of condensates averaged 2,156 BPD.

Algeria Hassi Bir Rekaiz Project

The Algeria Hassi Bir Rekaiz Project is located onshore in eastern Algeria. The Company holds 24.5% interest and is the operator of the project.

The project is in the Second Drilling campaign. In 2014, the project carried out 2D and 3D seismic imaging, and completed plans to drill altogether 5 exploration and appraisal wells. The project began drilling an appraisal well in the third quarter of 2014.

Algeria 433A & 416B Project

The Algeria 433A & 416B Project is located onshore in the eastern Algeria. The Company holds a 35% interest in the project, and Groupement Bir Seba Joint Operating Company is the operator.

The project is under construction of production facilities and pipeline systems. Production is expected to begin in the second half of 2015 with a capacity of 20,000 BPD.

Mozambique Rovuma Offshore Area 1 Project

The Mozambique Rovuma Offshore Area 1 project is a large natural gas project located offshore of Mozambique. The Company owns an 8.5% interest with Anadarko as the operator. Total discovered recoverable resources in of the project are currently estimated around 70 TCF of natural gas.

In 2014, the project completed drilling 5 out of 6 planned exploration and appraisal wells to further assess for petroleum potential. The Tubarao Tigre-1 exploration well successfully discovered an additional gas field, and the project began drilling the Tubarao Tigre-2 appraisal well in the fourth quarter of 2014, with completion expected during the first quarter of 2015.

The LNG Engineering and Construction Development continues to be carried out with first production and sales of LNG expected in 2019.

Mozambique Rovuma Onshore Project

The Mozambique Rovuma Onshore Project is located onshore, in the north of Mozambique. The Company owns a 10% interest in the onshore concession area of the Rovuma Block, with Anadarko as the operator.

In 2014, the project finished drilling the Tembo-1 well, which is one of two planned exploration wells in 2014. Drilling results for Tembo-1 are being evaluated as for its commerciality prospect, while the second exploration well called Kifaru-1 was spud at the end of 2014 with completion expected during the first quarter of 2015.

Kenya L10A Project

The Kenya L10A Project is located offshore of Kenya. The Company owns a 31.25% interest in Block L10A, whose operator is BG.

In 2014, the project completed the Sunbird-1 exploration well which showed no commercial discoveries. The project, however, continues to study the well's drilling results for further geological use.

The Company has withdrawn its participating interests in the Kenya L10B block which is located in offshore Kenya, and in which the Company, through its wholly-owned subsidiary, Cove, held a 15 % interest, with BG as operator. The withdrawal has been officially approved by government of Kenya, and the Company has transferred all of its participating interests to the remaining joint venture partners as of May 2014.

Kenya L5, L7, L11A, L11B and L12 Project

The Kenya L5, L7, L11A, L11B and L12 project is located offshore of Kenya. The Company holds a 10% interest in the blocks, with Anadarko as the operator.

In 2014, the project is carried out geological and geophysics studies to plan for the location of the first exploration well in 2015.

1.4.1.2.3 Project Activity Highlights in Australasia: PTTEP has 1 project in this region which is located in Australia comprising of 15 concession permits with the following as key highlights:

PTTEP Australasia Project

In 2009, the Company acquired 100% of the ordinary shares of Coogee Resources Limited, which was later renamed to PTTEP Australasia Pty Ltd. (PTTEP AA). PTTEP AA owns exploration and development fields located in the Timor Sea, in Australia. PTTEP AA currently holds concessions to 15 permits with the 2 principal fields being the currently producing Montara Field and the Cash Maple field which is still under feasibility studies. The rest of the concessions are primarily in the exploration phase.

Montara Field

The Montara Field is located in the Timor Sea in Australia. The project began producing crude oil from the Montara Field in 2013. The project produced crude oil at an average rate of 18,000 BPD during 2014. Moreover, since the onset of the Montara incident through to the end of 2014, PTTEP has received total compensation claims amounting to USD 244 million from the insurers. In relation to the claims submitted by the Government of Indonesia seeking compensation for the oil spill from the Montara Incident, PTTEP is ready to continue discussions with the Government of Indonesia to determine the impact (if any) using scientific evidence.

Cash-Maple field

In 2014, the project completed the Maple-East exploration well without commercial discovery. The project is currently undergoing geological and geophysical review, engineering study as well as commercial assessment to determine development concepts for the gas field.

For other concessions, PTTEP has interests ranging between 20% - 100%, all of which are undergoing geological and geophysics studies to determine potential for petroleum. However, in 2014, PTTEP relinquished its rights to the AC/P4 permit after having written-off the Dillon South-1 exploration well during the second quarter. The relinquishment is pending official approval from the Australian government.

2.4) Project Activity Highlights in North America: PTTEP has 3 projects in this region which located in Canada and Brazil. The following are significant activities in this region:

The Mariana Oil Sands Project

The Mariana Oil Sands Project (formerly known as the Canada Oil Sands KKD Project) is located in Alberta, Canada. In 2011, PTTEP CA, a subsidiary of the Company, acquired a 40% interest in the Canada Oil Sands KKD project from Statoil Canada Limited (SCL), the operator of the project holding the remaining 60% interest. The project formerly comprised 5 areas, namely, Leismer, Corner, Thornbury, Hangingstone and South Leismer. In May 2014, PTTEP completed the asset swap transaction as stipulated in the Partnership Units Redemption Agreement (PURA) with Statoil Canada Limited (SCL) resulting in PTTEPCA having 100% ownership of the Thornbury, Hangingstone, and South Leismer fields, and receiving USD 419 million in cash.

The project is currently progressing with the Winter Delineation Campaign (WDC), studying development plans and carrying out Pre-FEED activities for Thornbury Phase 1.

The Barreirinhas AP1 Project

The Barreirinhas AP1 Project is located in the Barreirinhas Basin, offshore to the east of Brazil. During April 2014, PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL, a subsidiary of PTTEP) farmed-in to the Barreirinhas AP1 Project to hold a 25% interest with BG Brasil as an operator. The project comprises four exploration blocks called BAR-M-215, BAR-M-217, BAR-M-252 and BAR-M-254. The Brazilian government approved the transaction in August 2014.

The project is currently carrying out the EIA and making preparations for 3D seismic acquisition which is expected to begin in the second quarter of 2014.

The Brazil BM-ES-23 Project

The Brazil BM-ES-23 Project is located in the Espirito Santo basin, offshore to the east of Brazil. During September 2014, PTTEP BL acquired a 20% stake in the BM-ES-23 Project whose operator is Petrobras. The Brazilian government approved the acquisition in November 2014.

During 2014, the project drilled 2 exploration wells, one of which discovered oil. Two more exploration wells are planned for 2015.

Projects Relinquished in 2014

Indonesia South Sagari Project

The Indonesia South Sagari Project is located offshore in the Makassar Straits, southwest of Sulawesi Island in Indonesia. The Company owned a 20% interest in the project with Talisman as the operator. The exploration activities carried out discovered limited petroleum potential, and the Company has submitted documents regarding the relinquishment of its investment rights to the government of Indonesia. The relinquishment was official approved from the Indonesian government on July 8, 2014.

New Zealand Great South Project

The New Zealand Great South Project is located in the Great South Basin, in New Zealand. The Company owned an 18% interest in the project with Shell as the operator. The project carried out its obligations per its agreement with government of New Zealand, with limited discoveries of petroleum potential from the exploration activities. The Company submitted documents regarding the relinquishment of its investment rights to the government of New Zealand, and received official approval from the government on September 24, 2014.

Indonesia Semai II Project

The Indonesia Semai II Project is located offshore, southwest of West Papua Island, in Indonesia. The Company owns a 28.3% interest in the project with Murphy Oil as the operator.

In 2014, to assess the project's potential, two exploration wells in the shallow water area were drilled. The exploration studies, however, discovered limited petroleum potential. The Company submitted documents regarding the relinquishment of its investment rights to the government of Indonesia since November 2014, and is currently awaiting official approval from the government.

Indonesia Sadang Project

The Indonesia Sadang Project is located offshore in the Makassar Straits, southwest of the Sulawesi Island in Indonesia. The Company owns a 30% interest in the project with Talisman as the operator. The exploration activities carried out discovered limited petroleum potential. The Company submitted documents regarding the relinquishment of its investment rights to the government of Indonesia since June 2013. The relinquishment is pending official approval from the Indonesian government.

A4 and 5/48 Project

The A4 and A5/48 blocks are located in the deep waters of the Andaman Sea, west of Thailand. PTTEPI owns and operates 100% of the project.

In 2014, the project completed additional geological studies and found limited petroleum potential. The Company submitted documents regarding the relinquishment of its investment rights to the Thai Department of Mineral Fuels since December 2014. The relinquishment is pending official approval from Thai Department of Mineral Fuels.

Additionally, the Company submitted documents regarding the relinquishment of its participating interests in Block L10B of the Kenya project as well as in concession fields L21/48 in Thailand. The relinquishments have been official approval by the government of Kenya and by Thai Department of Mineral Fuels, respectively. Moreover, the Company has also submitted documents for the relinquishment of its rights to the AC/P4 Field of the PTTEP AA Project, as is pending official approval from the Australian government.

1.4.2 Structuring Policy of PTTEP Group

PTTEP's subsidiaries and/or associated companies are established mainly to take parts in our core business. Our continuous expansion in domestic territory and overseas necessitates the needs for subsidiaries and/or associated companies in the regions where the Company has invested for a greater flexibility, operation efficiency and competitive advantages comparable to other international oil companies. To achieve this, PTTEP however has to consider various factors such as laws and regulations, financial structure, tax regimes, and risk management.

PTTEP's policy is to manage our subsidiaries as "One Company" with the view that they must strictly follow the Company's business direction and strategy and are acceptably managed as one team by the Company's executives and employees. In addition, our management and internal control systems are also adopted and implemented in all of the subsidiaries similarly to

how they are conducted and standardized at PTTEP. To manage our associated companies, PTTEP nominates representatives to serve as a shareholder and/or a member in each associated company's board of directors and participate in defining the overall business strategy and policy of these companies. To manage both the subsidiaries and associated companies, the Company adheres to the Good Corporate Governance and Business Ethics of PTTEP Group - our compelling philosophy - to ensure effectiveness, transparency, fairness, and achievement of our business goals.

PTTEP's management is responsible for appointing of directors for the subsidiaries and associated companies by selecting 1-3 individuals from our executives from the departmental level and above. The Company may also have to appoint a local director, if required by the laws and regulations of the countries in which the investments are made, to manage subsidiaries within the framework according to the Company's policy and business strategy. To encourage flexibility of subsidiaries and associated companies, the Company delegates the authority as specified by the Corporate DAS (Delegation of Authority and Signatures) similarly to the practice of other leading E&P companies. The subsidiaries and associated companies meanwhile are obligated to report their performance to the Company on a quarterly basis in order to ensure their performance and effectiveness

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1.5 Relationship with the Major Shareholder

PTTEP's major shareholder is PTT Public Company Limited (PTT), a state-owned company which engages in fully integrated petroleum and petrochemical businesses by strategically investing directly and indirectly through its group of companies both in the upstream and downstream businesses.

Currently, PTT holds 65.29% of PTTEP's registered and paid-up capitals, effectively making the PTT Group the only full-scale natural gas business operator in Thailand. As the major buyer of PTTEP's petroleum products, PTT, in turn, refines and processes these products, and supplies them as energy and raw materials to be used in the power, petrochemical and transportation sectors as well as other industries and households.

In 2014, PTTEP supplied crude oil, natural gas, LPG, and condensate to PTT. Conditions and price settings of all transactions undertaken between PTTEP and PTT follow normal business operations at the arm's length basis conditions for non-related persons or operations. Details of other connected transactions between PTTEP and PTT are disclosed in "Connected Transactions" part.

2. Nature of Business Operation

2.1 Revenue Structure

Commencing January 1, 2011, PTTEP's management has determined US Dollar as the functional currency and presents its financial statements in US Dollar in accordance with Thai Accounting Standard No. 21 "The Effects of Changes in Foreign Exchange Rates".

PTTEP and its subsidiaries' revenues are mainly from sales of petroleum products of which its price is marked to the world fuel price in US Dollar. Thus, PTTEP and its subsidiaries' revenue structure of 2012 – 2014 are presented here in US Dollar in order to reflect the Company's revenue structure.

The petroleum exploration and production projects in the production phase of PTTEP and its subsidiaries comprised 22 projects: the Bongkot, Contract 4, S1, Yadana, Yetagun, Contract 3, B8/32 & 9A, PTTEP1, E5, B6/27, Sinphuhorm, G4/43, Oman 44, Arthit, Vietnam 9-2, PTTEP Australasia, G4/48, MTJDA-B17, Vietnam 16-1, L53/43 & L54/43 , Natuna Sea A and Zawtika projects. In addition, PTTEP and its subsidiaries recorded revenues proportionately from gas pipeline transportation which are Moattama Gas Transportation Company (MGTC), Taninthayi Pipeline Company (TPC) and Andaman Transportation Limited (ATL).

Revenue Structure of PTTEP and Its Subsidiaries during 2012-

Product	Operated by	Shareholding by	% of interest	2012		2013 (Restated)		2014	
				Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Petroleum Exploration and Production Segment									
Crude	PTTEP	-	-	312.87	4.45	342.39	4.60	263.67	3.29
	PTTEPI	PTTEP	100	81.01	1.15	62.25	0.84	65.49	0.82
	PTTEPS	PTTEP	51	789.23	11.23	875.35	11.75	676.00	8.43
		PTTEPO	49						
	PTTEPO ¹	PTTEP	75	327.17	4.66	281.24	3.77	258.84	3.23
		PTTEPI	25						
	PTTEP HV	PTTEPO	100	65.67	0.93	57.17	0.77	53.64	0.67
	PTTEP AP group	PTTEPH	100	-	-	110.22	1.48	677.11	8.44
	PTTEP HL	PTTEPO	100	509.33	7.25	498.25	6.69	369.27	4.60
Natuna 2	PTTEP NH	50	-	-	0.27	-	3.04	0.04	
Natural Gas	PTTEP	-	-	2,045.27	29.11	2,288.95	30.72	2,209.84	27.55
	PTTEPI	PTTEP	100	837.59	11.92	859.40	11.53	1,143.97	14.26
	PTTEPS	PTTEP	51	48.88	0.70	53.05	0.71	59.33	0.74
		PTTEPO	49						
	PTTEPO ¹	PTTEP	75	87.82	1.25	60.33	0.81	49.30	0.61
		PTTEPI	25						
	PTTEP HV	PTTEPO	100	1.68	0.02	1.52	0.02	1.77	0.02
	PTTEP OM	PTTEPO	100	-	-	13.13	0.18	14.29	0.18
	PTTEP HL	PTTEPO	100	-	-	5.16	0.07	6.05	0.08
Natuna 2	PTTEP NH	50	-	-	7.46	0.10	105.21	1.31	
PTTEP SP	SHL	100	-	-	-	-	192.68	2.40	
LPG	PTTEP	-	-	7.10	0.10	7.44	0.10	7.14	0.09
	PTTEPS	PTTEP	51	21.30	0.30	22.31	0.30	21.41	0.27
		PTTEPO	49						

2014

Product	Operated by	Shareholding by	% of interest	2012		2013 (Restated)		2014	
				Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Condensate	PTTEP	-	-	1,073.42	15.28	1,113.06	14.94	997.90	12.44
	PTTEPI	PTTEP	100	125.01	1.78	136.97	1.84	113.11	1.41
	PTTEPS	PTTEP	51	2.50	0.04	2.17	0.03	2.23	0.03
		PTTEPO	49						
	PTTEP OM	PTTEPO	100	98.19	1.40	98.01	1.32	71.11	0.89
	PTTEP SP	SHL	100	-	-	-	-	66.24	0.83
Diluted Bitumen	PTTEP CA	PTTEP NC	100	255.52	3.64	275.80	3.70	67.52	0.84
Total				6,689.56	95.22	7,171.90	96.26	7,496.16	93.46
Overseas Pipeline Segment									
Gas Pipeline Transportation	MGTC	PTTEPO	25.5	95.33	1.36	91.72	1.23	75.05	0.94
	TPC	PTTEPO	19.31784	55.35	0.79	58.95	0.79	41.59	0.52
	ATL	PTTEPO	80	-	-	-	-	21.28	0.26
Total				150.68	2.14	150.67	2.02	137.92	1.72
Other Segment									
Other Revenue	PTTEP	-	-	31.64	0.45	35.02	0.47	32.57	0.40
	PTTEPI	PTTEP	100	14.37	0.20	32.96	0.44	15.71	0.20
	PTTEPO ¹	PTTEP	75	5.49	0.08	3.83	0.05	203.66	2.54
		PTTEPI	25						
	PTTEP HV	PTTEPO	100	0.09	-	0.04	-	0.02	-
	PTTEP HL	PTTEPO	100	0.06	-	0.07	-	0.39	-
	PTTEP OM	PTTEPO	100	0.94	0.01	-	-	-	-
	MGTC	PTTEPO	25.5	0.59	0.01	0.64	0.01	0.66	0.01
	TPC	PTTEPO	19.31784	0.23	-	0.26	-	0.28	-
	ATL	PTTEPO	80	0.03	-	-	-	0.01	-

Product	Operated by	Shareholding by	% of interest	2012		2013 (Restated)		2014	
				Revenue (Million USD)	%	Revenue (Million USD)	%	Revenue (Million USD)	%
Other Revenue (Continued)	PTTEP Services	PTTEP	25	1.14	0.02	1.51	0.02	3.27	0.04
		PTTEPI	75						
	PTTEPT ²	PTTEPI	-	0.07	-	-	-	-	-
	PTTEPS	PTTEP	51	1.91	0.03	4.57	0.06	2.96	0.04
		PTTEPO	49						
	PTTEP AP group	PTTEPH	100	93.95	1.34	32.57	0.44	23.45	0.29
	PTTEP NZ	PTTEPH	100	0.02	-	-	-	-	-
	PTTEP AI	PTTEPH	100	0.34	-	-	-	-	-
	PTT FLNG	PTTEP FH	50	-	-	-	-	3.12	0.04
	PTTEP SMD	PTTEP ID	100	2.11	0.03	-	-	-	-
	PTTEP CA	PTTEP NC	100	25.33	0.36	6.26	0.08	91.18	1.14
	PTTEP CIF	PTTEP NC	100	0.02	-	0.02	-	0.06	-
	Cove	PTTEP AI	100	0.10	-	0.13	-	0.02	-
	CEEAL	Cove	100	2.00	0.03	-	-	0.34	-
	CEMROFL	Cove	100	-	-	0.38	0.01	-	-
	Erawan 2 FSO Bahamas	JV Marine	13.11	-	-	4.07	0.05	4.07	0.05
	PTTEP BL	PTTEP BI	99.9999999	-	-	-	-	0.81	0.01
		PTTEP NH	0.0000001						
	PTTEP SP	SHL	100	-	-	-	-	0.80	0.01
	Natuna 2	PTTEP NH	50	-	-	-	-	0.02	-
Cove Energy Kenya Limited	Cove	100	-	-	-	-	0.01	-	
Total				180.43	2.57	122.33	1.64	383.41	4.78
Share of gain from associates ³				4.66	0.07	6.16	0.08	3.47	0.04
Grand Total				7,025.33	100.00	7,451.06	100.00	8,020.96	100.00

¹ PTTEPO has shareholding in Orange Energy Limited and B8/32 Partners Company Limited, which holds the project's concession.

² PTTEP (Thailand) Limited has registered for the dissolution with the Ministry of Commerce and complete liquidation on December 6, 2013.

³ Share of gain from associate came from PTTEP and PTTEP AP group

For 2014, total revenues for PTTEP and its subsidiaries was USD 8,021 million (equivalent to THB 260,389 million), an increase of USD 570 million or 8 percent against last year which was USD 7,451 million (equivalent to THB 228,931 million). The revenue from sales increased by the amount of USD 324 million due to an increment in average sales volume of 321,886 BOED, compared to 292,629 BOED in 2013, primarily from full year sales in 2014 of PTTEP Australasia Project, which began its first oil sales in August 2013, and from Zawtika Project, which commenced its domestic gas sales in March 2014 and export gas sales in August 2014. The revenue from sales also increased from acquiring additional 15 percent in participating interests of Contract 4 Project, while the average petroleum sales price decreased from USD 65.58 per barrels of oil equivalent (BOE) in 2013 to USD 63.38 per BOE in 2014.

2.2 Products Features

2.2.1 Petroleum

Petroleum means crude oil, natural gas, condensate, related products, and other hydrocarbon products which are free in nature.

Crude oil means crude mineral oil and bitumen of all kinds, which is liquid in nature and obtained from oil wells and through gas separation equipment, yet to be refined or purified.

Bitumen is another form of crude oil. It is sticky, black, opaque, and highly viscous (low API).

Natural gas is hydrocarbon which is gas or vapor at the atmospheric temperature and pressure, commonly having methane as its major constituent.

Condensate is hydrocarbon which is condensed into natural gas and, when separated from natural gas, transparent and has low specific gravity (high API).

Liquefied Petroleum Gas (LPG) is a petroleum product which is obtained from crude oil refinery or natural gas separation processes. It primarily consists of butane and propane.

Crude oil, condensate, LPG, and bitumen are measured in barrel, while natural gas is measured in cubic foot at standard conditions (1 atmosphere or atm and 60 degree Fahrenheit). All petroleum products can be converted into barrel of oil equivalent (BOE) based on their heat contents. One cubic foot of natural gas has a heating value of approximately 1,000 British thermal units (BTU), whereas 1 barrel of crude oil has a heating value of approximately 6,000,000 BTU.

2.2.2 Gas Transportation Pipeline

PTTEP Offshore Investment Company Limited (PTTEPO), a wholly-owned subsidiary of PTTEP, has major investments in other companies such as 80% holding interests in Andaman Transportation Limited (ATL), 25.5% in Moattama Gas Transportation Company (MGTC), and 19.32% in Taninthayi Pipeline Company (TPC). The objective of the company is to lay pipelines from the Zawtika, Yadana, and Yetagun projects in the Republic of the Union of Myanmar to Thai borders.

2.2.3 Jetty and Warehouse

Petroleum Development Support Base is established to provide jetty and warehouse services to support offshore exploration and production activities. The Support Base mainly accommodates the Company's own and affiliated offshore operating projects in Thailand. These projects are such as the Bongkot Project, Arthit Project, B6/27 Project, also including the Company's oversea joint venture projects such as the Zawtika Project and other offshore oil and gas operating companies such as PTT, Carigali-PTTEPI Operating Company Sdn. Bhd., Chevron Thailand Exploration and Production Limited, MP G11 (Thailand) Limited, and KrisEnergy G10 (Thailand) Ltd. Currently, the Support Base has operations in Songkhla and Ranong provinces, providing logistics support services.

1. Petroleum Development Support Base in Songkhla consists of a 6-berth jetty and 58-Rai storage warehouse and yard. All of which are owned and operated by PTTEP International Company Limited. The jetty is recognized as one of Thailand's leading shore base facilities for petroleum exploration and production activities, with a total length of 380 meters and able to uphold standard supply vessels of more than 500 Gross Tonnes berthing. The jetty is equipped with storage facilities and handled by high standard of material handling equipment, allowing it to be able to accommodate six vessels all at once. For the 58-Rai-storage warehouse and yard, it consists of free zone and non-free zone warehouse and yard.

2. Petroleum Development Support Base in Ranong consists of a 2-berth jetty and 25-Rai storage warehouse and yard. The jetty service is operated through Ranong Multi-Purpose Port owned by the Port Authority of Thailand. The 2-berth jetty is capable for vessels of more than 500 Gross Tonnes, fully equipped with storage facilities and standard material handling. The 25-Rai area consists of free zone and non-free zone storage warehouse and yard, all owned and operated by PTTEP International Company Limited.

Both Support Base branches are regularly operated with up-to-date technology, the International Environment Control program (ISO 14001 certification), the Occupational Health Control program (OHSAS18001 certification), the International Ship and Port Facilities Security Code (ISPS code–by Marine Safety and Environment Bureau, the Royal Thai Marine Department), and high security systems such as parameter lights, barb wire fence, CCTV system, and 24-hour security guards. In addition, Emergency Response Plan is regularly exercised to improve response team’s capability in response to emergency scenarios. The Company also regularly involves in and supports social and community activities in the operating areas.

2.2.4 PTT ICT Solution Company Limited (PTT ICT)

PTT ICT Solutions Company Limited, an affiliate with 20% shares owned by PTTEP, has signed an agreement with PTTEP to provide PTTEP with all information technology and communication services in accordance with the PTTEP’s Board of Director’s resolution number 10/2549/254 dated September 29, 2006. The agreement includes infrastructure design and implementation services, consultancy services, procurement services, and outsourcing services to support PTTEP’s needs in information technology and communication based on the PTT Group’s ICT Policy Strategy of driving and increasing synergy within the group. The 4.5-year renewal contract has been in effect since July 1, 2011.

2.2.5 Energy Complex Limited (Energy Complex)

PTT and PTTEP has jointly established energy complex to construct and manage the Energy Complex Investment Project, the energy business center of the country, in which the Ministry of Energy, subsidiaries or associate companies of the PTT group and the energy private companies are situated.

2.2.6 PTTEP Services Limited (PTTEP Services)

The concept that became PTTEP Services was originated from PTTEP’s Board meeting No. 12/2003/216. The stated objective of PTTEP Services is to supply manpower for both local and overseas subsidiary companies belonging to PTTEP with a large number of staff who are adequately capable and of the caliber primarily required to support PTTEP’s extensive and rapid growth.

In order to fulfill these requirements, PTTEP Services has recruited and hired staff for servicing PTTEP since July 1, 2004. Since then, it has developed, improved, and implemented compensation and benefits policies and practices as well as staff development program to ensure that standardized welfare benefits, including requisite training, are provided.

To build and enhance staff competency to enable effective support for PTTEP's operations, PTTEP Services has developed a training roadmap which contains various types of courses.

- (1) Foundation courses for new staff
- (2) Soft skills courses
- (3) English courses

2.3 Permission to Operate, Concession or Business Promote

PTTEP operates its petroleum exploration and production in the Kingdom of Thailand and abroad. The investments in foreign countries must comply with all applicable laws and regulations of those invested countries, i.e., Production Sharing Contract, Concession Agreement, and Services Agreement. Inside the Kingdom of Thailand, PTTEP shall comply with the Petroleum Act B.E. 2514 which sets out major details and procedures, for instance, application process, process for awarding petroleum concessions, and period of production. The act also sets out various forms of benefits to the government who is the owner of petroleum resources, such as royalty, petroleum income tax, and other benefits. The important points in the petroleum business operation are as follows:

1) Issue of Concession Areas

The Department of Mineral Fuels, a department of the Ministry of Energy, is the responsible agency which delineates exploration blocks and then invites oil companies to submit their applications for concessions. The Petroleum Committee meanwhile is responsible to consider the applications initially screened by the sub-committee. The Energy Minister with approval by the Cabinet has the power to award and sign the concessions. The government, on the other hand, will be the authority to consider the qualifications of each applicant, taking into account the proposed work program, adequacy of the investment funds to be brought in and used in the exploration activities, transfer of technology, employment of Thai nationals, and the utmost benefits offered to the Kingdom of Thailand.

2) Role of the Operator

A petroleum concession may be awarded to one concessionaire or a joint venture of two or more co-concessionaires. Since the petroleum exploration and production business is associated with relatively high risk, it is common for companies to join together in a joint venture in order to diversify the risks. In a joint venture, one company will be designated as the “operator” to conduct the exploration and production operations on behalf of its partner and commonly under the supervision of a management committee composed of representatives from each of the companies. Other companies which participate in the joint venture are called “non-operators”. The operator sets the cash call on all of the partners to finance the project. The non-operators through their representation in the management committee participate in technical and financial decisions. Generally, whether an oil company will become a project operator depends largely on investment conditions, its readiness, and business strategies in that particular project.

3) Nature of Operations and Investment Decisions

Before any oil company decides to invest in a petroleum exploration in the Kingdom of Thailand or abroad, it has to carefully consider its opportunity of having a successful exploration as well as other investment risk factors. A thorough study on the information available is conducted to determine whether the area has high petroleum potential and, production wise is commercially feasible. The success ratio of exploration wells in neighboring areas as well as other risk factors in the invested countries must also be taken into account. Assuming that the project is commercially feasible, then the company will apply for a petroleum concession or, if the concession is already awarded, “farm-in” to an existing petroleum concession.

After the oil company is awarded a concession area for exploration of petroleum, an exploration program will be conducted, normally taking 2 – 3 years. If the petroleum reserves are found, the oil company will compare the amount of investment funds required for the development phase and the expected sales’ value of the petroleum based on the commercialized petroleum reserves. If the study indicates that the reserves are worth investing in, generally this means that the petroleum field is considered to have commercial viability, sufficiently justifying further investment onto development phase. The operator shall apply for an approval of petroleum production and simultaneously may start its production activity. The operator is still able to explore the rest of the existing areas if it is within the time frame of exploration period as mentioned in the concession. At this stage, the operator must have a certain degree of confidence about the investment as the

investment expenditure required for such development phase is very high. Therefore, the operator will normally identify buyers of the petroleum in advance, whereas a long-term sales agreement for the petroleum to be produced shall be signed. At the present, PTT Public Company Limited (PTT) is the biggest petroleum buyer in Thailand. The principal elements of the sales agreement for petroleum generally include determination method of the sales price and quantity of the petroleum to be delivered. In this regard, once the commencement period as stated in the contract is reached, the buyer will be responsible for the petroleum produced immediately after the production. Sales of natural gas from domestic areas are made at the well-head, while sale of natural gas from those foreign areas is made at the Thai borders. PTT is currently responsible to install most of the gas pipelines sufficiently for the production amount specified in the gas sale agreement. Sales of the crude oil are made at the buyer's refinery, while sales of the condensate are made at the Floating Storage Unit (FSU) near the well-head.

4) Description of Laws Relating to the Business

The operation of petroleum business in Thailand is governed by two major enactments, namely, the Petroleum Act B.E. 2514, and the Petroleum Income Tax Act B.E. 2514 and its amendment. Several major features of these laws are as follows.

(1) An applicant for a concession must be a limited company or a juristic person which has the same status as a limited company, established under the laws of Thailand or foreign laws.

(2) The concessionaire, the co-concessionaire(s), or the joint-partner(s) must pay royalty which is normally in cash. The Minister however may authorize a payment in kind of petroleum, but with a prior notice of at least not less than 6 months. The royalty can be used as credit against income tax (Thailand I) or deducted as expenses (Thailand III).

(3) The petroleum income tax may be prescribed at a rate not less than 50%, but not over than 60%, of the net interest from the petroleum business.

(4) Interest paid cannot be deducted as expenses for income tax purposes.

(5) A concessionaire has a right to obtain concessions for exploration blocks without any limitations regarding the number.

Thailand I for the petroleum concessions issued by the Ministry of Industry⁴ from B.E. 2514 to B.E. 2532 and those onshore petroleum concessions issued before B.E. 2525

Thailand II⁵ for all onshore petroleum concessions issued by the Ministry of Industry⁶ from B.E. 2525 to B.E. 2532

Thailand III for the petroleum concessions issued by the Ministry of Industry from B.E. 2533

Thailand IV for the petroleum concessions issued by the Ministry of Energy⁷ from B.E. 2550

⁴Currently, the Ministry of Energy

⁵ Under section 36 of Petroleum Act (No. 4) B.E. 2532, all petroleum concessionaires under Thailand II have applied to be subject to the criteria under Thailand III.

⁶ Op. Cit., footnote 1

⁷ Petroleum Act B.E. 2514 as amended by No. 6 B.E. 2550 became effective on October 18, 2007.

Details of the Terms: Thailand I, II, III and IV

Term	Thailand I	Thailand II	Thailand III	Thailand IV
Royalty Rates	12.5% of income from sales or disposal of petroleum which may be treated as tax credit	12.5% of income from sales or disposal of petroleum which may be treated as tax credit	progressive rate at sliding scale of 5-15%, deemed to be expenses which could be deducted in tax calculation	progressive rate at sliding scale of 5-15%, deemed to be expenses which could be deducted in tax calculation
Petroleum Income Tax	50% of net profit from petroleum business operation	50% of net profit from petroleum business operation	50% of net profit from petroleum business operation	50% of net profit from petroleum business operation
Special Benefits	-	annual benefits and annual production bonus	special remunerator benefit which may be taken as deduction	special remunerator benefit which may be taken as deduction
Exploration Period	8 years with 4 year extension	8 years with 4 year extension	6 years with 3 year extension	6 years with 3 year extension
Production Period	not exceeding 30 years from exploration's expiration date, with extension not exceeding 10 years	not exceeding 30 years from exploration's expiration date, with extension not exceeding 10 years	not exceeding 20 years from exploration's expiration date, with extension not exceeding 10 years	not exceeding 20 years from exploration's expiration date, with extension not exceeding 10 years
Concession areas	not exceeding 10,000 sq km per exploration block, up to 5 exploration blocks	not exceeding 10,000 sq km per exploration block, up to 5 exploration blocks	not exceeding 4,000 sq km per exploration block, up to 5 exploration blocks	not exceeding 4,000 sq km per exploration block, without limitation over number of exploration blocks

2.4 Market and Competition

PTTEP has invested in both domestic and overseas projects, including Indonesia, the Republic of the Union of Myanmar, Vietnam, the Sultanate of Oman, Algeria, Australia, Canada, the Republic of Mozambique, the Republic of Kenya, and Brazil. PTTEP's petroleum products include natural gas, crude oil, condensate, and LPG, mainly marketed domestically to satisfy Thailand's energy demand. Moreover, its overseas expansion of E&P and sales business represents additional means of forging energy security and generating income for Thailand.

In the year 2014, total sales by PTTEP and its subsidiaries averaged 321,886 BOED, 8 percent increase from the previous year. Most of the incremental sales came from the petroleum product of PTTEP Australasia, Zawtika, and Natuna Sea A Project. The total sales ratio of natural gas and liquid was 67%:33% by volume, or 51%:49% by revenue, as details shown in the following figure.

Product	Volume	Value (million USD)
Natural Gas	484,445 MMSCF or 78.31 MMBOE	3,782.44
Condensate	13.18 MMBBL	1,250.60
Crude Oil	24.69 MMBBL	2,367.06
LPG	93,505 metric ton or 0.77 MMBOE	28.54
Bitumen	0.92 MMBBL or 0.53 MMBOE	67.52

2.4.1 Marketing Characteristics

PTTEP sells our outputs from domestic and regional projects to the Thai market through PTT Plc. (PTT), the major buyer and processor of all products which are then supplied to power sector, petrochemical industry sector, transportation sector, industries sector, and households sector.

Marketing of petroleum products varies with their characteristics and field location, which in turn differentiate market and sales price structures, as captured below.

1) Natural gas

Due to capital-intensive investment in developing oil and gas exploration business, gas sales agreements (GSAs) must be agreed or signed between buyer and sellers before any major investment is made. GSAs are typically long-term contract, ranging from 15 to 30 years. Prices, volumes, and points of sale are stipulated for each contract. The designated transfer points for all domestically sold gas are at the Central Processing Platform (CPP), from which the

buyer will invest in the transmission system to the CPP. However, the delivery point of the gas sold from the Republic of the Union of Myanmar to Thailand is at the Myanmar-Thai border. The seller is responsible for investment in the transmission pipelines from the CPP to the border area.

Gas prices are usually linked to fuel oil and key economic indices to reflect the investment costs and be competitive comparing with fuel oil for the GSA period.

Sales volumes are based on the assessed reserves on the negotiation date. GSAs stipulate buyer and seller obligations for the committed volume, if the buyer does not take the volume of gas as committed to in the GSA, it must pay for the committed volume whether the gas is taken or not (Take-or-Pay). As a consequence, the buyer is entitled to take delivery of free of charge in subsequent years (Make-up Gas).

On the other hand, should the seller fail to deliver as nominated by the buyer, the buyer is entitled to an agreed discount price of the undelivered volumes as (Shortfall) stipulated in each agreement.

2) Condensate and crude oil

Condensate and crude oil prices are determined by its property and benchmarking with other benchmark crude prices, meaning those predominantly sold in the region, which is the industry's common practice. Contracts are either short-term or long-term, and some are sold in spot markets.

3) LPG

LPG produced from S1 Project is sold to PTT under a long-term contract at a price referenced to the ex-refinery prices announced by Joint Committee on Energy Policy Administration.

Sales of petroleum products from international fields are vary from country to country as detailed below:

- **Zawtika Yadana and Yetagun Projects in the Republic of the Union of Myanmar:** Approximately 80 percent of the produced natural gas from Zawtika and Yadana Projects is primarily sold to Thailand (through PTT, the buyer), and the remaining 20 percent is sold to the Republic of the Union of Myanmar for its domestic power generation. Nearly all of the condensate from Yetagun Project is sold and consumed in the Republic of the Union of Myanmar, with the excess volume sold in regional spot markets. All the gas output from Yetagun Project is currently sold to PTT for consumption in Thailand.

- **Oman 44 Project in the Sultanate of Oman:** The gas output is sold to the government of the Sultanate of Oman, whereas the condensate is sold to PTT for consumption in Thailand.

- **Vietnam 9-2 and Vietnam 16-1 Projects in the Socialist Republic of Vietnam:** All the oil output produced from Vietnam 9-2 Project is sold to Binh Son Refining and Petrochemical Company Limited (BSR), a refinery in Vietnam, for consumption in Vietnam. The produced crude from Vietnam 16-1 Project is sold in spot markets by auction, whereas the produced gas from both projects is sold to Vietnam Oil and Gas Group, a state enterprise, for consumption in Vietnam.

For **MTJDA-B17 Project from B-17 of the Malaysia-Thailand Joint Development Area**, all produced natural gas is presently sold to PTT, the buyer, for consumption in Thailand. Starting in 2015, however, it will be rerouted to Malaysia according to the Gas Balancing Agreement between PTT and Petroliam Nasional Berhad (PETRONAS).

The condensate output will be marketed and sold by a co-marketing agent of PTT and PETRONAS Trading Corporation Sdn Bhd (PETCO) by auction in spot markets.

2.4.2 Competition

Thailand E&P industry is an oligopoly market since it is a high investment with advance technology characteristic. However, due to high demand especially natural gas and the GSAs are predominantly long-term contract, with take-or-pay clauses to guarantee its market. This is to attract investment in the business.

2.5 Production

2.5.1 Exploration and Production Stages and Technology

Petroleum exploration and production may generally be divided into four major stages as follows:

- 1) Exploration stage
 - Primary geological and geophysical surveys
 - Seismic acquisition, processing and interpretation
 - Drilling exploration wells

- 2) Appraisal/Delineation stage
 - Detailed study of petroleum geology and additional seismic survey
 - Reservoir formation evaluation and conceptual development design
- 3) Development stage
 - Construct and optimize the field development plan
 - Design, construct and install production facilities
 - Drilling development wells
- 4) Production stage
 - Oil and natural gas productions are controlled by the wellhead pressure and flow through processing facilities, including the production measuring equipment.
 - Petroleum production rates, proportion of produced water, pressure decline rate and future reservoir performance are closely monitored.
 - Well work-over and facilities maintenance are regularly performed to improve the petroleum production performance.

PTTEP is ready in terms of manpower, technology and equipment to run the business efficiently according to the Company's target.

2.5.2 Petroleum Reserves

Petroleum reserves can be divided into two categories according to the level of confidence, which are proved reserves and unproved reserves. Unproved reserves can be further divided into two categories which are probable reserves and possible reserves.

1) Proved reserves are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations. Proved reserves mean the petroleum in reservoirs that can be commercially produced, relying on supporting data of production rate testing. In some cases, Proved reserves obtain from well testing and/or analyzing of source rocks in that area or the neighboring area already produced or having tendency to be able to produce. Moreover, proved reserves will be able to produce by using the existing equipment or the equipment installed in the future.

2) Unproved reserves

- Probable reserves are those quantities of petroleum obtained from an analysis of geological and engineering data as same as proved reserves but having less possibility to produce due to the technology, rules, or economic conditions.

- Possible reserves are those quantities of petroleum obtained from an analysis of geological and engineering data as same as probable reserves but having less possibility to produce due to the technology, rules, or economic conditions.

The proved reserves are reviewed annually by Company's earth scientists and reservoir engineers to ensure rigorous professional standards. The proved reserves are reported on a gross basis, which includes the Company's net working interest and related host country's interest. As of December 31, 2014, the total proved reserves of all PTTEP and subsidiary' projects are 187 million stock tank barrels (MMSTB) for crude oil and condensate⁸, and 3,814 billion standard cubic feet (BSCF) for gas (590 million barrels of oil equivalent (MMBOE)). The total Proved reserves (Consolidated Companies) in term of oil equivalent is 777 million barrels (MMBOE). Details are shown in the following table.

⁸ Included the Proved Reserves of LPG and Bitumen

	Crude & Condensate Proved Reserves ^{(1) (2)}			Natural Gas Proved Reserves ⁽¹⁾			Crude, Condensate, and Natural Gas Proved Reserves ^{(1) (2)}		
	(million barrels)			(billion standard cubic feet)			(million barrels of oil equivalent)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Proved Reserves as of December 31, 2013	112	138	250	2,065	1,812	3,877	450	396	846
Revision of Previous Estimates	15	1	16	86	48	134	30	9	39
Improved Recovery	1	-	1	6	-	6	2	-	2
Extensions and Discoveries	7	-	7	146	-	146	31	-	31
Purchases/Sales of Petroleum in Place	5	(52)	(47)	222	-	222	42	(52)	(10)
Production	(27)	(13)	(40)	(406)	(165)	(571)	(94)	(37)	(131)
Proved Reserves as of December 31, 2014	113	74	187	2,119	1,695	3,814	461	316	777

(1) The proved reserves are reported on a gross basis which includes the Company's net working interest and the related host country's interest.

(2) Included the proved reserves and production of LPG and Bitumen.

2.5.3 PTTEP Petroleum Production

In 2014, the total production of PTTEP and its subsidiaries is 131 MMBOE (40 MMSTB of crude and condensate and 571 BSCF of natural gas or 91 million barrels of oil equivalent (MMBOE) or equivalent to the production rate of approximately 359,259 barrels of oil equivalent per day (BOED), approximately 29,846 BOED or 9.06% increase from last year. The production increase was attributed to the acquisition of Hess Corporation's interests in Sinphuhorm and Contract 4 projects in April 2014, which are currently producing, and the start of production of Zawtika Project.

2.5.4 Environmental Impact Mitigation and Management

An effective and standardized environmental management system has been developed and implemented in our operations to minimize the following potential environmental impacts.

- (1) Impacts on land use and marine organisms during seismic surveys from noise vibrations
- (2) Water and soil contamination from discharges of drilling fluids, produced water, releases of sludge, contaminated solid wastes, accidental spills of hydrocarbons (oil and condensate) during drilling and production activities into the environment, and accidental chemical spills
- (3) Air pollution from hydrocarbon releases and atmospheric emissions from gas flaring, venting and fuel combustion during drilling and production activities

PTTEP conducts environmental impact assessment prior to commencing new exploration and production projects, which is legally required to ensure that the environmental mitigation and monitoring programs are in place in order to minimize environmental impacts arising from operations for both domestic and international projects.

Currently, mitigation and monitoring of the above environmental impacts are controlled and regulated by local government agencies. In Thailand, there are two main agencies, namely, the Department of Mineral Fuels of the Ministry of Energy which plays a major role in regulating environmental impacts from exploration and production companies, and the Office of Natural Resources and Environmental Policy and Planning (ONEP) of the Ministry of Natural Resources and Environment which issues directives and approvals for organizations to conduct environmental impact assessments prior to the commencement of exploration drilling and production projects.

In an effort to reduce environmental impacts and endorse environmental sustainability, PTTEP introduced and implemented, with continuous improvement and monitoring, the following initiatives.

(1) Implementation of a sustainable development philosophy and framework to the way we do business and the way we conduct our daily operations in order to satisfy our current corporate vision and mission, and therefore creating sustainable value for all stakeholders.

Our sustainable development framework focuses on three dimensions of business, namely, social, environmental, and economic. In line with PTTEP's Sustainability Policy and Framework, the PTTEP Sustainable Development (SD) Guideline as well as the PTTEP SD Roadmap are developed and implemented to secure the Company's path towards sustainability.

(2) Implementation of the ISO14001:2004 Environmental Management System (EMS) Standard by PTTEP's domestic operational projects

In accordance with the ISO14001 requirements, an environmental management system should be in compliance with company policy and standards, national legislations, and other national and international standards/requirements to prevent environmental pollution and degradation, promote energy conservation, and ensure the improvement of company performance. As a result, PTTEP is the first petroleum exploration and production company in Thailand and in the Southeast Asian region to achieve the ISO14001 Certification from AJA Registrars Limited.

(3) A compliance audit for EIA monitoring and mitigation is also conducted for each project during each phase to ensure that the environmental programs issued in the environmental impact assessment are implemented and up to standards.

(4) Establishment of short term and long term greenhouse gas emissions reduction and offsetting targets

PTTEP's 2014 annual reduction and offsetting target for greenhouse gas is at 3.5% and PTTEP's long term greenhouse gas emissions reductions and offsetting target is to reduce and offset at least 20% greenhouse gas from 2012 base year by 2020. In addition to the above targets, PTTEP managed to reduce and offset, and achieved 5.1% of GHG emissions in 2014. PTTEP performance on the Greenhouse Gas Emission Management is shown in the table below.

Greenhouse Gas Emissions (GHGs)	Unit	2011	2012	2013	2014
Direct Total GHGs	Tonnes CO ₂ equivalent	2,751,323	4,431,144	4,459,039	4,399,529
Indirect Total GHGs	Tonnes CO ₂ equivalent	1,675	1,649	1,830	3,520
Other Relevant Indirect GHG Emission	Tonnes CO ₂ equivalent	10,978	12,817	12,470	33,622
GHG Intensity	Tonnes CO ₂ equivalent / Thousand Tonnes Production	239	337	310	308

* Domestic assets only

(5) Implementation of the ISO14064-1:2006 Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and GHG Protocol, as well as UNFCCC Guidelines.

The system is now being implemented in PTTEP to quantify, account, report, and monitor GHG emissions.

(6) Development of “Green Practices” Roadmap to achieve environmental sustainability with a long-term implementation plan towards 2020 to ensure that our business operations are environmental-friendly and those environmental impacts from operations are mitigated

The Roadmap includes plans for reduction of ecological footprint, namely, carbon footprint, for example, to reduce greenhouse gas emissions from our operations and other initiatives through Clean Development Mechanism (CDM), water footprint, and to increase biodiversity through environmental and CSR initiatives. The Roadmap also includes eco-efficiency projects, energy and resource efficiency initiatives such as the recovery of flare gas for electricity generation, mitigation of environmental impacts in operational areas, waste management and minimization, green supply chain initiatives for our supply chain to become more eco-friendly, and green practices for decommissioning at the project’s end of life. More details on Green Practices Roadmap as well as projects and initiatives are disclosed in the annual sustainability report.

(7) Since 2008, re-injection of produced water (water that exists in subsurface formations and is brought to the surface during oil and gas production and considered as waste) into subsurface reservoirs to ensure no overboard discharging which might affect the environment at Bongkot Project, Arthit Project, S1 Project, and PTTEP 1 Project.

(8) Control and monitoring of synthetic drilling fluid in order to reduce drilling wastes to comply with the standards as suggested in the Environmental Impact Assessment Report

(9) Monitoring of discharged wastewater quality from production process as well as of seawater quality, sediment quality, benthos, and ground fish habituating around the operation platform to ensure limited exposure to environmental hazard

In addition, Environmental Monitoring Reports of the above must be submitted to local regulators such as the Department of Mineral Fuels of the Ministry of Energy and the Office of Natural Resources and Environmental Policy and Planning (ONEP) of the Ministry of Natural Resources and Environment.

(10) Implementation of the Oil Spill Response Plan

Oil spill equipment and response plans are provided to ensure environmentally sound operations from Tier 1 oil spill incidents. PTTEP is also registered as a member in the Oil Industrial Environmental Safety Group Association (IESG) for Tier 2 oil spill response incidents. As for Tier 3 oil spill response, PTTEP is a registered member of the Oil Spill Response Limited (OSRL) and cooperates with PTT Group in the mitigation of environmental impacts.

(11) Provision of appropriate technologies for waste management system (disposal, storage, treatment, and transport) for hazardous and non-hazardous wastes, e.g., mercury contaminated waste, oil contaminated wastes, chemical wastes, and other wastes from production process for environmental impact abatement

PTTEP also complies with the Basel Convention for the transportation and disposal of mercury contaminated wastes as well as mercury wastes, in addition to local legislations and requirements concerning waste management.

(12) PTTEP strives to ensure that our operations do not cause harm to people, communities and environment. In all of our operations, we strictly comply with all relevant SSHE legislation requirements. The Company also has in place SSHE Management System (SSHE MS) which stipulates that, for all activities, SSHE risks shall be identified, assessed and managed to As Low As Reasonably Practicable (ALARP). PTTEP SSHE MS was developed based on legal requirements and international best practices from International Association of Oil and Gas Producer (IOGP). SSHE trainings and SSHE publications are also published to consistently promote SSHE awareness within the Company.

PTTEP SSHE MS consists of the following seven key elements:

- 1) Leadership and commitment
- 2) Policy and strategic objectives
- 3) Organization, resources and documentation
- 4) Evaluation and risk management
- 5) Implementation and operational control
- 6) Monitoring and measurement
- 7) Audit and review

(13) Continuation of the “Step Change in SSHE Program” with the continuous promotion of the “Life Saving Program” which was launched in 2012 to improve our SSHE performance towards SSHE Excellence

As part of the Step Change in SSHE, PTTEP Life Saving Program was also launched in 2012 to reinforce compliance culture. The program comprises 18 safety icons, based on the IOGP study of E&P incidents that lead to fatalities and serious injuries. The Life Saving Program focuses on raising awareness of activities which are most likely to result in fatalities and also highlights simple actions which individuals can take to protect themselves and others.

(14) Provision of appropriate support and coordination with other exploration and production companies, government agencies, the Petroleum Institute of Thailand, and other related agencies/associations in order to encourage knowledge sharing and experience aimed at abatement of the environmental impacts and problems and to allow for further continuous improvement for environmental issues in the oil and gas sector

(15) SSHE performance reporting in PTTEP’s Sustainability Report has been assured by a third party since 2012 and rated to receive a GRI A+ level for 3 consecutive years.

(16) PTTEP was selected as one of the members of the Dow Jones Sustainability Index (DJSI) in the DJSI world for the oil and gas sector in 2014.

(17) PTTEP has been rated by the Carbon Disclosure Project, a well-known organization which compiles and evaluates information regarding environmental governance, and shortlisted into the Carbon Disclosure Leader Index (CDLI) as one of the top companies in the Southeast Asia plus Hong Kong in disclosure of information of greenhouse gas emission as well as doing the most to combat climate change.

2.5.5 Implementation results over the past three years

During the past 3 years (2012 – 2014), PTTEP has strictly complied with both Thai and International legislations, and other regulations and requirements concerning the area of safety, security, health and environment in our operations.

(1) Regularly conduct Environmental Impact Assessment Studies prior to the commencement of all exploration and production development projects as required by local regulations.

In addition, EIA Audit Reports and Environmental Monitoring Reports are also conducted and submitted to local authorities and regulators periodically as required.

(2) Strictly comply with waste management regulations required by the Department of Mineral Fuels and other regulatory bodies.

(3) Submission of Safety, Security, Health and Environment performance reports to local regulator (Department of Mineral Fuels) on a monthly and annual basis.

(4) From 2011 to 2013, PTTEP received the OHSAS 18001:2007 Occupational Health and Safety Standard which specifies requirements for a company to feature the occupational health and safety management system that enables the organization to control its occupational health and safety risks and improve its performance. The Company received this certification for the following projects: S1, PTTEP1, Petroleum Support Bases in Songkhla and Ranong, Arthit, and Bongkot (for both North & South fields).

(5) PTTEP is constantly improving and developing its Environmental Management System Standard to comply with the revised edition of international standards ISO 14001 (ISO14001:2004), and audited and certified from AJA Registrars Limited under accreditation of the United Kingdom Accreditation Service (UKAS). By adopting the ISO 14001 “One Common System” for all certified sites, the Company has improved the efficiency of our environmental management system by continuously upgrading the environmental practices in maintaining, developing, and reducing environmental impacts with details as listed below.

(1) Greater Bongkot North Field of the Bongkot Project – with the scope of “exploration and production of natural gas and condensate”

(2) Arthit Project – with the scope of “exploration and production of natural gas and condensate”

(3) S1 Project – with the scope of “exploration and production of petroleum”

(4) PTTEP1 Project – with the scope of “exploration and production”

(5) PTTEP Petroleum Development Support Base, Songkhla – with the scope of “Provision of logistic services to offshore oil and gas operations”

(6) PTTEP Core Research Center – with the scope of “building management and maintenance service, core research center and logistic support for storage of core, slab samples and archive of company document”

Additional PTTEP operational sites which achieved the ISO 14001 standard last year are as follows.

1) Montara Field, Darwin base and Perth office of PTTEP Australasia (Ashmore Cartier) Pty Ltd. in Australia-with the scope of “exploration and production”

2) PTTEP Petroleum Development Support Base, Ranong – with the scope of “Provision of logistic services to offshore oil and gas operations”

3) Greater Bongkot South Field of the Bongkot Project – with the scope of “exploration and production of natural gas and condensate”

Similarly, PTTEP is also constantly improving and developing our Environmental Management System Standard at Sinphuhom and other PTTEP’s international operating units in order to bring these units into compliance with the ISO14001 standard in the near future.

With regard to the spill incidents in years 2012, 2013, and 2014, the spills accounted for 0.43, 2.92, and 0.09 tonnes per one million ton of production respectively. The total figures from these spills clearly indicate that the level of spillage in the year 2014 remains within the estimated target which is approximately 5.94 tonnes per one million ton of production. This is also lower than the average spill rate of IOGP of year 2013, which reported an average spill rate of 6.59 tonnes per one million ton of production. Compared with the 2013 spill performance, a dramatic improvement was resulted from the Company’s intensive incident investigation process which also develops specific mitigation measures to eliminate such spill incidents.

PTTEP is firmly committed to its SSHE policy, focusing on minimizing negative impacts on personnel and properties (both of the company and contractors) with numerous indicators such as Lost Time Injury Frequency (LTIF) rate and Total Recordable Injury Rate (TRIR). In 2014, LTIF and TRIR have been determined at 0.22 and 1.30 respectively, and a well-defined declining trend is shown. Notably, this declining trend is lower than the average LTIF rate and TRIR of the IOGP of year 2013, which meanwhile were held at 0.45 and 1.60, respectively.

To stay in line with PTTEP's sustainable growth, proactive reinforcement of the SSHE Management System is carried out throughout the Company's business life cycle in both domestic and international units in order to encourage use of identical standard practices throughout.

2.5.6 Disputes or lawsuits regarding the environment and solutions

No legal dispute regarding the environment currently exists.

3. Risk Factors

The risks associated with PTTEP's business derive from two sources, namely, internal and external factors.

3.1 Internal Risk Factors

3.1.1 New Investment Risks

PTTEP's investment strategy seeks to expand the Company's interests both domestically and internationally, with a focus on the projects that have potential and align with our strategic plan, by expanding our investment in primary areas through explorations and mergers and acquisitions (M&A). Priority is also given to development-phase or early stage of production phase to immediately increase the Company's reserves. Investment in new countries or unfamiliar areas however contains inherent risks. The Company therefore has instituted risk mitigation guidelines for the assessment of each investment. The guidelines provide consideration in various aspects, ranging from petroleum potential, size and project characteristics, acquisition procedures, additional reserve volume, operator's capability and performance, attractiveness of fiscal regime, geographical conditions, international relations, to economic and financial stability. All risks are then taken into account, from which prevention measures and options are formulated, and integrated into the return-on-investment analysis.

Investment in each new project must be intensively screened by the Investment Committee whose function is to assess and ensure that the project adheres to corporate investment direction and policy and that it is economically and technologically feasible whether conventional or unconventional resources are involved. New investments, including farm-in and farm-out joint ventures, must secure endorsement from the Investment Committee, the Management Committee, and afterwards the Risk Management Committee, prior to final approval from the Board.

3.1.2 Exploration Risks

In petroleum exploration and production (E&P) business, exploration activities are essential to ensure that additional new petroleum reserves are found to replace those which have been turned to production. Therefore, PTTEP has always aimed to add new reserves to support future production targets and the Company's future growth strategy.

The objective of exploration is to search for petroleum resources which are of a size suitable for commercial development. The chance of finding successful petroleum resource is dependent on geological risks in finding whether there is a source for petroleum and a trap to contain it (Geological Risks) and the uncertainty of finding a petroleum field of commercial size (Resource Uncertainty).

Another major risk associated with petroleum exploration is the investments in exploration and appraisal wells, including investment during the phase of geological and geophysical studies before drilling. The criteria for exploration decisions are based on:

- 1) Assessment of the chance of success or Geological Risk assessment
- 2) Resource estimation, an assessment of the size of petroleum resource in the event of finding a petroleum resource in an exploration block
- 3) Expenditure during exploration period such as geological studies, seismic acquisition and interpretation, and drillings
- 4) Exploration economic evaluation, considering all exploration and development expenditure and government's take according to block concession or contract

PTTEP establishes the best practice process, starting from potential basin evaluation and selection, in-depth subsurface studies of targeted blocks, and above-ground investment risk. The Exploration Group of PTTEP is tasked with formulating the exploration strategy and strategic plan based on the Exploration Portfolio Management, while allocating exploration budgets to high potential blocks for further exploration activities. This process is reviewed and revised annually to reflect and be in line with changing of the environment, outcome of exploration activities, and corporate targets.

As exploration activities generally involve high level of geological risks and uncertainties, it is important that geological studies or evaluation are performed based on sufficient data, comprehensive database, clear standards and guideline, and the capability of geoscientists. PTTEP also nominates a special advisory team (Quality Assurance Review Team – QART), consisting of experts, to review and ensure quality and completeness of the investigation and that they are in compliance with standards of studies and evaluation before decision making.

3.1.3 Project Development Risks

Recognizing the potential of project development delays and cost overruns, PTTEP has implemented the following risk mitigation measures to enable successful and timely project completion.

1) Project management: To safeguard against project delays and cost overruns, the Company focuses on related policy formulation, project management organization, project planning and engineering system designs, contract management, procurement, and construction monitoring.

2) Personnel and process: To meet the targets set for safety, quality, budgetary, and schedules for project completion, the Company focuses on developing our project team's skill. This in part helps the Company to better prepare for and protect ourselves from the increased competition in the employment market of those with extensive skills and experience. Information and experience sharing of previous projects is also encouraged as part of the project team skills development, while the Company's Project Realization Process (PREP) continues to find new approaches to fine-tune operations so that targets are achieved.

3) Commercial contract: To ensure maximum efficiency in order to minimize the risks associated to non-contractual compliance and disputes while working with our contractors, the Company focuses on contract drafting, terms and condition identification and contract administration. Meanwhile, the risks can also and be controlled by negotiations based on comprehensive competency, knowledge, and concerted effort from various departments such as construction, engineering, procurement, finance, accounting, and legal. Prudent contract management also lessens the risks and possible damages potentially resulting from delays which could adversely affect a given project as well as the Company's performance at large.

3.1.4 Production Risks

In order to produce petroleum, PTTEP has to face various aspects which present potential of risk, starting from bottom of the well at the production process until the point of sales, such as well potential, production design flaws, damaged equipment, aging facilities, operation errors, and poor product quality; all of which can directly impact corporate goal, and production and sales targets.

Mitigation of production risks focuses on the areas of platform design, production control system, and preventive maintenance. Moreover, the Asset Reliability & Integrity Management System (ARIMS) which is a part of the Operational Excellence Project, has been continuously improved to ensure the highest standards of production integrity and safety. ARIMS has been designed specifically to minimize production losses due to worn-out equipment and improve equipment efficiency through preventive maintenance and inspection, with the goal to attain the zero unplanned shutdowns. Work procedures, operation manuals, and extensive training programs have meanwhile been developed and employed to instill greater understanding and efficiency of the Company's operation personnel.

The Company has also set up the Operational Risk Committee (ORC) to analyze and assess production risks in respect to technical issues, contracts, and operational support to projects in order to increase our overall efficiency.

3.1.5 Commercial Risks

PTTEP sells the majority of our main product, natural gas, to the Thai market. Therefore, the Company's revenue could drop if the domestic demand decreased from the projection. As a result, the Company has therefore expanded and invested more internationally, for instance, in oil projects such as Vietnam 9-2 Project, Vietnam 16-1 Project, Oman 44 Project and PTTEP Australasia Project in order to diversify the risks of depending entirely on Thailand's natural gas demand. The Company also acquired a project in Mozambique which possesses large natural gas reserves which can be developed as a Liquefied Natural Gas (LNG) PTT's project. This project fits well with PTT's plan to import LNG as well as contributes well to the enhancement of energy security of Thailand.

PTTEP has entered in long-term gas sales agreements (GSAs) with PTT, which is the Company's major domestic buyer. The terms of GSAs generally lasts 25-30 years. To mitigate market risks which can result in refusals from buyers to purchase contracted volumes of natural gas, GSAs stipulate buyer and seller obligations for committed annual minimum volume. Buyers must pay for the committed volume of gas, whether or not the full amount is taken (Take-or-Pay).

To effectively cope with the dynamics of Thailand energy market, PTTEP closely monitors petroleum demand in coordination with PTT and related government agencies to collectively outline an optimized supply plan. The Company reviews and adjusts its production as well as project development plans regularly in order to ensure that the holistic development master plan is able to optimize reserves and resources of existing assets to match the country's energy demand.

3.1.6 Organization Capability Risks

The abilities of an organization are a key component towards the efficient realization of the company's targets. Generally, this consists of major elements, human resources to support the company's growth and business process efficiency and effectiveness. PTTEP, in this particular regard, has taken the following actions to enhance our business process and organizational capability.

1) Knowledge management, including new technologies and capability of the Company's research and development program, is developed to be consistent with the Company's growth strategy. The implementation of the Center of Excellence (COE) corresponds with this objective, keying on four major areas.

- Increase exploration success
- Enhance more production
- Develop deep water
- Operate unconventional

2) System, procedures, and organization structure are developed according to PTTEP's growth strategy and business plan, focusing on international investment for which new international business models have been developed. The Company has also restructured the organization to better respond with overseas business as well as redesigned monitoring and evaluating of the administration process to create a more effective, more efficient working environment between corporate functions and international assets. In addition, an IT Global platform is developed to maintain the stability and security of PTTEP Group's system.

3) Human Resources Development plans for recruiting, selecting, developing and assessing the capability and competency of the Company's personnel. The Competency Management System is currently employed to develop career growth plans for vocational personnel. The Technical Career Ladder (TCL) meanwhile provides career growth opportunities to technical personnel, who are now able to attain job values comparable to management while staying on the technical track. The Accelerated Development Program (ADP) focuses on speeding up staff competency development to be ready to perform given assignments on their own. The Talent Management program is designed to promote those who have high potential to hold executive positions or equivalent in order to replace retiring executives or add to new executive positions to match with the demands from the Company's growth, whereas the Employee Engagement Program has been introduced to retain personnel while cultivating PTTEP's values & cultures.

3.1.7 Safety, Security, Health and Environmental Risks

As PTTEP and subsidiaries operate in the E&P business, the Company inherently encounters safety, security, health and environmental (SSHE) risks caused by internal and external factors which may have various degrees of severity.

The Company established a clear SSHE policy and constantly improves our SSHE performance to reinforce safety, security and environmental controls and efficiency. PTTEP has put in place the SSHE Management System (SSHE MS), a reflection of the Company's vision and mission, which is essential for the effective operation of all SSHE and SSHE-related activities. SSHE MS standards and procedures define minimum requirements to be applied across the organization to ensure that relevant SSHE risks to personal safety and process safety are effectively and consistently managed, aiming to achieve the operational excellence. Management's commitment and employee's engagement are crucial in strengthening SSHE MS, leading up to a strong and sustained SSHE culture within the Company. In addition, the Company always communicates SSHE issues which may affect the Company operations, such as, natural disaster, epidemics, social and political unrest in an open and transparent manner in order to pave the way for PTTEP to be a leading E&P company with safe operations and sustainable development. The Company's SSHE MS is periodically reviewed to ensure performance excellence and maintain the Company's public trust for safety and our determination for future sustainability, in addition to building a SSHE culture where all of the members can contribute.

In 2014, the Montara Field was certified with the internationally accepted environmental management system standard (ISO 14001 : 2004). Moreover, Bongkot South Field and the Petroleum Development Support Base in Ranong were certified with the occupational, health and safety management system standard (OHSAS 18001:2007) and the ISO 14001 : 2004. This is a further guarantee that PTTEP has standardized systems in place, for both domestic and international projects. Currently, PTTEP has plans to get certified in other international projects to demonstrate our commitment to conduct the business with responsibility to the environment and achieve the objectives of sustainable development in every area where we operate.

Realizing on sustainable development, social responsibility and quality of life, long term resources utilization and environment conservation along with response to country's energy demand, PTTEP, for the first time, has become a listed company of the Dow Jones Sustainability Index (DJSI) in 2014. This world recognition reflects PTTEP's determination to conduct business with sustainable growth by balancing among business, social and environment.

3.1.8 Financial Risks

The key financial risks of PTTEP Group consist of counterparty and liquidity risks. Regarding the former, it is a PTTEP Group's policy to conduct businesses only with counterparties with good credit-rating. The majority of sales are currently made to PTT, PTTEP's parent company. In addition, it is a mandatory practice for the Group to periodically review and assess the risks related to the counterparties whom we have had contractual financial transactions with, including bank deposits and financial derivatives.

Liquidity risk arises from a lack of viable sources of funding for PTTEP Group's business activities, and we manage the aforementioned risk by forecasting and continually updating cash requirements and financial projection, including entering into credit lines with and without obligations with commercial banks.

3.1.9 Shareholding Risks

PTT currently holds 65.286% of PTTEP's registered and paid-up capital, and therefore it has the controlling votes in the Company's shareholders' meetings. Appointing and removing of PTTEP directors, in addition to some agendas and decisions, must be in line with the decision of PTT's Board and its business policy as a result.

PTTEP has constructed various measures which are designed to protect the rights of our minority shareholders. These measures include, as necessitated by the laws, disclosure of business transactions between PTTEP and our parent company and, when the transactions are of significance, requirement of approval from PTTEP's Board or shareholders (as the case may be). The minority shareholders have opportunities to make inquiries and agenda proposals as well as nominate qualified candidates for elections during the shareholders' meetings where minutes are officially recorded. Meanwhile, communication between PTTEP and our shareholders is also encouraged through the Company's Investor Relations Section who is in charge of publishing PTTEP Newsletter and regularly organizing company visits and activities which are intended to provide the shareholders and investors with up-to-date and necessary information for their investment in the Company.

PTTEP and PTT are listed companies and are governed by a stringent set of rules and regulations as set forth by the Stock Exchange of Thailand. For this and the aforementioned measures to minimize the shareholding risks, PTT's holding of majority of the shares does not result in any material impacts on the Company's minor shareholders.

3.2 External Risks Factors

3.2.1 Political Risk in Investment Countries

Due to PTTEP's foreign investment policy to secure resources to meet the expanding domestic energy market and to ensure the sustainable growth of the Company in the long term, we continue our growth strategy by expanding our business in countries that are susceptible to geopolitical risks.

International expansion can be categorized into four main regions: Southeast Asia, Australasia, North America, Africa and the Middle East. Therefore, as part of this policy, PTTEP has appointed a geopolitical risk team to monitor all these factors and periodically analyze as well as report on the development of these forms of risk. Afterwards, the team will formulate possible scenarios for the consideration of management and relevant units for their decision-making on the new investments and assessment of security risks in existing investment countries where PTTEP staffs are based in.

In 2014, PTTEP analyzed and evaluated a number of geopolitical risk factors including political stability, macro-economics, legal and regulatory, and security risks across a range of investment countries.

Comprehensive assessment of all risks ensures prompt responses especially when significant incidents happen. In such cases, the Company has a process of evaluating risks and scenario formulation which assists management and relevant departments in evaluating risks relating to investments as well as safety and security of the Company's staffs stationed overseas.

Analysis is also conducted to formulate geopolitical risk's rating scores which will be used as a part of the assessment process before making investments in new projects.

In addition, PTTEP liaises closely with the Ministry of Foreign Affairs and Thai embassies in all these countries to ensure that the Company's business operations are well-supported by them and align with their respective national energy policy.

3.2.2 Compliance Risk

These risks can be resulted from a variety of factors, e.g., complexity of articles of a specific law, continual changes to laws and regulations, an incorrect interpretation of a law, or even the nuances of the foreign language in which the law is written. The risks can potentially lead to incorrect compliance with a law, resulting in violation of or non-compliance with applicable laws which, in effect, may lead to pecuniary punishments, e.g., fines, operational difficulties such as potential revocation and suspension of licenses, and possible damage to PTTEP's reputation. To minimize these risks, the Company has established the Compliance Department to be responsible for assuring that all of the business units strictly comply with their relevant laws, thereby building confidence among the Company's Board, management, and employees that the Company is fully compliant with laws relating to its business operations. More details of roles and responsibilities of the Compliance Department are disclosed in the "Internal controls and Risk Management" section under the "Roles and Responsibilities of Head of the Compliance Department" part.

3.2.3 Price Risks

PTTEP's product prices vary with the world's oil market which is affected by a number of uncontrollable factors such as market demand and supply, political and economic stability of various countries, OPEC's production policy, oil reserves of each country, and seasonal climate conditions. Changes in the oil market have an immediate and direct impact on prices of the Company's crude oil and condensate. Prices of natural gas, the Company's main products, on the other hand, will change at a slower rate as the natural gas price formula has a built-in natural hedge mechanism against oil prices. The Company's prices of natural gas are periodically adjusted, for example, every six or twelve months as stipulated by each project's price formula.

In an effort to minimize price risks, the risk management plans are formulated based on the Company's annual analysis and evaluation of the impacts of different price levels on the revenue and profits. These plans must be approved by the Risk Management Committee and acknowledged by the Board.

First half of 2014 saw oil price in a narrow range-bound market where Brent was USD 105 – 110 per barrel. In June, the oil price rallied and Brent peaked at USD 115 per barrel as a result of the tension in Iraq. Afterwards, the oil price however has continually fallen due to crude oil oversupply particularly from substantial production growth of shale oil, whereas the U.S. Brent came down to touch USD 60 per barrel in December as a result.

In 2014, PTTEP implemented an oil price hedging program, as approved by the Risk Management Committee, which had helped to significantly protect the Company's 2014 financial performance from the oil price downtrend.

3.2.4 Exchange Rate Risks

The Company has determined the US Dollar (USD) as the functional currency for IFRS reporting standards as USD is the main reference currency used for trading petroleum products such as crude oil and natural gas which are the Company's major products. The Company's cash flows however still bears exchange rate risk from the Thai Baht (THB)/USD as most of the Company's revenue is in THB which is linked to USD. For example, revenue from USD-linked crude price formula is paid by the Thai-listed customers who are required to make settlement to the Company in THB. Although our main cash outflows, such as investing and operating expenditures, are mostly in USD; the discrepancies between payables and receivables' settlement periods as well as USD/THB volatility still impose the exchange rate risks on the cash flows.

The Company has minimized such risk by not only using the available financial instruments in the market such as forward and option contracts to hedge exposure relating to the exchange rate which is determined in the Company's sales agreement, but the Company also minimize the risk by matching our USD revenue to our USD investing and operating expenditures. With USD as our functional currency, the Company is exposed to currency volatilities in translating our non-USD assets and liabilities at the end of every accounting period. In an effort to minimize such translation risk, the Company has consistently implemented measures to maintain a proper balance between our THB assets and THB liabilities, while engaging in cross currency swaps on our THB-denominated obligations in order to reduce the impact from the exchange rate volatilities by changing both interest and principal payments into USD.

Meanwhile, the Company's operating performance is also affected by the USD/CAD volatility as PTTEP CA, the Company's subsidiary operating the Mariana Oil Sands Project, uses Canadian Dollar (CAD) as its functional currency, despite its debts being denominated in USD. The structure therefore causes an unrealized gain or loss from translating the subsidiary's liabilities from CAD to USD whenever the USD/CAD exchange rate changes. In this particular case, the Company has managed the translation risks in PTTEP CA by adjusting the subsidiary's debt-to-equity ratio, engaging in cross currency swaps to change USD-denominated debts to CAD-denominated debts, securing new loans in CAD, and the others by taking into account costs, market situations, and the Company's acceptable risk level.

3.2.5 Interest Rate Risks

PTTEP and our subsidiaries are subject to interest rate risks which can produce a significant impact on the Group's future cash flows and financial instruments' fair values. To minimize interest rate risks, PTTEP Group's policy is to keep the proportions of its fixed-rate and floating-rate liabilities at appropriate and suitable levels for its business operating characteristics. PTTEP Group continuously reviews and considers borrowing either in fixed-rate or in floating-rate, using financial derivative instruments to manage interest rate risks such as interest rate swap, which is used to convert fixed-rate liabilities to floating-rate liabilities and vice versa, while taking into account the costs of such measures, market conditions, and acceptable risk level.

3.2.6 Funding Risks

The E&P business is a capital-intensive business with large financial commitment and upfront investments. PTTEP's ability to mobilize funds, which is a key to its sustainable growth, depends on several factors such as our financial performance and position as well as future cash flows. Domestic and global variables such as economies, political situations, and the vitality of financial markets also have a major role in the Company's funding ability. To mitigate these risks, it is essential for the Company to manage its financial ratios such as debt-to-equity and debt-to-reserves to be at an acceptable level as to maintain the Company's overall credit rating.

4. PTTEP and its Subsidiaries' Assets

4.1 Property, Plant and Equipment

4.1.1 Oil and Gas Properties⁹

PTTEP and its subsidiaries' properties mainly are jointly controlled oil and gas properties in each project. Oil and Gas properties, which located at each project, comprise land, buildings and construction, machine and equipment including transportation pipeline, capitalized exploratory and production drilling costs, property acquisition costs of concession right which shall incur when PTTEP and its subsidiaries acquire the concession right and decommissioning costs which have been determined based on reviews and estimates by the Group's own engineers and managerial judgment.

As at December 31, 2014, PTTEP and its subsidiaries' oil and gas properties are represented as share of the joint ventures' individual assets for each project as follows:

<u>PTTEP's joint ventures</u>	<u>Company's interest (%)</u>
1. Contract 3	5
2. E5	20
3. Sinphuhorm (E 5-North)	20
4. Algeria Hassi Bir Rekaiz	24.5
5. S1	25
6. Bongkot (Block B15, B16, B17)	44.4445
7. Contract 4	45
8. Arthit (Block B14A, B15A, B16A)	80
<u>PTTEPI's joint ventures</u>	<u>Company's interest (%)</u>
9. G4/48	5
10. Yetagun	19.31784
11. G4/43	21.375
12. Yadana	25.50
13. Bongkot (Block G12/48)	44.4445
14. Contract 4 (Block G7/50)	45
15. MTJDA - B17 (Block B-17)	50
16. L21/48 & L28/48	70
- L21/48 ¹⁰	-
- L28/48	70

⁹ See more detail in Attachment 5 – Supplementary Information of Oil and Gas Producing Activities

¹⁰ On April 10, 2014, PTTEP International Limited (PTTEPI), an operator of the exploration Block L21/48 and L28/48 had received the approval of the return of the exploration Block L21/48 after the fulfilment of the concession requirements for the year one of the exploration phase 3.

17.	Arthit (Block G8/50)	80
18.	PTTEP1	100
19.	G9/43	100
20.	L22/43	100
21.	Myanmar M3	80
22.	Myanmar M11 ¹¹	52.9412
23.	Zawtika	80
24.	L53/43 & L54/43	100
25.	A4/48 & A5/48 ¹²	100
	<u>PTTEPO's joint venture</u>	<u>Company's interest (%)</u>
26.	B8/32 & 9A ¹³	25.0010
	<u>PTTEP SV's joint venture</u>	<u>Company's interest (%)</u>
27.	Vietnam 52/97	7
	<u>PTTEP KV's joint venture</u>	<u>Company's interest (%)</u>
28.	Vietnam B & 48/95	8.50
	<u>PTTEP HL's joint venture</u>	<u>Company's interest (%)</u>
29.	Vietnam 16-1	28.50
	<u>PTTEP HV's joint venture</u>	<u>Company's interest (%)</u>
30.	Vietnam 9-2	25
	<u>PTTEP OM's joint venture</u>	<u>Company's interest (%)</u>
31.	Oman 44	100
	<u>PTTEP AG's joint venture</u>	<u>Company's interest (%)</u>
32.	Algeria 433a & 416b	35
	<u>PTTEPS's joint venture</u>	<u>Company's interest (%)</u>
33.	Sinphuhorm (EU-1)	20
34.	B6/27	60
35.	S1	75
	<u>PTTEP SM's joint venture</u>	<u>Company's interest (%)</u>
36.	Indonesia Semai II ¹⁴	28.33

¹¹ On August 12, 2014, other joint venture of Myanmar M11 Project has submitted a request to terminate its 15% participating interests. The termination was effective as of October 22, 2014 based on Joint Operating Agreement. As a result, PTTEP International Limited (PTTEPI)'s participating interests in Block G6/50 was increased from 45% to 52.9412% and PTTEPI will continue to be an operator in this project.

¹² On December 23, 2014, PTTEP International Limited (PTTEPI), an operator of the exploration Block A4/48 and A5/48 had sent the notification letter to request the return of a 100% exploration Block A4/48 and A5/48. The return will be effective after the official approval from the Department of Mineral Fuels.

¹³ PTTEPO has shareholding in Orange Energy Limited and B 8/32 Partners Limited, which holds the project's concession.

<u>PTTEP SA's joint venture</u>		<u>Company's interest (%)</u>
37.	Myanmar PSC G & EP 2	90
38.	Myanmar MD-7 & MD-8	100
39.	Myanmar MOGE 3 ¹⁵	85
<u>PTTEP NZ's joint venture</u>		<u>Company's interest (%)</u>
40.	New Zealand Great South ¹⁶	-
<u>PTTEP SMD's joint venture</u>		<u>Company's interest (%)</u>
41.	Indonesia South Mandar ¹⁷	50.7463
<u>PTTEP ML's joint venture</u>		<u>Company's interest (%)</u>
42.	Indonesia Malunda	100
<u>PTTEP SD's joint venture</u>		<u>Company's interest (%)</u>
43.	Indonesia Sadang ¹⁸	30
<u>PTTEP SS's joint venture</u>		<u>Company's interest (%)</u>
44.	Indonesia South Sageri ¹⁹	-
<u>PTTEP CA's joint venture</u>		<u>Company's interest (%)</u>
45.	Canada Oil Sands KKD ²⁰	-
46.	Mariana Oil Sands ²⁰	100

¹⁴ On November 7, 2014, PTTEP Semai II Limited (PTTEP SM) and its joint ventures have submitted a request to terminate and return the exploration block of Indonesia Semai II Project after fulfillment the requirements of the Production Sharing Contract. The termination will be effective after the approval from the government of Indonesia.

¹⁵ On August 8, 2014, PTTEP South Asia Limited (PTTEP SA) had entered into the Production Sharing Contract (PSC) with Myanmar Oil and Gas Enterprise (MOGE) to obtain the exploration and production rights of Block MOGE 3 located in the Republic of the Union of Myanmar. Upon entering into the contract, PTTEP SA is the operator and holds 85% participating interests.

¹⁶ On September 24, 2014, PTTEP New Zealand Limited (PTTEP NZ) has received the approval from the government of New Zealand to terminate its 18% participating interests under the New Zealand Great South Project.

¹⁷ On June 1, 2013, PTTEP South Mandar Limited (PTTEP SMD) has received the transfer of the participating interests in the Indonesia South Mandar Project from Talisman Sount Mandar B.V. As a result, the participating interest in the project was increased from 34% to 50.7463%. The transfer will be effective after the approval from the government of Indonesia.

¹⁸ On June 3, 2013, PTTEP Sadang Limited (PTTEP SD) and its joint venture have submitted a request to terminate and return the exploration block of Indonesia Sadang Project after fulfillment the minimum operating requirements of exploration phase 1. The termination will be effective after the approval from the government of Indonesia.

¹⁹ On September 13, 2013, PTTEP South Sageri Limited (PTTEP SS) had terminated its 20% participating interests under the Indonesia South Sageri Project. The termination was approved by the government of Indonesia on July 8, 2014

²⁰ On January 30, 2014, PTTEP Canada Limited (PTTEP CA), a subsidiary of the Company, had signed into a Partnership Units Redemption Agreement (PURA) with Statoil Canada Limited, a joint venture partner of Canada Oil Sands KKD (KKD) Project, to restructure the ownership interests of the five areas of the KKD Project, whereby PTTEP CA exchanged its 40% participating interests in Leismer and Corner (L&C) areas with the 60% participating interests in Thournbury, Hangingstone and South Leismer (THSL) areas.

<u>PTTEP AP's joint venture</u>		<u>Company's interest (%)</u>
47.	PTTEP Australasia	
	● AC/L7, AC/L8, AC/RL7, AC/P33, AC/P34 and AC/P54	100
	● AC/L1, AC/L2 and AC/L3	89.6875
	● AC/RL10	90
	● AC/RL4 (Tenacious)	100
	● AC/RL6 (Audacious), AC/P4, AC/RL4 (exclude Tenacious), AC/RL5 and AC/RL6 (exclude Audacious)	50
	● AC/P4 ²¹	-
	● WA-396-P and WA-397-P	20
<u>PTTEP AI's joint venture</u>		<u>Company's interest (%)</u>
48.	Cove Energy Group	
	● Mozambique Rovuma Offshore Area 1	8.5
	● Mozambique Rovuma Onshore	10
	● Kenya L10A & L10B	
	- L10A	31.25
	- L10B ²²	-
	● Kenya L5, L7, L11A, L11B & L12	10
<u>Natuna 2's joint venture</u>		<u>Company's interest (%)</u>
49.	Natuna Sea A	11.5
<u>PTTEP BL's joint venture</u>		<u>Company's interest (%)</u>
50.	Barreirinhas AP 1 ²³	25
51.	Brazil BM-ES-23 ²⁴	20

²¹ On September 18, 2014, PTTEP Australasia (Ashmore Cartier) Pty Ltd has submitted a request to terminate its 50% participating interests in the AC/P 4 concession block. The termination was approved by the government of Australia on October 29, 2014.

²² On May 29, 2014, Cove Energy Kenya Limited (CEKL) had been approved by the government of Kenya for the termination of the 15% participating interests under Kenya L10 B Project. The termination was effective as of May 31, 2014.

²³ On April 3, 2014, PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL), a subsidiary of the Group, had entered into an agreement with BG E&P Brasil Ltda. (BG Brasil) to farm-in and hold 25% participating interests in the exploration blocks BAR-M-215, BAR-M-217, BAR-M-252 and BAR-M-254. The agreement had been officially approved by the Brazil's National Agency of Petroleum, Natural Gas and Biofuels (the ANP) on August 6, 2014.

²⁴ On July 22, 2014, PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL), a subsidiary of the Group, had entered into an agreement to acquire 20% participating interests in concession blocks BM-ES-23 from Shell Brasil Petroleo Ltda (Shell Brasil). The agreement had been officially approved by the Brazil's National Agency of Petroleum, Natural Gas and Biofuels (the ANP) on October 31, 2014.

<u>PTTEP SP's joint venture</u>		<u>Company's interest (%)</u>
52.	Contract 4 (B12/27) ²⁵	15
53.	Sinphuhorm (E5 North and EU-1) ²⁵	35
<u>PTTEP G7's joint venture</u>		<u>Company's interest (%)</u>
54.	Contract 4 (G7/50) ²⁵	15

As at December 31, 2014, details of properties' net book value are as follows:

Unit: Million USD

Details of properties	Historical cost	Accumulated depreciation	Allowance for impairment of assets	Net book value
Proved Properties and Related Producing Properties	20,773.81	(10,914.66)	(576.19)	9,282.96
Exploration and Evaluation Assets	5,041.93	-	(626.02)	4,415.91
Decommissioning Costs	1,983.59	(646.49)	-	1,337.10
Goodwill	1,134.08	-	(7.31)	1,126.77
Pipeline	854.08	(130.63)	-	723.45
Support Equipment, Facilities and other	490.61	(217.51)	-	273.10
Total *	30,278.10	(11,909.29)	(1,209.52)	17,159.29

* Inter-company transaction has already been eliminated.

²⁵ On April 22, 2014, PTTEP Offshore Investment Company Limited and PTTEP International Limited, subsidiaries of the Group, had signed the Share Purchase Agreement (SPA) to acquire 100% equity stakes in Hess Thailand Holdings II Limited (HTH) and Hess Exploration Thailand Company Limited (HETCL), Hess Corporation's subsidiaries.

The transaction of HTH was completed on April 22, 2014. As a result, the Company's participating interests in Block B12/27 of Contract 4 Project and Block EU-1 and Block E5 North of Sinphuhorm Project increased by 15% and 35%, respectively. Also, the transaction of HETCL was completed on May 28, 2014, therefore the Company owned the increasing of 15% participating interests in Block G7/50 of Contract 4 Project. The Group has become the operator of Sinphuhorm Project after the acquisition.

Then, the Company changes name of HTH and HETCL to Sinphuhorm Holdings Limited and PTTEP G7 Limited, respectively.

4.2 Investments

PTTEP has details of subsidiaries, associates and controlled entities presented as follows:

Company name	Registered country	Type of business	Percentage of interest (including indirect holding)	
			2014	2013
Subsidiary Companies				
PTTEP International Limited (PTTEPI)	Thailand	Petroleum	100	100
PTTEP Offshore Investment Company Limited (PTTEPO)	Cayman Islands	Petroleum	100	100
PTTEP Services Limited (PTTEP Services)	Thailand	Supply manpower	100	100
PTTEP Siam Limited (PTTEPS)	Thailand	Petroleum	100	100
PTTEP MEA Limited (PTTEP MEA)	Cayman Islands	Petroleum	100	100
PTTEP HK Holding Limited (PTTEP HK)	Hong Kong	Petroleum	100	100
PTTEP Southwest Vietnam Company Limited (PTTEP SV)	Cayman Islands	Petroleum	100	100
PTTEP Kim Long Vietnam Company Limited (PTTEP KV)	Cayman Islands	Petroleum	100	100
PTTEP Hoang-Long Company Limited (PTTEP HL) ²⁶	Cayman Islands	Petroleum	100	100
PTTEP Hoan-Vu Company Limited (PTTEP HV) ²⁷	Cayman Islands	Petroleum	100	100
PTTEP Oman Company Limited (PTTEP OM)	Cayman Islands	Petroleum	100	100
PTTEP Algeria Company Limited (PTTEP AG)	Cayman Islands	Petroleum	100	100
PTTEP Iran Company Limited (PTTEP IR)	Cayman Islands	Petroleum	100	100
PTTEP Holding Company Limited (PTTEPH)	Cayman Islands	Petroleum	100	100
PTTEP Indonesia Company Limited (PTTEP ID)	Cayman Islands	Petroleum	100	100
PTTEP Andaman Limited (PTTEPA)	Thailand	Petroleum	-	100
PTTEP Africa Investment Limited (PTTEP AI)	Cayman Islands	Petroleum	100	100
PTTEP Rommana Company Limited (PTTEPR)	Cayman Islands	Petroleum	100	100
PTTEP Australia Pty Limited (PTTEP AU)	Australia	Petroleum	100	100
PTTEP Australia Offshore Pty Limited (PTTEP AO)	Australia	Petroleum	100	100
PTTEP South Asia Limited (PTTEP SA)	Cayman Islands	Petroleum	100	100
PTTEP New Zealand Limited (PTTEP NZ)	Cayman Islands	Petroleum	100	100
PTTEP Semai II Limited (PTTEP SM)	Cayman Islands	Petroleum	100	100
PTTEP Australia Perth Pty Limited (PTTEP AP)	Australia	Petroleum	100	100
PTTEP Australia Browse Basin Pty Limited (PTTEP AB)	Australia	Petroleum	100	100
PTTEP Australia International Finance Pty Limited (PTTEP AIF)	Australia	Funding services for the Group's business	100	100
PTTEP Australasia Pty Limited (PTTEP AA)	Australia	Petroleum	100	100
PTTEP Australia Timor Sea Pty Limited (PTTEP AT)	Australia	Petroleum	100	100
PTTEP Australasia (Finance) Pty Limited (PTTEP AAF)	Australia	Petroleum	100	100
PTTEP Australasia (Petroleum) Pty Limited (PTTEP AAP)	Australia	Petroleum	100	100

²⁶ has shareholding in Hoang Long Joint Operating Company 28.5%

²⁷ has shareholding in Hoan-Vu Joint Operating Company 25%

Company name	Registered country	Type of business	Percentage of interest (including indirect holding)	
			2014	2013
<u>Subsidiaries company (continued)</u>				
Tullian Pty Limited (PTTEP AAT)	Australia	Petroleum	100	100
PTTEP Australasia (Operations) Pty Limited (PTTEP AAO)	Australia	Petroleum	100	100
PTTEP Australasia (Ashmore Cartier) Pty Limited (PTTEP AAA)	Australia	Petroleum	100	100
PTTEP Australasia (Staff) Pty Limited (PTTEP AAS)	Australia	Petroleum	100	100
PTTEP International Holding Company Limited (PTTEP IH)	Cayman Islands	Petroleum	100	100
PTTEP Southwest Vietnam Pipeline Company Limited (PTTEP SVPC)	Cayman Islands	Gas pipeline transportation	100	100
PTTEP FLNG Holding Company Limited (PTTEP FH)	Hong Kong	Petroleum	100	100
JV Shore Base Limited (JV Shore Base)	Cayman Islands	Petroleum	100	100
PTTEP Netherland Holding Limited (PTTEP NL)	Cayman Islands	Petroleum	100	100
JV Marine Limited (JV Marine)	Cayman Islands	Petroleum	100	100
PTTEP South Mandar Limited (PTTEP SMD)	Cayman Islands	Petroleum	100	100
PTTEP South Sageri Limited (PTTEP SS)	Cayman Islands	Petroleum	100	100
PTTEP Sadang Limited (PTTEP SD)	Cayman Islands	Petroleum	100	100
PTTEP Malunda Limited (PTTEP ML)	Cayman Islands	Petroleum	100	100
PTTEP Netherlands Coöperatie U.A. (PTTEP NC)	Netherlands	Petroleum	100	100
PTTEP Canada Limited (PTTEP CA)	Canada	Petroleum	100	100
PTTEP Canada International Finance Limited (PTTEP CIF)	Canada	Funding services for the Group's business	100	100
Cove Energy Limited (Cove)	England	Petroleum	100	100
Cove Energy Mozambique Rovuma Onshore Limited (CEMROL)	Cyprus	Petroleum	100	100
Cove Energy East Africa Limited (CEEAL)	Cyprus	Petroleum	100	100
Cove Energy Mozambique Rovuma Offshore Limited (CEMROFL)	Cyprus	Petroleum	100	100
Cove Mozambique Terra Limitada (CMTL)	Mozambique	Petroleum	100	100
Cove Mozambique Energia Limitada (CMEL)	Mozambique	Petroleum	100	100
Cove Energy Kenya Limited (CEKL)	Kenya	Petroleum	100	100
PTTEP Netherlands Holding Coöperatie U.A. (PTTEP NH)	Netherlands	Petroleum	100	100
PTTEP Brazil Investment B.V. (PTTEP BI)	Netherlands	Petroleum	100	100
PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL)	Federative Republic of Brazil	Petroleum	100	100
Sinphuhorm Holdings Limited (SHL) ²⁸	Cayman Islands	Petroleum	100	-
PTTEP SP Limited (PTTEP SP) ²⁸	England	Petroleum	100	-
PTTEP G7 Limited (PTTEP G7) ²⁸	Thailand	Petroleum	100	-

²⁸ The additional information is disclosed in Note 7 to financial statements, Acquisition.

Company name	Registered country	Type of business	Percentage of interest (including indirect holding)	
			2014	2013
Associated Companies				
Energy Complex Company Limited (EnCo)	Thailand	Property rental services	50	50
PTT ICT Solutions Company Limited (PTT ICT)	Thailand	Information technology and communication services	20	20
PTTEP AP Group's Associates ²⁹	Australia	Operation service of air base	50	50
UAQ Petroleum Limited (UAQ)	Hong Kong	Petroleum	30	30
Jointly Controlled Entities				
Carigali – PTTEPI Operating Company Sdn Bhd. (CPOC)	Malaysia	Petroleum	50	50
Moattama Gas Transportation Company (MGTC)	Bermuda	Gas pipeline transportation	25.50	25.50
Taninthayi Pipeline Company LLC (TPC)	Cayman Islands	Gas pipeline transportation	19.3178	19.3178
Orange Energy Limited (Orange)	Thailand	Petroleum	53.9496	53.9496
B8/32 Partners Limited (B8/32 Partners)	Thailand	Petroleum	25.0009	25.0009
PTT FLNG Limited (PTT FLNG)	Hong Kong	Produce and sale of petroleum product	50	50
Erawan 2 FSO Bahamas Limited (Erawan 2) ³⁰	Bahamas	FSO rental services	13.11	13.11
KKD Oil Sands Partnership (KOSP) ³¹	Canada	Petroleum	-	40
Leismer Aerodrome Limited (LAL)	Canada	Airports and flying field services	32	32
Groupement Bir Seba (GBRS)	Algeria	Petroleum	35	35
Andaman Transportation Limited (ATL)	Cayman Islands	Gas pipeline transportation	80	80
NST Supply Base Company Limited (NST)	Thailand	Petroleum supply base, port and warehouse	15.67	15.67
Natuna 2 B.V. (Natuna 2)	Netherlands	Petroleum	50	50

Relationship: The Company directly or indirectly holds the shares in subsidiaries, associates and jointly controlled entities. Subsidiaries' management teams are from the Company.

4.3 Net Book Value

As at December 31, 2014, PTTEP's net book value amounted to USD 12,548 million (equivalent to THB 413,620 million) or USD 3.16 per share (equivalent to THB 104.19 per share).

²⁹ PTTEP AP's group associates are Mungalalu Truscott Airbase Pty Ltd. and Troughton Island Pty Ltd.

³⁰ has shareholding in Asia Pacific Marine Services (EF) B.V. 100%

³¹ The additional information is disclosed in Note 6 to financial statements, Restructuring of the Ownership Interests in Canada Oil Sands KKD (KKD) Project.

5. Legal Dispute

- None -

6. General and Other Significant Information

6.1 Information of PTTEP

Company Name	PTT Exploration and Production Public Company Limited or PTTEP
Headquarters Address	555/1 Energy Complex Building A, 6 th and 19 th – 36 th floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900, Thailand
Type of Business	Exploration and production of petroleum and investments in related businesses
Registration Number	0107535000206
Telephone	+66-2537-4000
Facsimile	+66-2537-4444
Website	www.pttep.com
E-mail	Independent Directors: independentdirector@pttep.com Investor Relations: ir@pttep.com Corporate Secretary: corporatesecretary@pttep.com
Registered Capital	3,969,985,400 ordinary shares with THB 1 per share (THB 3,969,985,400)
Paid-Up Capital	3,969,985,400 ordinary shares with THB 1 per share (THB 3,969,985,400) as of December 31, 2014

6.2 Subsidiaries' Information

As of December 31, 2014, there were 61 subsidiaries. All of them had the same contact address, telephone and facsimile as those of PTTEP (see item 6.1). Details of directors for each subsidiary are disclosed in Attachment 2.

No	Company Name	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
Petroleum Exploration and Production Business						
1	PTTEP International Limited	PTTEPI	2,000,000,000	THB 10	Ordinary Share	PTTEP 100%
2	PTTEP Siam Limited	PTTEPS	1,000,000	THB 100	Ordinary Share	PTTEP 51% PTTEPO 49%
3	Orange Energy Limited	Orange	1,000,000	THB 100	Ordinary Share	PTTEPO 53.9496% MOECO 36.0504% KrisEnergy 10%
4	PTTEP G7 Limited ³²	PTTEP G7	6,063,741	THB 100	Ordinary Share	PTTEPI 100%
5	JV Marine Limited	JV Marine	50,000	USD 1	Ordinary Share	PTTEP IH 100%
6	PTTEP Algeria Company Limited	PTTEP AG	50,000	USD 1	Ordinary Share	PTTEPO 100%
7	JV Shore Base Limited	JV Shore Base	50,000	USD 1	Ordinary Share	PTTEP IH 100%
8	PTTEP Africa Investment Limited	PTTEP AI	50,000	USD 1	Ordinary Share	PTTEPH 100%
9	PTTEP Holding Company Limited	PTTEPH	50,000	USD 1	Ordinary Share	PTTEPO 100%
10	PTTEP Hoang-Long Company Limited	PTTEP HL	50,000	USD 1	Ordinary Share	PTTEPO 100%

³² Formerly known as Hess Exploration (Thailand) Company Limited

No	Company Name	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders	
11	PTTEP Hoan-Vu Company Limited	PTTEP HV	50,000	USD 1	Ordinary Share	PTTEPO	100%
12	PTTEP Indonesia Company Limited	PTTEP ID	50,000	USD 1	Ordinary Share	PTTEPH	100%
13	PTTEP International Holding Company Limited	PTTEP IH	50,000	USD 1	Ordinary Share	PTTEPH	100%
14	PTTEP Iran Company Limited	PTTEP IR	50,000	USD 1	Ordinary Share	PTTEP OM	100%
15	PTTEP Kim Long Vietnam Company Limited	PTTEP KV	50,000	USD 1	Ordinary Share	PTTEPO	100%
16	PTTEP Malunda Company Limited	PTTEP ML	50,000	USD 1	Ordinary Share	PTTEP ID	100%
17	PTTEP South Asia Limited	PTTEP SA	50,000	USD 1	Ordinary Share	PTTEPH	100%
18	PTTEP Netherland Holding Limited	PTTEP NL	50,000	USD 1	Ordinary Share	PTTEP IH	100%
19	PTTEP New Zealand Limited	PTTEP NZ	50,000	USD 1	Ordinary Share	PTTEPH	100%
20	PTTEP Offshore Investment Company Limited	PTTEPO	6,667	USD 1	Ordinary Share	PTTEP	75%
						PTTEPI	25%
21	PTTEP Oman Company Limited	PTTEP OM	50,000	USD 1	Ordinary Share	PTTEPO	100%
22	PTTEP Rommana Company Limited	PTTEPR	50,000	USD 1	Ordinary Share	PTTEP AI	100%
23	PTTEP Sadang Limited	PTTEP SD	50,000	USD 1	Ordinary Share	PTTEP ID	100%
24	PTTEP Semai II Limited	PTTEP SM	50,000	USD 1	Ordinary Share	PTTEP ID	100%
25	PTTEP South Mandar Limited	PTTEP SMD	50,000	USD 1	Ordinary Share	PTTEP ID	100%
26	PTTEP South Sageri Limited	PTTEP SS	50,000	USD 1	Ordinary Share	PTTEP ID	100%
27	PTTEP Southwest Vietnam Limited	PTTEP SV	50,000	USD 1	Ordinary Share	PTTEPO	100%

No	Company Name	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
28	PTTEP MEA Limited	PTTEP MEA	50,000	USD 1	Ordinary Share	PTTEP 100%
29	Sinphuhorm Holdings Limited ³³	SHL	50,000	USD 0.01	Ordinary Share	PTTEPO 100%
30	PTTEP Australia Pty Ltd	PTTEP AU	50,000	AUD 1	Ordinary Share	PTTEPH 100%
31	PTTEP Australia Offshore Pty Ltd	PTTEP AO	50,000	AUD 1	Ordinary Share	PTTEP AU 100%
32	PTTEP Australia Perth Pty Ltd	PTTEP AP	50,000	AUD 1	Ordinary Share	PTTEPH 100%
33	PTTEP Australia Browse Basin Pty Ltd	PTTEP AB	50,000	AUD 1	Ordinary Share	PTTEP AP 100%
34	PTTEP Australasia (Staffs) Pty Ltd	PTTEP AAS	10	AUD 1	Ordinary Share	PTTEP AB 100%
35	PTTEP Australasia Pty Ltd	PTTEP AA	409,895,440	various price ³⁴ (average AUD 0.4895)	Ordinary Share	PTTEP AB 100%
			40,000,000	AUD 0.4957	Preference Share	
			1,575,000	AUD 0.4895	Class B Share ³⁵	
36	PTTEP Australasia (Petroleum) Pty Ltd	PTTEP AAP	10	AUD 1	Ordinary Share	PTTEP AA 100%
37	Tullian Pty Ltd	PTTEP AAT	1	AUD 1	Ordinary Share	PTTEP AAP 100%
38	PTTEP Australasia (Finance) Pty Ltd	PTTEP AAF	1	AUD 1	Ordinary Share	PTTEP AA 100%

³³ Formerly known as Hess Thailand Holdings II Limited

³⁴ Total amount equals AUD 200,631,256.48 (plus AUD 19,826,452.31 for the preference shares and AUD 770,914.25 for the Class B shares = total AUD 221,288,623.04).

³⁵ A type of share issued to employees under an Employee Share Option Plan, which was subsequently acquired by PTTEPAB.

No	Company Name	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
39	PTTEP Australasia (Ashmore Cartier) Pty Ltd	PTTEP AAA	1,700,000	AUD 2	Ordinary Share	PTTEP AB 100%
40	PTTEP Australasia (Operation) Pty Ltd	PTTEP AAO	106,686,517	AUD 0.20	Ordinary Share	PTTEP AB 100%
41	PTTEP Australia Timor Sea Pty Ltd	PTTEP AT	50	No par value (average AUD 827,048.78) ³⁶	Common Share	PTTEP AB 100%
42	PTTEP Netherlands Coöperatie U.A.	PTTEP NC	- ³⁷	-	-	PTTEP IH 0.00005% PTTEP NL 99.99995%
43	PTTEP Netherlands Holding Coöperatie U.A.	PTTEP NH	- ³⁸	-	-	PTTEP HK 75% PTTEPI 25%
44	PTTEP Brazil Investment B.V.	PTTEP BI	324,423,816.34	USD 1	Ordinary Share	PTTEP NH 100%
45	PTTEP Canada Limited	PTTEP CA	1,073,292,632.84	CAD 1	Ordinary Share	PTTEP NC 100%
46	PTTEP FLNG Holding Company Limited	PTTEP FH	10,000	HKD 1	Ordinary Share	PTTEP IH 100%
47	PTTEP HK Holding Limited	PTTEP HK	10,000	HKD 1	Ordinary Share	PTTEP 25% PTTEPI 75%
48	Cove Energy Limited	COVE	5,089,129.47	GBP 1	Ordinary Share	PTTEP AI 100%
49	Cove Energy East Africa Limited	CEEAL	1,000	EUR 1	Ordinary Share	COVE 100%

³⁶ PTTEP AB acquired PTTEP AT's 50 shares for a total amount of AUD 41,352,439.

³⁷ PTTEP NC had total amount of Member Contribution of USD 1,085,050,500.00 from 2010 to 2014.

³⁸ PTTEP NH had total amount of Member Contribution of USD 324,373,816.77 from 2013 to 2014.

No	Company Name	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
50	Cove Energy Mozambique Rovuma Onshore Limited	CEMROL	1,000	EUR 1	Ordinary Share	CEEAL 100%
51	Cove Energy Mozambique Rovuma Offshore Limited	CEMROFL	1,000	EUR 1	Ordinary Share	CEEAL 100%
52	Cove Energy Kenya Limited	CEKL	1,000	KES 100	Ordinary Share	CEEAL 99.9% COVE 0.1%
53	Cove Mozambique Terra Limitada	CMTL	50,000	MZN 1	Ordinary Share	CEMROL 100%
54	Cove Mozambique Energia Limitada	CMEL	50,000	MZN 1	Ordinary Share	CEMROFL 100%
55	PTTEP Brasil Investimentos Em Exploração e Produção de Petróleo e Gás Ltda. (PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada)	PTTEP BL	790,293,700	BRL 1	Ordinary Share	PTTEP BI 99.9999999% PTTEP NH 0.0000001%
56	PTTEP SP Limited ³⁹	PTTEP SP	2	GBP 2	Ordinary Share	SHL 100%
			95,279,585	USD 95,279,585	Ordinary Share	

³⁹ Formerly known as Hess (Thailand) Limited

No	Company Name	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders	
Service Business							
57	PTTEP Services Limited (Personnel Services Support)	PTTEP Services	100,000	THB 10	Ordinary Share	PTTEP	25%
						PTTEPI	75%
58	Andaman Transportation Limited (Investments in gas pipeline projects in Myanmar)	ATL	62,500	USD 1	Ordinary Share	PTTEPO	80%
						MOGE	20%
59	PTTEP Southwest Vietnam Pipeline Company Limited (Investments in gas pipeline projects in Vietnam)	PTTEP SVPC	50,000	USD 1	Ordinary Share	PTTEPH	100%
60	PTTEP Australia International Finance Limited (Raise Fund for PTTEP Business)	PTTEP AIF	50,000	AUD 1	Ordinary Share	PTTEP AP	100%
61	PTTEP Canada International Finance Limited (Raise Fund for PTTEP Business)	PTTEP CIF	50,000	CAD 1	Ordinary Share	PTTEP NC	100%

6.3 Associated Company's Information (including the business entities in which the Company invests for more than 10% and not exceeding 50%)

As of December 31, 2014, PTTEP had 18 associated companies. Details of the directors of each associated company are disclosed in Attachment 2.

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
1	Energy Complex Limited	Property	EnCo	180,000,000	THB 10	Ordinary Share	<ul style="list-style-type: none"> • PTTEP 50% • PTT 50%
	Head Office: 555/1 Energy Complex Building A, Vibhavadi-Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900	Leasing					
	Telephone: 66 (0) 2140-1000						
	Facsimile: 66 (0) 2 140-1122						
2	PTT ICT Solutions Company Limited	Information	PTT ICT	15,000,000	THB 10	Ordinary Share	<ul style="list-style-type: none"> • PTTEP 20% • PTT 20% • PTTGC 40% • ThaiOil 20%
	Head Office: : 555/1 Energy Complex Building A, floor 4-5, Vibhavadi-Rangsit Road, Chatuchak, Chatuchak, Bangkok 10900	Technology and Communication Services					
	Telephone: 66 (0) 2537- 3456						
	Facsimile: 66 (0) 2537- 2935						

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
3	Carigali – PTTEPI Operating Company Sendirian Berhad	Petroleum Exploration and Production	CPOC	350,000	MYR 1	Ordinary Share	<ul style="list-style-type: none"> • PTTEPI 50% • PCJDA Limited 50%
	Head Office: Tower 1, Petronas Twin Towers, Kuala Lumpur City Center, 50088, Kuala Lumpur, Malaysia						
	Telephone: (603) 2782-2555						
	Facsimile: -						
4	Moattama Gas Transportation Company	Gas Pipeline in the Union of Myanmar	MGTC	1,000,000	USD 0.03	Ordinary Share	<ul style="list-style-type: none"> • PTTEPO 25.5% • Unocal Myanmar Offshore 28.2625% • Total E&P Myanmar 31.2375% • MOGE 15%
	Head Office: No.5 Sacred Tooth Relic Lake Avenue, Punn Pin Gone Quarter No. 5, Mayangon Township, Yangon, The Union of Myanmar						
	Telephone: (951) 650-977, 660-466						
	Facsimile: (951) 650-478, 650-479						

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
5	Taninthayi Pipeline Company LLC	Gas Pipeline in the Union of Myanmar	TPC	100,000	USD 1	Ordinary Share	<ul style="list-style-type: none"> • PTTEPO 19.31784% • Petronas Carigali Myanmar (Hong Kong) Ltd 40.91018% • MOGE 20.45414% • Nippon Oil Exploration (Myanmar) Ltd 19.31784%
	Head Office: 16 Shwe Taung Kyar Bahan, Yangon, The Union of Myanmar						
	Telephone: (951) 526-411-4						
	Facsimile: (951) 525-698						
6	B8/32 Partners Limited	Petroleum Exploration and Production	B 8/32 Partners	110,000	THB 100	Ordinary Share	<ul style="list-style-type: none"> • PTTEPO 25.0009% • MOECO 16.7064% • KrisEnergy 4.6346% • Chevron 53.6581%
	Head Office: 19 Siam Commercial Bank Park Plaza, East 3rd Building, 5th floor, Ratchadapisek Road, Chatuchak, Bangkok, 10900						
	Telephone: 66 (0) 2545-5555						
	Facsimile: -						

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
7	Hoang Long Joint Operating Company	Petroleum Exploration and Production	HL JOC	- ⁴⁰	-	-	<ul style="list-style-type: none"> ● PTTEP HL 28.5% ● PVEP 41% ● SOCO 28.50% ● OPECO 2.0%
	Head Office: Suite 2001, Me Linh Point Tower, 2 Ngo Duc Ke Street, District 1, Ho Chi Mihn City, S.R. Vietnam						
	Telephone: (848) 3829-9359						
	Facsimile: (848) 3822-6106						
8	Hoan-Vu Joint Operating Company	Petroleum Exploration and Production	HV JOC	- ⁴¹	-	-	<ul style="list-style-type: none"> ● PTTEP HV 25% ● SOCO 25% ● PVEP 50%
	Head Office: Suite 2006, Me Linh Point Tower, 2 Ngo Duc Ke Street, District 1, Ho Chi Mihn City, S.R. Vietnam						
	Telephone: (848) 3823-9525						
	Facsimile: (848) 3823-9526						

⁴⁰ No share was issued. Percentage of shareholding is subject to participation interest of the concession.

⁴¹ No share was issued. Percentage of shareholding is subject to participation interest of the concession.

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
9	Mangalalu Truscott Airbase PTY Ltd	Operation of Air Base	-	600	AUD 1	Ordinary Share	<ul style="list-style-type: none"> • PTTEP AAO 50% • Arthur Hamilton 41.667% • Alex Wood 8.333%
	Head Office: Level 1, 40 Cavenagh Street, Darwin, Northern Territory, 0800, Australia						
	Telephone: (61) 8-8922-0930						
	Facsimile: (61) 8-8922-0910						
10	Troughton Island Pty Ltd	Operation of Air Base (Secondary)	-	100	AUD 1	Ordinary Share	<ul style="list-style-type: none"> • PTTEP AAO 50% • Arthur Hamilton 44% • Alex Wood 6%
	Head Office: Level 1, 40 Cavenagh Street, Darwin, Northern Territory, 0800, Australia						
	Telephone: (61) 8-8922-0930						
	Facsimile: (61) 8-8922-0910						

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
11	Groupement Bir Seba	Petroleum Exploration and Production	GBRS	- ⁴²	-	-	<ul style="list-style-type: none"> • PTTEP AG 35% • PVEP 40% • Sonatrach 25%
	Head Office: Lot No.1, Lotissement Belle Vue-Hydra, Algiers, Algeria						
	Telephone: (213) 2194-5325 / 26 / 27						
	Facsimile: (213) 2194-5320 / 22						
12	PTT FLNG Limited	Manufacture/Production /Trading of Oil/Gas/Other Energy Supply	PTT FLNG	1,000	HKD 10	Ordinary Share	<ul style="list-style-type: none"> • PTTEP FH 50% • PTT International (Singapore) Company Pte. Ltd. 50%
	Head Office: 1401 Hutchison House, 10 Harcourt Road, Hong Kong						
	Telephone: (852) 2846 1888						
	Facsimile: (852) 2845 0476						

⁴² No share was issued. Percentage of shareholding is subject to participation interest of the concession.

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
13	Erawan 2 FSO Bahamas Ltd.	Lease of FSO (vessel)	Erawan 2 FSO Bahamas	100	USD 1	Ordinary Share	<ul style="list-style-type: none"> • Chevron Global Energy Inc. 65.91% • JV Marine Ltd. 13.11% • MOECO 20.98%
	Head Office: Ocean Centre, Montagu Foreshore, East Bay Street, Nassau, New Providence, Bahamas P.O. Box SS-19084, Nassau, New Providence, Bahamas						
	Telephone: -						
	Facsimile: -						
14	Leismer Aerodrome Limited	Operation of Air Base	LAL	200	No Par Value	Ordinary Share	<ul style="list-style-type: none"> • Statoil Canada Ltd. 96% • PTTEP CA 64% • FCCL Partnership 40%
	Head Office: Suite 3600, 308 – 4 th Ave S.W., Calgary, Alberta T2P 0H7, Canada						
	Telephone: (403) 234-0123						
	Facsimile: (403) 234-0103						

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
15	Asia Pacific Marine Services (EF) B.V.	Lease of FSO (vessel)	Asia Pacific Marine Services	18,000	EUR 1	Ordinary Share	<ul style="list-style-type: none"> Erawan 2 FSO Bahamas Ltd. 100%
	Head Office: Naritaweg 165 Telestone 8, Amsterdam						
	Telephone: -						
	Facsimile: -						
16	UAQ Petroleum Inc.	Petroleum Exploration and Production	UAQ	10,000	HKD 1	Ordinary Share	<ul style="list-style-type: none"> PTTEP FH 30% CanEmir Petroleum (UAQ) Corp. 70%
	Head Office: Room 2402, 24/F., CC Wu Building, 302-308 Hennessy Road, Wanchai, Hong Kong						
	Telephone: (852) 2525-3318						
	Facsimile: (852) 2521-8087						

No.	Company Name	Type of Business	Abbreviation	Number of Shares Sold	Par Value	Share Type	Shareholders
17	NST Supply Base Company Limited ⁴³	Petroleum Supply Base, Port and Warehouse	NST Supply Base	1,000,000	THB 1,000	Ordinary Share	<ul style="list-style-type: none"> • Chevron Thailand Exploration and Production Ltd. 62.86% • MOECO 20.58% • JV Shore Base 15.67% • KrisEnergy International (Thailand) Holdings Ltd., 0.56% • Palang Sophon Limited 0.33%
	Head Office: 19 SCB Park Plaza, Tower East 5 th Floor, Ratchadapisek Rd., Chatuchak, Bangkok 10900						
	Telephone: 66 (0) 2545-5555						
	Facsimile: 66 (0) 2545-5454						
18	Natuna 2 B.V.	Petroleum Exploration and Production	Natuna 2	90,000	EUR 1	Ordinary Share	<ul style="list-style-type: none"> • PTTEP NH 50% • PT Pertamina (Persoro) 50%
	Head Office: Teleportboulevard 140, 1043 EJ Amsterdam, The Netherlands						
	Telephone: -						
	Facsimile: -						

⁴³ NST Supply Base Company Limited is in liquidation process.

6.4 References

1) Share Registrar

Name	Thailand Securities Depository Company Limited
Address	62 the Stock Exchange of Thailand Building, Rachadapisek Road, Klongtoey, Bangkok 10110, Thailand
Telephone	+66-2229-2800
TSD Call center	+66-2229-2888
Facsimile	+66-2359-1259
Email	TSDCallCenter@set.or.th
Website	http://www.tsd.co.th

2) Registrar and Paying Agent

2.1) Registrar and paying agent for THB 2,500 million debentures issued in March 2003, THB 5,000 million debentures issued in May 2009, and THB 5,000 million subordinated capital debentures issued in June 2012

Name	TMB Bank Public Company Limited
Address	Floor 5A, 3000 Phahon Yothin Road, Chatuchak, Bangkok 10900, Thailand
Telephone	+66-2299-1536, +66-2299-1321
Facsimile	+66-2242-3270

2.2) Registrar and Paying Agent for THB 11,400 million debentures issued in June 2014 and THB 8,200 million debentures issued in June 2014

Name	Siam Commercial Bank Public Company Limited
Address	Floor 3, Building 2, 1060 Phetchaburi Road, Makkasan, Ratchthewee, Bangkok 10400, Thailand
Telephone	+66-2256-2325, +66-2256-2326, +66-2256-2327
Facsimile	+66-2256-2406

3) Debenture Holders' Representative

- 3.1) Debenture holders' representative for THB 5,000 million debentures issued in May 2009 and THB 5,000 million subordinated capital debentures issued in June 2012

Name Siam Commercial Bank Public Company Limited
Address Floor 3, Building 2, 1060 Phetchaburi Road, Makkasan,
Ratchthewee, Bangkok 10400, Thailand
Telephone +66-2256-2316
Facsimile +66-2256-2401, +66-2256-2402, +66-2256-2403, +66-2256-2404

4) Trustee

- 4.1) Trustee for USD 500 million debentures issued in July 2010, USD 700 million debentures issued in April 2011, USD 500 million debentures issued in September 2013, and USD 1,000 million subordinated capital debentures issued in June 2014

Name BNY Mellon Corporate Trust
Address #03-01 Millenia Tower, 1 Temasek Avenue, Singapore 039192
Telephone +65-6432-0351, +65-6432-0354, +65-6432-0120
Facsimile +65-6883-0338

- 4.2) Trustee for USD 490 million debentures issued in June 2012

Name Citicorp International Limited
Address Floor 39, Citibank Tower, 3 Garden Road, Central, Hong Kong
Telephone +852-2868-7964
Facsimile +852-2323-0279

5) Registrar Paying Agent and Debenture Holders' Representative

- 5.1) Registrar paying agent and debenture holders' representative for USD 200 million debentures issued in August 2010

Name Bangkok Bank Public Company Limited
Address Floor 24, Securities Service Department 333, Silom Road,
Bangrak, Bangkok 10500, Thailand
Telephone +66-2230-1894
Facsimile +66-2636-5697

6) Registrar and Paying Agent

6.1) Registrar and paying agent for bills of exchange with a total revolving credit of up to THB 50,000 million

Name TMB Bank Public Company Limited
Address Floor 5A, 3000 Phahon Yothin Road, Chompon, Chatuchak,
Bangkok 10900, Thailand
Telephone +66-2299-1536, +66-2299-1321
Facsimile +66-2242-3270

7) Facility Agent

7.1) Facility agent for USD 500 million loan agreement dated in November 2010

Name The Bank of Tokyo-Mitsubishi UFJ Limited
Address Floor 6, AIA Central, 1 Connaught Road, Central, Hong Kong
Telephone +852-2823-6698, +852-2823-6691-3
Facsimile +852-2823-6686

7.2) Facility agent for CAD 300 million loan agreement dated in April 2012

Name Sumitomo Mitsui Banking Corporation
Address Floor 7-8, One International Finance Centre, 1 Harbour View
Street, Central, Hong Kong
Telephone +852-2206-2130, +852-2206-2131
Facsimile +852-2206-2988

8) Process Agent for Equity

8.1) Name CT Corporation System
Address Floor 13, 111, Eighth Avenue, New York, NY 10011
United States
Telephone +1-212-894-8800
Facsimile -

9) Interest Rate Swap Counterparties

- 9.1) Name Kasikornbank Public Company Limited
Division Capital Markets Business Division
Address 400/22 Phahon Yothin Avenue, Samsen-Nai, Phayathai
Bangkok 10400, Thailand
Telephone +66-2470-2020
Facsimile +66-2470-3065
- 9.2) Name The Hongkong and Shanghai Banking Corporation Limited
Division Corporate Marketing and Sales
Address 968 HSBC Building, Rama IV Road, Silom, Bangrak,
Bangkok 10500, Thailand
Telephone +66-2614-4847, +66-2614-4848
Facsimile +66-2632-4831

10) Cross Currency Swap Counterparties

- 10.1) Name Krung Thai Bank Public Company Limited
Division Corporate Sales, Treasury
Address Building 1 (Nana-Nue), Floor 5, 35 Sukhumvit Road,
Klongtoey-Nue, Wattana, Bangkok 10110, Thailand
Telephone +66-2208-4815
Facsimile +66-2256-8398
- 10.2) Name Kasikornbank Public Company Limited
Division Capital Markets Business Division
Address 400/22 Phahon Yothin Avenue, Samsen-Nai, Phayathai
Bangkok 10400, Thailand
Telephone +66-2470-2020
Facsimile +66-2470-3065

- 10.3) Name Deutsche Bank AG, Bangkok Branch
Division Corporate Treasury Sales
Address 63 Athenee Tower, 27-29 Floor, Wireless Road, Lumpini,
Pathumwan, Bangkok 10330, Thailand
Telephone +66-2646-5139
Facsimile +66-2651-5892
- 10.4) Name Siam Commercial Bank Public Company Limited
Division Corporate Banking Division 4, Wholesale Banking Group
Address Floor 8, Zone B, 9 Ratchadapisek Road, Chatuchak,
Bangkok 10900, Thailand
Telephone +66-2544-2483
Facsimile +66-2937-7969
- 10.5) Name Barclays Bank PLC
Division Investment Banking
Address Level 28 One Raffles Quay South Tower, Singapore 048583
Telephone +65-6308-2075
Facsimile +65-6308-3319

11) Auditor

- 11.1) Name Office of the Auditor General of Thailand
Address Soi Areesampan, Rama VI Road, Phayathai
Bangkok 10400, Thailand
Telephone +66-2271-8112
Facsimile +66-2618-5788

12) Legal Advisors

- 12.1) Name Alem & Associate
- Address 126 Foch Street, Beirut Central District,
Beirut 2012 6609, Lebanon
- Telephone +96-1199-9717
- Facsimile +96-1199-9607
- 12.2) Name Allens & Overy
- Address Level 25, 85 Castlereagh Street,
Sydney NSW 2000, Australia
- Telephone +61-2-9373-7700
- Facsimile +61-2-9373-7710
- 12.3) Name Ashurst LLP
- Address 12 Marina Boulevard, #24-01 Marina Bay,
Financial Centre Tower 3, Singapore 018982
- Telephone +65-6221-2214
- Facsimile +65-6221-5484
- 12.4) Name Baker Botts
- Address One Shell Plaza 910 Louisiana Street, Houston,
Texas 77002-4995, United States
- Telephone +1-713-229-1234
- Facsimile +1-713-229-1522

- 12.5) Name Baker & McKenzie/ Trench, Rossi e Watanabe Advogados
(Associado a Baker & McKenzie International)
- Address 1 Centro Empresarial Internacional Rio Av. Rio Branco, 1, 19º andar, Setor B 20090-003 Rio de Janeiro, RJ - Brasil
- Telephone +55-21-2206-4900
- Facsimile +55-21-2206-4949
- Address 2 Floor 25, Abdulrahim Place, 990 Rama IV Road,
Bangkok 10500, Thailand
- Telephone +66-2636-2000
- Facsimile +66-2636-2111
- 12.6) Name Herbert Smith Freehills LLP
- Address 1 22F West Tower, Center 1 Building 26, Eulji-ro 5-gil, Jung-gu,
Seoul Korea 100-210
- Telephone +82-2-6321-5600
- Facsimile +82-2-6321-5601
- Address 2 Exchange House Primrose Street,
London EC2A 2EG London office DX: 28 England
- Telephone +44-20-7374-8000
- Facsimile +44-20-7374-0888

- 12.7) Name King & Wood Mallesons
Address Level 30 QV.1 Building, 250 St. Georges Terrace,
WA 6000 Australia
Telephone +61-8-9269-7000
Facsimile +61-8-9269-7999
- 12.8) Name Latham & Watkins
Address Floor 18, One Exchange Square, 8 Connaught Place,
Central, Hong Kong
Telephone +852-2912-2500
Facsimile +852-2912-2600
- 12.9) Name Mochtar Karuwin Komar
Address Floor 14, Wisma Metropolitan II, Jl. Jend.
Sudirman Kav. 31, Jakarta 12820 Indonesia
Telephone +62-2-1571-1130
Facsimile +62-2-1571-1162, +62-2-1570-1686
- 12.10) Name Pracha Tooppoltup Law Office
Address 54 Soi 73 Chokchai 4 Road, Ladprao, Ladprao,
Bangkok 10230, Thailand
Telephone +66 2530 3173
Facsimile -

- 12.11) Name SAL & Caldeira Advogados, Lda.
Address Julius Nyerere Av. 3412, Maputo, Mozambique - Cx – Postal 2830
Telephone +25-8-2124-1400
Facsimile +25-8-2149-4710
- 12.12) Name Siam Premier International Law Office Limited
Address The Offices of Central World, 26th Floor, 999/9 Rama 1 Road,
Pathumwan, Bangkok 10330, Thailand
Telephone +66 2646 1888
Facsimile -
- 12.13) Name Slaughter and May (Hong Kong)
Address Floor 47, Jardine House, One Connaught Place,
Central Hong Kong
Telephone +852-2521-0551
Facsimile +852-2845-2125
- 12.14) Name Stikeman Elliot LLP
Address 4300 Bankers Hall West, 888 - 3rd Street S.W. Calgary,
Alberta T2P 5C5, Canada
Telephone +40-3266-9000
Facsimile +40-3266-9034

12.15) Name Tauil & Chequer Advogados associado a Mayer Brown LLP
Address Rua Teixeira de Freitas, 31-7th, 8th and 9th Floors,
 20021-350, Rio de Janeiro – RJ, Brazil
Telephone +55-21-2127-4210
Facsimile +55-21-2127-4211

12.16) Name Vilaf Vietnam International Law Firm
Address Suite 603, HCO Building (Melia) 44B Ly, Thuong Kiet Street,
 Hanoi, Vietnam
Telephone +84-4-3934-8530
Facsimile +84-4-3934-8531

12.17) Name Vinson & Elkins LLP
Address Trammell Crow Center, 2001 Ross Avenue, Suite 3700 Dallas,
 Texas 75201-2975, United States
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Facsimile +1-214-220-7716

13) **Advisors to the Board of Directors**

13.1) Name Mr. Tongchat Hongladarom
Address 8/48 Prasanmit Condominium, Sukhumvit 23,
 Klongtoey-Nua, Wattana, Bangkok 10110, Thailand
Telephone +66-2258-4363
Facsimile +66-2258-4363

13.2) Name Ms. Sukhon Kanchanalai
Address 188 Soi 16, Tesbanimit Tai Road, Prachanivej, Chatuchak,
Bangkok 10900, Thailand
Telephone +66-2589-5566
Facsimile -

6.5 Other Significant Information

- None -

7. Securities and Shareholders

7.1 Capital Structure

As of December 31, 2014, PTTEP's capital structure consisted of USD 4,229 million interest-bearing liabilities and USD 12,548 million shareholders' equities. The interest-bearing liabilities to shareholders' equities ratio were 0.34 times. Details of the capital structure are as follows:

7.1.1 Securities

Capital Stock

As of December 31, 2014, the PTTEP's registered and paid-up capital was at THB 3,969,985,400 consisting of 3,969,985,400 ordinary shares at the par value of THB 1 per share.

Debentures

PTTEP is rated as investment grade (Baa1, BBB+, A-) by international credit rating agencies, namely, Moody's Investors Service ("Moody's"), Standard & Poor's Ratings Services ("Standard & Poor's") and Japan Credit Rating Agency ("JCR") respectively. Moreover, PTTEP is also rated by TRIS Rating Co., Ltd. ("TRIS"), a domestic credit rating agency at AAA, which is the highest credit rating.

During year 2014, PTTEP has issued both domestic and international debentures at the amount of THB 19,600 million and USD 1,000 million respectively. These issuances have been used for general corporate purposes, future investments and funding our exploration, development and production activities as following details.

- On June 6, 2014, PTTEP has issued 2 tranches of unsecured and unsubordinated debentures to institutional and high net-worth investors in Thailand for the total aggregate amount of THB 19,600 million, which consisted of the 5-year THB 8,200 million debentures at a coupon rate of 3.91% per annum and the 15-year THB 11,400 million debentures at a coupon rate of 4.82% per annum. The debentures were rated AAA by TRIS. Furthermore, PTTEP has entered into cross currency and interest rate swap agreements for the aforementioned debentures.

- On June 18, 2014, PTTEP has issued subordinated capital debentures (Hybrid USD Bonds) in aggregate principal amount of USD 1,000 million. The debentures confer a right to receive distributions from the issue date at a fixed distribution rate of 4.875% per annum for the first 5 years, after which the distribution rates will be reset as per the details prescribed in the offering memorandum. Additionally, PTTEP has the right to early redeem the debentures on the 5th anniversary, on the 10th anniversary or on every distribution payment date thereafter. The debentures were rated Baa3 and BBB- by Moody's and Standard & Poor's respectively.

The aforementioned debentures were issued from the amount approved by the Board of Directors and the general shareholders' meeting in year 2010 and 2011 respectively.

Details of outstanding debentures as of December 31, 2014 are as follows:

1) Details of THB debentures (total outstanding THB 27,100 million) are as follows:

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : THB Million)	Rate per annum	Credit Rating ¹
THB debentures, unsecured, unsubordinated	March 27, 2003	March 27, 2018	15 years	2,500 ²	Fixed 4.625%, coupon payment: semi-annually	AAA
	May 29, 2009	May 29, 2019	10 years	5,000 ³	Fixed 4.80%, coupon payment: semi-annually	AAA
	June 6, 2014	June 6, 2019	5 years	8,200 ⁴	Fixed 3.91%, coupon payment: semi-annually	AAA
	June 6, 2014	June 6, 2029	15 years	11,400 ⁵	Fixed 4.82%, coupon payment: semi-annually	AAA

¹ The debentures were rated by TRIS on April 11, 2014.

² In 2005, PTTEP entered into a Cross Currency Swap agreement with a bank to swap THB for USD 60.82 million. Under this agreement, interest was charged at the rate of 3.85% per annum. In 2007, PTTEP swapped the USD with the same bank for THB 2,500 million (Unwounded Swap Transaction). Under this agreement, the interest rate was charged at the rate of 3.30% per annum. In 2011, PTTEP swapped THB 2,500 million for USD 82.92 million. Under this agreement, interest rate was charged at the rate of 3.30% per annum.

³ In 2011, PTTEP entered into a Cross Currency Swap agreement with a bank to swap THB for USD 161.81 million. Under this agreement, the average interest rate was charged at the rate of 4.93% per annum.

⁴ In 2014, PTTEP entered into a Cross Currency Swap agreement with a bank to swap THB for USD 251.07 million. Under this agreement, the interest rate was charged at the rate of 3.013% per annum.

⁵ In 2014, PTTEP entered into a Cross Currency Swap agreement with a bank to swap THB for USD 349.05 million. Under this agreement, the interest rate was charged at the rate of 4.989% per annum.

2) Details of USD debentures (total outstanding USD 2,390 million) are as follows:

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : USD Million)	Rate per annum	Credit Rating	
						Moody's	Standard & Poor's
USD debentures, unsecured, unsubordinated	July 19, 2010	July 19, 2015	5 years	500 ¹	Fixed 4.152%, coupon payment: semi-annually	Baa1	BBB+
	August 4, 2010	August 4, 2015	5 years	200 ²	Fixed 4.152%, coupon payment: semi-annually	Baa1	BBB+
	April 5, 2011	April 5, 2021	10 years	700 ³	Fixed 5.692%, coupon payment: semi-annually	Baa1	BBB+
	June 12, 2012	June 12, 2042	30 years	490 ⁴	Fixed 6.35%, coupon payment: semi-annually	Baa1	BBB+
	September 16, 2013	September 16, 2018	5 years	500 ⁵	Fixed 3.707%, coupon payment: semi-annually	Baa1	BBB+

¹ PTTEP AIF was the issuer, fully guaranteed by PTTEP, the debentures were rated by Moody's on June 6, 2014 and Standard & Poor's on April 22, 2014.

² PTTEP AIF was the issuer, fully guaranteed by PTTEP, the debentures were rated by Moody's on June 6, 2014 and Standard & Poor's on April 22, 2014.

³ PTTEP CIF was the issuer, fully guaranteed by PTTEP, the debentures were rated by Moody's on June 6, 2014 and Standard & Poor's on April 22, 2014.

⁴ PTTEP CIF was the issuer, fully guaranteed by PTTEP, the debentures were rated by Moody's on June 6, 2014 and Standard & Poor's on April 22, 2014.

⁵ PTTEP was the issuer, the debentures were rated by Moody's on June 6, 2014 and Standard & Poor's on April 22, 2014.

3) Details of THB Hybrid Bonds (total outstanding THB 5,000 million) are as follows:

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : THB Million)	Rate per annum	Credit Rating ¹
THB Hybrid Bonds, unsecured, unconvertible, callable, subordinated debentures with single redemption upon liquidation, PTTEP can defer the distribution at its sole discretion ²	June 15, 2011	No maturity date <ul style="list-style-type: none"> ▪ payment upon liquidation or ▪ early redemption subject to terms & conditions 	Perpetual	5,000	Year 1-10: 5.85% Year 11- 30: 6.10% Year 31- 60: 6.85% Year 61 onward: 7.85%, coupon payment: quarterly	AA

¹The bonds were rated by TRIS on April 11, 2014.

²In accounting, Hybrid Bonds are recorded in Shareholders' equity.

4) Details of USD Hybrid Bonds (total outstanding USD 1,000 million) are as follows:

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : USD Million)	Rate per annum	Credit Rating ¹	
						Moody's	Standard & Poor's
USD Hybrid Bonds, subordinated perpetual capital securities with the issuer's right to defer the distribution at its sole discretion ²	June 18, 2014	No maturity date <ul style="list-style-type: none"> ▪ payment upon liquidation or ▪ early redemption subject to terms & conditions 	Perpetual	1,000	Year 1-5 : 4.875% Year 6-10: 5 Years UST + 3.177% Year 11- 25: 6M LIBOR + 3.351% Year 26 onward: 6M LIBOR+ 4.101%, coupon payment: semi-annually	Baa3	BBB-

¹The bonds were rated by Moody's and Standard & Poor's dated June 6, 2014.

²In accounting, Hybrid Bonds are recorded in Shareholders' equity.

7.1.2 Number of shares and shareholders voting rights will be affected by NVDR issuance

An NVDR or Non-Voting Depository Receipt is a trading instrument issued by the Thai NVDR Company Limited, a wholly owned subsidiary of the Stock Exchange of Thailand (SET). NVDRs are automatically regarded as listed securities in the SET. The objective of issuing NVDRs is to stimulate trading activities in the Thai stock market, such as the foreign investment limits and the impediments faced by institutional investors who previously could not trade in the existing Thai Trust Fund. Investors will receive all financial benefits; i.e., dividends, right issues or warrants, just as if they had invested in the Company's common shares. The only difference between investing in an NVDR and the Company's shares is the voting right. Additionally, although the NVDR is designed mainly to ease foreign investment barriers, the SET does not prohibit Thai investors from investing this instrument.

As at February 13, 2015, as publicized on the website of the Stock Exchange of Thailand, PTTEP's ordinary shares at NVDR were 170,785,868 shares, which represent 4.30 percent of the total issued and paid-up capital of PTTEP (3,969,985,400 Shares). The NVDR holders will not participate and vote in shareholder's meeting, except in the case where a listed company wishes to delist its shares from the SET.

7.2 Shareholders

7.2.1 Top 10 shareholders

As of February 13, 2015, the top 10 shareholders of PTTEP were as follows:

Rank	List of Top 10 Shareholders	Number of Shares	% of Total Number of Shares
1.	PTT PUBLIC COMPANY LIMITED	2,591,860,489	65.29
2.	THAI NVDR COMPANY LIMITED	170,785,868	4.30
3.	STATE STREET BANK EUROPE LIMITED	112,845,795	2.84
4.	CHASE NOMINEES LIMITED 42	54,480,165	1.37
5.	THE BANK OF NEW YORK MELLON	49,403,274	1.24
6.	HSBC (SINGAPORE) NOMINEES PTE LTD	47,084,692	1.19
7.	THE BANK OF NEW YORK (NOMINEES) LIMITED	45,677,182	1.15
8.	BNP PARIBAS SECURITIES SERVICES LUXEMBOURG	38,147,545	0.96
9.	STATE STREET BANK AND TRUST COMPANY	37,957,444	0.96
10.	SOCIAL SECURITY (2 CASES)	33,581,955	0.85
	Total number of shares held by top 10 shareholders	3,181,824,409	80.15
	Total fully-paid capitals as of February 13, 2015	3,969,985,400	100

7.2.2 NVDR holder who owns more than 0.50% of the paid-up PTTEP shares*

Rank	NVDR holder (as of February 13, 2015)	Number of NVDR issues	% of total outstanding shares in underlying stock
1.	STATE STREET BANK AND TRUST COMPANY	42,881,841	1.08
	Total shares	42,881,841	1.08

7.2.3 Major shareholder with controlling influence over PTTEP's policy or operation

PTT, a major shareholder of PTTEP, takes part in determining PTTEP's policy and our operations under the Board's approval. As of January 1, 2015, there were 3 out of 13 directors who were a director or an executive of PTT.

7.3 Dividend Payment Policy

It is a policy of the Company's Board of Directors to recommend to the shareholders an annual dividend of no less than 30% of net income. The Board of Directors, from time to time and in case there are adequate profits, may also decide to pay the interim dividends and subsequently inform the shareholders in the next shareholders' meeting.

However, under terms and conditions of the subordinated capital debentures (PTTEP Subordinated Capital Debentures No. 1/2555 and PTTEP Subordinated Capital Debentures USD 1,000 million issued in June 2014), if PTTEP defers interest payment on the debentures, we may not declare or make any dividend payment, make interest payment or distribute any sorts of instrument or security that rank pari passu or junior to subordinated capital debentures.

PTTEP does not have dividend policies for the subsidiaries.

Five-year dividend payment history of PTTEP is as follows:

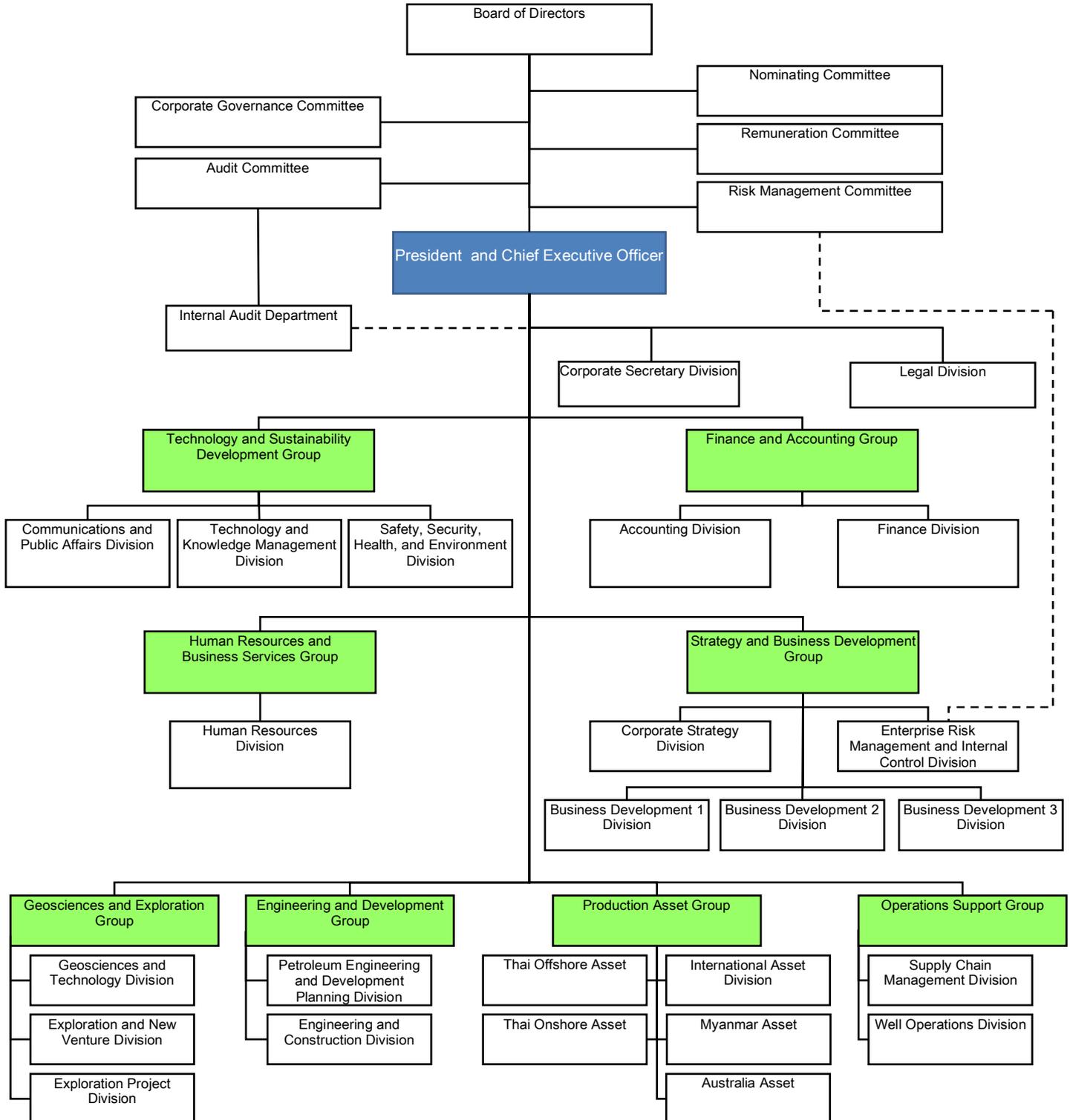
Year	2010	2011	2012	2013	2014
Earnings per Share	13.21	13.48	17.08	14.07	5.19
Dividend per Share	5.03	5.40	5.80	6.00	4.50
Dividend Payout Ratio	40%	40%	38%	40%	82%

Source: <http://www.set.or.th/set/companyholder.do?symbol=PTTEP-R>

* Since January 18, 2010, Thai NVDR Co., Ltd. has changed its rule to disclose the names of NVDR holders having over 0.50% of paid-up capital of the underlying securities.

8. Management Structure

As of January 1, 2015



8.1 The Board of Directors

8.1.1 The Board's Structure

PTTEP's Board of Directors ("the Board") consists of qualified directors who possess a versatility of expertise with a skill mix in the fields of industry knowledge, accounting and finance, business judgment, management skill, international marketing, business strategy, crisis management, corporate governance, and legal. Additionally, the Company does not have a policy discriminating against directors based on their gender. The directors must not be over 70 years old and shall possess qualifications according to the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE), laws relevant to Public Limited Companies and Securities and Exchange, as well as rules and regulations of the Securities Exchange Commission (SEC), the Capital Market Supervisory Board (CMSB), the Stock Exchange of Thailand (SET), and relevant resolutions of the Cabinet. The directors shall also be highly committed and dedicated time to fully perform duties responsibilities; for example, they would be regarded as unqualified if absent from the meeting for more than three consecutive times without a reasonable justification.

The Board structure consists of 15 skillful directors, and this is considered appropriate for the Company's operational size. The Board is divided into two categories; non-executive and executive directors. Moreover, the Board shall not comprise independent directors of less than half of the incumbent members. As of December 31, 2014, the Board consisted of 14 directors.

- 13 non-executive directors (93% of total members)
- 1 executive director: President and Chief Executive Officer
- 8 independent directors (57% of total members) which was more than half of the incumbent members

PTT is the only major shareholder of PTTEP, while the minor shareholders are dispersed. Therefore, the aforementioned Board's component and proportion are considered appropriate to maintain the balance within the Board for the best interests of all shareholders.

Names, biography, qualification, experience and shareholding percentage of non-executive directors, executive directors, independent directors, and directors from the private sector, including directors from PTT, are disclosed in the "Information of the Board of Directors, Management and Corporate Secretary of the Company" section as well as in the PTTEP's annual report and website.

8.1.2 Authorities and Responsibilities of the Board

Based on the principles of accountability, duty of care and duty of loyalty, the Board has clearly defined their roles and responsibilities and has effectively carried out them to be in alignment as those stipulated by laws, the objectives and Articles of Association of PTTEP, and resolutions of the shareholders' and Board's meetings. The scope of the authority and responsibilities of the Board are as follows:

(1) To govern our operations to be in compliance with CG&BE as well as to be a leader and role model in adopting, advising, communicating, and educating CG&BE for the PTTEP Group's employees and other organizations

(2) To consider and approve of the statement of vision, mission, and corporate values of PTTEP Group to ensure that they are effectively applicable and practical

(3) To consider and approve of the PTTEP Group's strategic plan, business direction, targets, workforce structure, and other significant operations, including regularly monitoring and reviewing operation results to ensure they are in line with strategy, operational direction, targets, and policies as planned with emphasizes on mobility and applicability in order to allow the management to effectively and efficiently manage business

(4) To establish efficient and adequate internal control systems by having a clear set of regulations and work processes, as well as having a standardized and reliable accounting system and financial reporting, appropriate and adequate risk management, effective compliance program, and a regular monitoring systems

(5) To consider and approve significant matters as prescribed by laws or in the Company's affidavits, policies or regulations, as well as matters that may result in corporate obligations

(6) To consider cases related to conflicts of interest in a prudent and transparent manner, and to report to the Company of any vested interests of oneself and of related persons, including prevention of the misuse of the Company's properties and execution of transactions with the Company's connected persons in an inappropriate way

(7) To ensure that the Company has clear and proper regulations, a standardized and reliable financial reporting, an efficient internal control system, and a proper risk management

(8) To govern the Company to engage both internal and external auditors to ensure they perform their duties effectively

(9) To govern the Company to communicate and disclose information to stakeholders in an accurate, complete, appropriate, and timely manner

(10) To govern the Company to treat stakeholders with a fair and equal treatment

(11) To consider, approve and appoint specialists from different professional fields to provide the Company with insight information as well as to act on our behalf on significant matters that can significantly financial standing and reputation of PTTEP Group

(12) To consider and approve the Board Performance Target as well as to evaluate performance of the Board, Chairman of the Board, and Sub-Committees

(13) To consider and approve the Performance Agreement of the President and Chief Executive Officer (CEO) as well as to evaluate performance and determine remuneration of CEO to align with performance results. The Board is also responsible for governing that PTTEP has an effective performance evaluation process of the executives.

(14) To consider and delegate appropriate authority to CEO to manage operations to be according to our strategic plan, business direction, targets and policies of the organization, as well as to govern the Company to implement appropriate and effective evaluation tools for the performance of CEO

The Board is permitted to make requests for information and seek advices and services regarding the business operation from the management. Moreover, if deemed necessary and appropriate, the directors may seek advices from external, independent advisors at the Company's expense.

8.1.3 Sub-Committees

8.1.3.1 The Corporate Governance Committee

PTTEP's Corporate Governance Committee has the duties and responsibilities according to its charter as follows:

(1) To establish the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) for the Board's approval for implementations throughout the organization

(2) To promote CG&BE to the Board, management, and employees to ensure that it is complied with in all areas of the Company's business operations

(3) To review Business Ethics of the Company as well as practices regarding the Company's Good Corporate Governance to ensure that they are in line with relevant laws as well as practices of and recommendations from leading international organizations before proposing them to the Board for approval and corresponding with shareholders

(4) To govern PTTEP to carry out an assessment on our compliance with CG&BE

(5) To disclose information, with prior approval of the Board, regarding the Company's Good Corporate Governance to our stakeholders in the PTTEP annual report

(6) To oversee and provide recommendations on the Corporate Social Responsibility (CSR) activities

(7) To regularly review and update its own charter to ensure appropriateness

(8) To disclose the performance of the Corporate Governance Committee in the Company's annual report

(9) To perform other duties relevant to the Good Corporate Governance of PTTEP Group as assigned by the Board

The Corporate Governance Committee consists of at least three directors, all of whom must be an independent director. The serving term of the current Committee is from April 25, 2014 to April 24, 2017. As of December 31, 2014, the Committee comprised four members as follows:

Admiral Tanarat Ubol	Chairman of the Committee and Independent Director
Mr. Achporn Charuchinda	Member and Independent Director
Mr. Nuttavudh Photisaro	Member and Independent Director
Mr. Piti Tantakasem	Member and Independent Director

Admiral Tanarat Ubol assumed the chairmanship from September 25, 2014 in replacement of General Pornchai Kranlert. Mr. Nuttavudh Photisaro was appointed on September 25, 2014 in replacement of Mr. Maitree Srinarawat, while Mr. Piti Tantakasem was appointed on October 1, 2014.

According to its charter, the Committee must hold the meeting at least four times per year. During 2014, the Committee held seven meetings, and the majority of incumbent directors as well as the Company's Corporate Secretary, acting as the Committee's secretary, attended all the meetings. The Committee has disclosed its annual performance in the Corporate Governance Committee Report for 2014.

8.1.3.2 The Audit Committee

PTTEP's Audit Committee has the duties and responsibilities according to its charter as follows:

- (1) To review the Company's financial reports with the external auditor on a quarterly basis to ensure accuracy and adequacy
- (2) To review the Company's performance in compliance with the securities and exchange laws, SET's regulations, and other laws related to the business
- (3) To review connected transactions or transactions that may lead to conflicts of interest to ensure that these transactions comply with the laws and SET's regulations and that they are reasonable as well as in the best interests of the Company

(4) To review that the Company has efficient and appropriate internal control and internal audit systems, including the audit reports and approaches taken, as well as to assess audit results in various activities of the Company according to the procedures and acceptable standards in coordination with the external auditor

(5) To consider, select, and propose the appointment of the external auditor, to consider the proposal of audit fees, and to attend the non-executive session meeting with the external auditor at least once a year

(6) To determine the independence of the Company's Internal Audit Department, and to endorse the appointments, transfers, and review merits or punishments of the Head of the Internal Audit Department. In case the Head of the Internal Audit Department is the subject of a report, the Audit Committee will appoint an Investigation Committee as appropriate.

(7) To approve the audit plan of the Internal Audit Department

(8) To endorse the budget and workforce requirements of the Internal Audit Department for the management to propose to the Board

(9) To approve the charter of the Internal Audit Department

(10) To approve the Conflict of Interest Form required for the Head of the Internal Audit Department in case he or she must personally conduct the auditing

(11) To endorse auditing results in the annual audit plan, additional auditing results as requested

(12) To attend the shareholders' meeting to answer questions regarding the Committee's performance or appointment of the external auditor

(13) To annually review and update its own charter to ensure its appropriateness

(14) To perform other duties as assigned by the Board

(15) To prepare and disclose the Audit Committee Report in the Company's annual report

The Audit Committee consists of at least three directors, all of whom must be an independent director with knowledge, expertise, and experience in auditing financial statements. The serving term of the current Committee is from April 25, 2013 to April 24, 2016. As of December 31, 2014, the Committee comprised three members as follows:

Director Name	Position	Financial Statements Audit Experience
Mr. Ampon Kittiampon	Chairman for two terms <ul style="list-style-type: none"> • 1st term: April 25, 2011 – March 30, 2013 • 2nd term: April 25, 2013 – Present 	<ul style="list-style-type: none"> • December 2005 – April 2007: Member of the Audit Committee, Rayong Refinery Plc. • May – December 2007: Chairman of the Audit Committee, Rayong Refinery Plc. • April 2010 – April 2011: Chairman of the Audit Committee, PTT Plc.
Mr. Achporn Charuchinda	Member October 31, 2013 – Present	<ul style="list-style-type: none"> • 2007 – 2013: Chairman of the Audit Committee, Bank of Thailand's Financial Institutions Development Funds • October 2013 – Present: Member of the Audit Committee, Metropolitan Waterworks Authority
Mr. Sethaput Suthiwart-Narueput (In replacement of Mrs. Varanuj Hongsaprabhas)	Member September 25, 2014 – Present	<ul style="list-style-type: none"> • 2011 – 2012: Director and Chairman of the Audit Committee, TMB Bank Plc. • Experiences in Financial Statements Analysis: <ul style="list-style-type: none"> ○ 2008 – 2009: President, SCB Asset Management ○ 2007 – 2008: Managing Director and Head of Research, SCB Securities

According to its charter, the Committee must hold the meeting on a quarterly basis. During 2014, the Committee held ten meetings, and 63 agenda items were considered. All incumbent directors and the Committee's secretary, who was the Vice President of the Internal Audit Department, attended all the meetings. The Committee has disclosed its annual performance in the Audit Committee Report for 2014.

8.1.3.3 The Nominating Committee

PTTEP's Nominating Committee has the duties and responsibilities according to its charter as follows:

(1) To select and nominate individuals qualified to be directors or President and Chief Executive Officer (CEO) to the Board for their consideration and to the Annual Shareholder's General meeting for their approval when there is a vacancy or a need to replace those whose term has expired by taking into consideration the Board composition, their knowledge and capability, experience proven useful to PTTEP, the number of companies in which they had served as a director, and their conflict of interest

(2) To prepare list of possible candidates for new directors or CEO in advance and/or when there is a vacancy

(3) To accept opinion or suggestions from the Board and/or CEO of PTT (if any) to supplement the nomination selection decision before submitting it to the Board for consideration and to the AGM (as the case may be)

(4) To consider annual Board Performance Target and the Performance Agreement of the Board and CEO and propose to the Board for approval as well as to set the Performance Evaluation Form of the Chairman, Directors, Sub-Committees, and President and Chief Executive Officer

(5) To consider and propose qualified directors to be a member of the Board or to be the chairman of the Sub-Committees when there is a vacancy as well as to propose the restructuring of Sub-Committees as deem appropriate

(6) To regularly review and update its own charter in order to ensure its appropriateness

(7) To disclose performance of the Sub-Committee in the Company's annual report

(8) To perform other duties relevant to the nomination of directors or Chief Executive Officer as may be assigned by the Board

The Nominating Committee consists of at least three directors, in which the Chairman and the majority of the members must be an independent director. The serving term of the current Committee is from June 28, 2012 to June 27, 2015. As of December 31, 2014, the Committee comprised three members, two of which were independent directors, as follows:

Mr. Nuttavudh Photisaro	Chairman and Independent Director
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Mr. Manas Jamveha	Member
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Colonel Nimit Suwannarat	Member and Independent Director
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Mr. Nuttavudh Photisaro assumed the chairmanship from September 25, 2014 in replacement of General Warawat Indradat. On the same date, Mr. Manas Jamveha and Colonel Nimit Suwannarat were appointed as members of the Committee in replacement of Mr. Pailin Chuchottaworn and General Pornchai Kranlert, respectively.

According to its charter, the Committee must hold the meeting at least two times per year. During 2014, the Committee held five meetings, and all incumbent directors as well as the Company's Corporate Secretary, acting as the Committee's secretary, attended all the meetings. The Committee has disclosed its annual performance in the Nominating Committee Report for 2014.

8.1.3.4 The Remuneration Committee

PTTEP's Remuneration Committee has the duties and responsibilities according to its charter as follows:

1) To consider remuneration for the Board and Sub-Committees before proposing at the Annual General Shareholders' Meeting for approval using the fair and reasonable criteria or principles, while also being able to ensure that the remunerations are in accordance with the individual performance results, the Company's performance, the industry practices, as well as the scope of duties and responsibilities

2) To consider the remunerations of the President and Chief Executive Officer (CEO), and the salary structure of the Company's executives before proposing the fair and reasonable criteria or principles before proposing them to the Board for approval.

The remuneration of CEO must be in alignment with the duties and responsibilities, as well as the performance results of CEO

3) To evaluate the performance of the Remuneration Committee and report it to the Board for an annual disclosure to shareholders

4) To regularly review and update the Remuneration Committee Charter to ensure its appropriateness

5) To perform other duties as assigned by the Board

The Remuneration Committee consists of at least three directors, in which the Chairman and the majority of the members must be an independent director. The serving term of the current Committee is from June 28, 2012 to June 27, 2015. As of December 31, 2014, the Committee comprised three members, two of which were independent directors, as follows:

Mr. Achporn Charuchinda	Chairman and Independent Director
Admiral Tanarat Ubol	Member and Independent Director
Mr. Pailin Chuchottaworn	Member

Mr. Achporn Charuchinda assumed the chairmanship from September 25, 2014 in replacement of Mr. Athapol Yaisawang. On the same date, Admiral Tanarat Ubol and Mr. Pailin Chuchottaworn were appointed as members of the Committee in replacement of General Warawat Indradat and Mr. Nattachat Charuchinda, respectively.

During 2014, the Committee held one meeting, and all incumbent directors as well as the Company's Corporate Secretary, acting as the Committee's secretary, attended all the meetings. The Committee has disclosed its annual performance in the Remuneration Committee Report for 2014.

8.1.3.5 The Risk Management Committee

PTTEP's Risk Management Committee has the duties and responsibilities according to its charter as follows:

- 1) To define the policy framework and process for risk management, including recommendation on corporate risk management to the Board and management
- 2) To promote and implement the risk strategy and policy by enhancing the level of risk awareness within the Company and through the development of appropriate procedures and commitment of resources
- 3) To maintain an enterprise-wide view of risks which are related to corporate direction and E&P value chain such as exploration risk, development risk, SSHE risks, investment and geopolitical risk, financial risk, organizational capability risk, and law and regulatory risk, as well as to recommend mitigation strategy to manage risks to keep them within the acceptable level according to clause 1) and continuously monitor, assess and improve mitigation strategy in responding to changing of the business environment
- 4) To support risk management function in assessing key risk factors and provide advices on other potential risks which may impact the Company for continuous and efficient risk management comparable to other leading companies, as well as to assign certain tasks related to PTTEP risk management to the risk management function to perform
- 5) To support the monitoring of risks across PTTEP and regularly report to the Board
- 6) To disclose the Committee's performance in the company's annual report
- 7) To regularly review and update its own charter to ensure its appropriateness
- 8) To perform other duties relating to the Company's risk management as may be assigned by the Board

The Risk Management Committee consists of at least three directors, and at least one member must be an independent director. As of December 31, 2014, the Committee comprised five members, two of which were independent directors, as follows:

Mr. Nuttachat Charuchinda	Chairman
Mr. Chakkrit Parapuntakul	Member
Mr. Chavalit Pichalai	Member
Mr. Sethaput Suthiwart-Narueput	Member and Independent Director
Colonel Nimit Suwannarat	Member and Independent Director

Mr. Nuttachat Charuchinda assumed the chairmanship from September 25, 2014 in replacement of Mr. Prajya Phinyawat, who was appointed as the Chairman of the Board, thereby ending his term as a member of the Risk Management Committee. On the same date, Mr. Chakkrit Parapuntakul, Mr. Sethaput Suthiwart-Narueput, and Colonel Nimit Suwannarat were appointed as members of the Risk Management Committee in replacement of Mr. Tevin Vongvanich, Mr. Viraphol Jirapraditkul, and Mrs. Varanuj Hongsaprabhas, respectively.

According to its charter, the Committee must hold the meeting at least four times per year. During 2014, the Committee held nine meetings, and the majority of incumbent directors attended all the meetings. The Committee's secretary, who was the Executive Vice President of the Strategy and Business Development Group, also attended the meetings. The Committee has disclosed its annual performance in the Risk Management Committee Report for 2014.

8.1.3.6 Independent Directors Committee

PTTEP's Independent Directors Committee has the duties and responsibilities according to its charter as follows:

- (1) To propose to the Board and/or President and Chief Executive Officer (as the case may be) on significant matters that are beneficial to the Company and major and minor shareholders
- (2) To advise the Board and independent directors on their roles and responsibilities for the benefits of the Company and major and minor shareholders
- (3) To review that the Company's operations in order to ensure that they comply with the laws relevant to independent directors, as well as to review the definition of independent directors to be lawfully appropriate and complete
- (4) To perform other duties as assigned by the Board, provided that such duties do not affect the Committee's independence
- (5) To regularly review and update the Independent Directors Committee Charter to ensure its appropriateness

The directors who meet all qualifications of an independent director according to the CG&BE are considered as an independent director without requiring appointment from the Nominating Committee. As of December 31, 2014, the Committee comprised eight members as follows:

Mr. Prajya Phinyawat	Chairman
Admiral Tanarat Ubol	Vice Chairman
Mr. Ampon Kittiampon	Member
Mr. Achporn Charuchinda	Member
Colonel Nimit Suwannarat	Member
Mr. Sethaput Suthiwart-Narueput	Member
Mr. Piti Tantakasem	Member
Mr. Nuttavudh Photisaro	Member

According to its charter, the Committee must hold the meeting at least four times per year. During 2014, the Committee held four meetings, and the majority of incumbent directors as well as the Company's Corporate Secretary, acting as the Committee's secretary, attended all the meetings. There was no compensation paid to the members of the Committee for their meeting attendance. The Committee has disclosed its annual performance in the Independent Directors Committees Report for 2014.

PTTEP's Definition of Independent Directors

The Good Corporate Governance of PTTEP has defined the qualification of the Company's independent directors stricter than those defined by the Capital Market Supervisory Board, specifically in the area of shareholding as clarified in no. 1) below. Our definitions of an independent director, whose qualification is annually reviewed, are as follows:

(1) Holding shares not exceeding 0.5 percent of the total number of shares with voting rights of PTTEP, our parent company, subsidiary company, associated company, major shareholder or controlling person, including shares held by related persons of such independent director

(2) Neither being nor used to be an executive director, employee, staff, advisor who receives salary, or a controlling person of PTTEP, our parent company, subsidiary company, associated company, same-level subsidiary company, major shareholder or controlling person, unless the foregoing status has ended for not less than two years prior to his/her appointment as an Independent Director. Such prohibited characteristic shall not include the case where the independent director used to be a government official or advisor of a government unit which is a major shareholder or controlling person of the Company.

(3) Not being a person related by blood or legal registration as a father, mother, spouse, sibling, and child, including spouse of a child of director, executive, major shareholder, controlling person, or person to be nominated as director, executive, or controlling person of PTTEP or its subsidiary company

(4) Neither having nor used to have a business relationship with PTTEP, our parent company, subsidiary company, associated company, major shareholder, or controlling person, in the manner which may interfere with his independent judgment, and neither being nor used to be a significant shareholder or controlling person of any person having a business relationship with the Company, our parent company, subsidiary company, associated company, major shareholder or controlling person, unless the foregoing relationship has ended for not less than two years.

The term 'business relationship' under the first paragraph shall include normal business transactions, rental or lease of immovable property, transactions relating to assets or services or granting or receiving of financial assistance. For example, these include receiving or extending loans, guarantee, providing assets as collateral, and any other similar actions which can potentially result in PTTEP or his counterparty being subject to indebtedness payable to the other party in the amount of three percent or more of the net tangible assets of PTTEP or THB twenty million or more, whichever is lower. The amount of such indebtedness shall be calculated according to the method for calculation of value of connected transactions under the Notification of the Capital Market Supervisory Board's governing rules on connected transactions *mutatis mutandis*. The consideration of such indebtedness shall include indebtedness occurred during the period of one year prior to the date on which the business relationship with the person commences.

(5) Neither being nor used to be an auditor of PTTEP, our parent company, subsidiary company, associated company, major shareholder, or controlling person, and not being a significant shareholder, controlling person, or partner of an audit firm which employs auditors of the Company, our parent company, subsidiary company, associated company, major shareholder or controlling person, unless the foregoing relationship has ended not less than two years

(6) Neither being nor used to be a provider of any professional services, including those as legal advisor or financial advisor who receives service fees exceeding THB two million per year from PTTEP, our parent company, subsidiary company, associated company, major shareholder or controlling person, and not being a significant shareholder, controlling person or partner of the provider of professional services, unless the foregoing relationship has ended for not less than two years

(7) Not undertaking any businesses in the same nature and in competition to the business of PTTEP or its subsidiary company, or not being a significant partner in a partnership or being an executive director, employee, staff, advisor who receives salary or holding shares exceeding one percent of the total number of shares with voting rights of any company which undertakes business in the same nature and in competition to the business of the Company or our subsidiary company

(8) Not being a director appointed as representative of directors of PTTEP, major shareholder or shareholder who is related to major shareholder

(9) Not having any other characteristics which cause the inability to express independent opinions regarding PTTEP's business operations

After being appointed as independent director with the qualifications under No. (1) to (9), the independent director may be assigned by the Board to take part in the business decision of PTTEP, our parent company, subsidiary company, associated company, same-level subsidiary company, major shareholder or controlling person, provided that such decision shall be in the form of a collective decision.

The definition of each of specific words mentioned is subjected to the Notification of the Capital Market Supervisory Board's RE: Determination of Definitions relating to Issuance and Offer for Sale of Securities.

Business Relationship or Professional Services of Independent Directors for the Company during the Past Fiscal Year

None

8.1.4 Performance Appraisal of the Board

The Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) stipulates that there should be an annual performance appraisal for the Board. In 2014, the appraisal of the Board will derive from the score from Board Performance Target, while the Chairman and Sub-Committees will be evaluated by the Board using the corresponding appraisal forms. This would allow the Company's directors to review their performances, key issues, and obstacles with which they had faced during the past year as well as to enhance their directorship efficiencies. The Nominating Committee will determine the appraisal forms and consider the Board Performance Target prior to proposing to the Board for consideration and approval. The Board's performance appraisal comprised the followings.

1) Individual self-appraisal which includes four evaluation topics in (1) Qualifications, (2) Independence, (3) Roles and Responsibilities, and (4) Training and Self-Development

2) Appraisal of the whole Board which includes six evaluation topics in (1) Corporate Policies and Strategic Planning, (2) Board Performance, (3) Management Governance, (4) Board Meetings, (5) Board Structure and Qualifications, and (6) Training and Development

3) Appraisal of Sub-Committees which includes questions on each Sub-Committee's performance efficiency according to the roles and responsibilities stated in their individual charter

4) Appraisal of the Chairman which includes questions on the Chairman's performance efficiency according to the roles and responsibilities of the Chairman as stated in CG&BE under Section 6.3: Roles of the Board of Directors and Management, including topics such as acting as the Chairman of the Board meetings and the Annual General Shareholders' Meeting, setting agendas for the Board meetings, and performing other of the Board's meeting-related roles, etc.

As for individual cross-appraisal, the Nominating Committee has agreed that the evaluation be refrained in 2014 as there were six directors who had assumed directorship to fill in the vacancies within a considerably short period.

Unchanged from 2013, the 2014 appraisal set a weight for each topic with a scoring system of 1 to 5; 1 = urgent improvement needed, 2 = improvement needed, 3 = fair, 4 = good, 5 = very good. The 2014 annual results are as follows:

(1) The self-appraisal score averaged at 4.71, while it was 4.86 in 2013.

(2) The appraisal of the Board consisted of two parts, in which each weighs 50%.

2.1) Score from the Board Performance Target was 3.53, where the score was 3.47 in 2013.

2.2) Score from the self-appraisal of the Board averaged at 4.80, while it was 4.89 in 2013.

The overall appraisal score of the Board for 2014 therefore averaged at 4.17, while it was 4.18 in 2013.

(3) The appraisal scores of the five Sub-Committees were within the highest range and are as follows:

3.1) The appraisal score of the Audit Committee was 4.91, while it was 4.96 in 2013.

3.2) The appraisal score of the Remuneration Committee was 4.84, while it was 4.91 in 2013.

3.3) The appraisal score of the Nominating Committee was 4.79, while it was 4.86 in 2013.

3.4) The appraisal score of the Corporate Governance Committee was 4.80, while it was 4.95 in 2013.

3.5) The appraisal score of the Risk Management Committee was 4.83, while it was 4.93 in 2013.

(4) The appraisal of the Chairman by the Board was 4.96, while it was 4.98 in 2013.

PTTEP reports the score results to the Board for acknowledgement before disclosing them in the annual report. Recommendations from the Board's appraisal will then be used for efficiency improvement of the Board, Sub-Committees, Chairman, and the Company in the future.

8.1.5 Performance Appraisal of the President and Chief Executive Officer

The Board assigns the Remuneration Committee to conduct performance appraisal of the President and Chief Executive Officer (CEO). The appraisal form is determined by the Nominating Committee and based on the Performance Agreement for CEO, in which the result will be measured by the Company's KPI in that year. The appraisal form must also be approved by the Board to ensure check and balances system as well as to allow the Company to monitor the performance of CEO in comparison to his or her preset short- and long-term targets. The appraisal result essentially provides the transparency and justification in consideration of CEO's remuneration, in addition to promoting the Company's Good Corporate Governance and a greater operational efficiency in the future.

8.1.6 The Board's Meeting

The Board's monthly meetings and agendas are scheduled and predetermined in advance each year by the Board itself, where there are normally 12 meetings being held annually on the last Thursday of every month. The Board members have been informed of 2015 meeting schedule since October 2014. Meetings related to the Company's strategic planning, in which the Board has greatly committed its time and priority, are commonly held in the off-site meeting. Additional meetings were held when deemed appropriate. In 2014, there were 14 of the Board's meetings. The Board usually receives meeting invitations from the Corporate Secretary, along with agendas and important documents related to the meetings, to considerate 7 days or 5 working days prior to the meeting date. Consequently, the members would therefore have adequate time to prepare themselves before attending the meetings except when urgent circumstances occur. In addition, the Board members can make enquiries regarding the Board meeting matters from the Corporate Secretary.

Generally, the Company's Chairman, the President and Chief Executive Officer (CEO), and the Corporate Secretary will consider agendas to be proposed in the Board's meetings, but in practice the directors also have the eligibility to propose agendas as well.

The Board's meeting agendas are clearly classified, namely, the agendas for approval, agendas for acknowledgement, and the monthly agenda of Performance Review. In 2014, there were 84 agendas proposed for approval. Among the agendas were of PTTEP reorganization, strategic direction and policy of the Company's operation, strategic direction and policy review correspondingly to the drop in oil prices, annual budgetary, financial statements, project investment, member of Thailand's Private Sector Collective Action Coalition against Corruption Council (CAC), revision of the Good Corporate Governance and Business Ethics of PTTEP Group, election of the Chairman, Vice Chairman and director to fill in the vacancies as well as appointing Sub-Committees' members and authorized directors who may sign to bind the Company, and the 2014 Board's performance appraisal. Some of the agendas meanwhile were of regulation concerns, such as the issue of the Investment Project Management Regulation B.E. 2557 and the revision of the Risk Management Committee Charter B.E. 2548.

During the year, there were 144 agendas proposed for acknowledgement, most of which were reports of the performance and development of Company's projects, PTTEP share investment environment, CG and CSR reports, Business Continuity Management during the Bangkok Shutdown period, state enterprise direction according to the National Council for Peace and Order (NCPO), the appointment of executives, and results of the Sub-Committees' meetings.

During each meeting, the Chairman will allocate an appropriate period of time for each agenda as well as provide the opportunity for the directors to express their opinions freely. The executives have also attended the meetings however only during appropriate agendas to offer the necessary information and acknowledge the policies and issues being raised for the purpose of work process efficiency. Each of the Board's meetings usually lasted about three hours. The Corporate Secretary attended every meeting to supervise the meetings, provide advice to the Board on related rules and regulations for proper practices, take minutes of the meetings, and gather information or meeting documents.

The Board's resolution is based on majority vote, whereas one director is eligible for one vote. Shall a director have a stake in one of the issues, he or she will not be allowed to attend the meeting and/or to exercise a vote in the particular issue. In the circumstance where the voting is tied, the Chairman of the meeting is entitled to the one additional and final vote.

The issues which are required to receive an approval of more than three-fourth of the total number of the Company's eligible shareholders attending the meeting are as follows:

- 1) Selling or transferring, in whole or significant parts, of the Company's business
- 2) Purchasing or accepting of transfer of business of other companies or private companies by PTTEP
- 3) Making, amending or terminating of contracts related to hiring of the Company's business, in whole or significant parts, including entrustment of the management to, or consolidation of the business with, other entities with the purpose of profit and loss sharing
- 4) Amending of the Company's Memorandum of Association or the Articles of Association
- 5) Increasing and decreasing of the Company's capital, issuing of debentures, merger and acquisition, and business dissolution
- 6) In case where the Company or our subsidiaries agrees to enter connected transactions or sales or acquisition of the Company or the subsidiaries assets, as determined by the Stock Exchange of Thailand's announcement on connected of listed companies (as the case may be)

Minutes of the Board meetings cover all significant matters in completion. For the issues seeking approval, the resolutions are unanimous. Name of the persons attending or absented from the meetings, name of meetings' attendants, name and content of those who state their opinions, questions, answers, or clarifications are recorded in details, while the reports of the minutes are systematically filed and kept in safety. All directors of the Board usually attend all of the meetings unless an absence deemed necessary. In which case, the director must provide the Boards' Chairman with an absent letter which is subsequently recorded in the report of individual directors' meeting attendance.

In 2014, the non-executive meetings were held two times, one in July and one in December, which were without presence of the management and were held prior to the ordinary Board meeting. The purpose of the meetings was to discuss and clarify some ongoing issues which were of interest, while the results were summarized and acknowledged to CEO for further consideration.

8.1.7 Number of Meeting Attendance of PTTEP Directors in 2014

Members		Board	Independent Directors Committee	Non-Executive Director Committee	Corporate Governance Committee	Audit Committee	Remuneration Committee	Nominating Committee	Risk Management Committee	Annual General Shareholders' Meeting 2014
		Total number of meetings: 14 times	Total number of meetings: 4 times	Total number of meetings: 2 times	Total number of meetings: 7 times	Total number of meetings: 10 times	Total number of meetings: 1 time	Total number of meetings: 5 times	Total number of meetings: 9 times	Total number of meetings: 1 time
1. Mr. Prajya	Phinyawat ¹⁵	14/14	4/4	2/2	-	-	-	-	6/6	1/1
2. Mr. Chakkrit	Parapuntakul	14/14	-	2/2	-	-	-	-	9/9	1/1
3. Mr. Ampon	Kittiampon	14/14	4/4	1/2	-	10/10	-	-	-	1/1
4. Mr. Pailin	Chuchottaworn ¹⁶	12/14	-	2/2	-	-	1/1	3/4	-	1/1
5. Mr. Manas	Jamveha ¹⁶	13/14	-	1/2	-	-	-	1/1	5/5	1/1

¹⁵ Mr. Prajya Phinyawat was elected to serve as Vice Chairman and Chairman of the Board of Directors on March 20, 2014 and August 28, 2014, respectively.

¹⁶ From September 25, 2014, there were appointments of directors as follows:

- Mr. Pailin Chuchottaworn was elected to serve as Vice Chairman, assumed directorship of the Remuneration Committee and resigned from directorship of the Nominating Committee.
- Mr. Manas Jamveha resigned from directorship of the Risk Management Committee and assumed chairmanship of the Nominating Committee.
- Mr. Achporn Charuchinda assumed chairmanship of the Remuneration Committee.
- Mr. Nuttachat Charuchinda resigned from directorship of the Remuneration Committee and assumed chairmanship of the Risk Management Committee.
- Mr. Nuttavudh Photisaro assumed chairmanship of the Nominating Committee and assumed directorship of the Corporate Governance Committee.
- Admiral Tanarat Ubol assumed chairmanship of the Corporate Governance Committee and assumed directorship of the Remuneration Committee.
- Colonel Nimit Suwannarat assumed directorship of the Nominating Committee and assumed directorship of the Risk Management Committee.
- Mr. Sethaput Suthiwart-Narueput assumed directorship of the Risk Management Committee and assumed directorship of the Audit Committee.
- Mr. Chavalit Pichalai assumed directorship of the Risk Management Committee.
- Mr. Tevin Vongvanich resigned from directorship of the Risk Management Committee.

Members		Board	Independent Directors Committee	Non-Executive Director Committee	Corporate Governance Committee	Audit Committee	Remuneration Committee	Nominating Committee	Risk Management Committee	Annual General Shareholders' Meeting 2014
		Total number of meetings: 14 times	Total number of meetings: 4 times	Total number of meetings: 2 times	Total number of meetings: 7 times	Total number of meetings: 10 times	Total number of meetings: 1 time	Total number of meetings: 5 times	Total number of meetings: 9 times	Total number of meetings: 1 time
6. Mr. Achporn	Charuchinda ¹⁶	14/14	4/4	2/2	5/7	10/10	1/1	-	-	1/1
7. Mr. Nuttachat	Charuchinda ¹⁶	14/14	-	2/2	-	-	-	-	3/3	1/1
8. Mr. Nuttavudh	Photisaro ¹⁶	3/4	2/3	1/1	2/2	-	-	1/1	-	-
9. Admiral Tanarat	Ubol ¹⁶	4/4	3/3	1/1	2/2	-	1/1	-	-	-
10. Colonel Nimit	Suwannarat ¹⁶	4/4	3/3	1/1	-	-	-	1/1	1/3	-
11. Mr. Sethaput	Suthiwart-Narueput ¹⁶	4/4	3/3	1/1	-	3/3	-	-	3/3	-
12. Mr. Chavalit	Pichalai ¹⁶	4/4	-	1/1	-	-	-	-	3/3	-
13. Mr. Piti	Tantakasem ¹⁷	3/3	3/3	1/1	2/2	-	-	-	-	-
14. Mr. Tevin	Vongvanich ¹⁶	14/14	-	-	-	-	-	-	4/5	1/1

¹⁷ Mr. Piti Tantakasem assumed directorship of the Corporate Governance Committee from October 1, 2014.

Members	Board	Independent Directors Committee	Non-Executive Director Committee	Corporate Governance Committee	Audit Committee	Remuneration Committee	Nominating Committee	Risk Management Committee	Annual General Shareholders' Meeting 2014
		Total number of meetings: 4 times	Total number of meetings: 2 times	Total number of meetings: 7 times	Total number of meetings: 10 times	Total number of meetings: 1 time	Total number of meetings: 5 times	Total number of meetings: 9 times	Total number of meetings: 1 times
Former directors resigning during 2014									
1. Mr. Norkun	Sitthiphong ¹⁸	4/4	-	-	-	-	-	-	1/1
2. Mr. Athapol	Yaisawang ¹⁹	4/5	-	-	-	-	-	-	1/1
3. Mr. Suthep	Liumsirijarn ²⁰	5/6	-	-	-	-	-	-	-
4. Mr. Viraphol	Jirapraditkul ²¹	8/8	-	-	-	-	-	4/4	1/1
5. General Warawat	Indradat ²²	10/10	-	-	-	-	4/4	-	1/1
6. Mrs. Varanuj	Hongsaprabhas ²³	9/10	-	-	-	6/6	-	6/6	1/1
7. Mr. Maitree	Srinarawat ²⁴	10/10	-	-	5/5	-	-	-	1/1
8. General Pornchai	Kranlert ²⁵	9/10	-	-	5/5	-	4/4	-	1/1

¹⁸ Mr. Norkun Sitthiphong ended directorship term in the 2014 Annual General Shareholders' Meeting on March 27, 2014.

¹⁹ Mr. Athapol Yaisawang resigned from directorship on May 1, 2014.

²⁰ Mr. Suthep Liumsirijarn resigned from Chairman of the Board of Directors on July 1, 2014 and directorship on August 30, 2014.

²¹ Mr. Viraphol Jirapraditkul resigned from directorship on July 17, 2014 and directorship of the Risk Management Committee.

²² General Warawat Indradat resigned from directorship on August 30, 2014, chairmanship of the Nominating Committee and directorship of the Remuneration Committee.

²³ Mrs. Varanuj Hongsaprabhas resigned from directorship on August 30, 2014, directorship of the Risk Management Committee and the Audit Committee.

²⁴ Mr. Maitree Srinarawat resigned from directorship on August 31, 2014 and directorship of the Corporate Governance Committee.

²⁵ General Pornchai Kranlert resigned from directorship on August 31, 2014 and chairmanship of the Remuneration Committee, directorship of the Corporate Governance Committee and Nominating Committee.

8.1.8 Number of PTTEP Shares Held by the Directors

Director Name		Number of Shares			
		As of January 1, 2014	Changes in 2014	As of December 31, 2014	
1. Mr. Prajya Phinyawat ^{\$.%,###}	15,000	Acquisition	-	15,000	
		Disposition	-		
	Spouse	-	Acquisition	-	-
		-	Disposition	-	-
	Minor child	-	Acquisition	-	-
		-	Disposition	-	-
2. Mr. Chakkrit Parapuntakul [%]	-	Acquisition	-	-	
		-	Disposition	-	-
	Spouse	-	Acquisition	-	-
		-	Disposition	-	-
	Minor child	-	Acquisition	-	-
		-	Disposition	-	-
3. Mr. Ampon Kittiampon ^{\$.%}	-	Acquisition	-	-	
		-	Disposition	-	-
	Spouse	-	Acquisition	-	-
		-	Disposition	-	-
	Minor child	-	Acquisition	-	-
		-	Disposition	-	-
4. Mr. Pailin Chuchottaworn ^{%,S#}	-	Acquisition	-	-	
		-	Disposition	-	-
	Spouse	-	Acquisition	-	-
		-	Disposition	-	-
	Minor child	-	Acquisition	-	-
		-	Disposition	-	-
5. Mr. Manas Jamveha [%]	-	Acquisition	-	-	
		-	Disposition	-	-
	Spouse	-	Acquisition	-	-
		-	Disposition	-	-
	Minor child	-	Acquisition	-	-
		-	Disposition	-	-
6. Mr. Achporn Charuchinda ^{\$.%}	-	Acquisition	-	-	
		-	Disposition	-	-
	Spouse	-	Acquisition	-	-
		-	Disposition	-	-
	Minor child	-	Acquisition	-	-
		-	Disposition	-	-

Director Name	Number of Shares		
	As of January 1, 2014	Changes in 2014	As of December 31, 2014
7. Mr. Nuttachat Charuchinda [%]	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
8. Mr. Nuttavudh Photisaro ^{%,@}	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
9. Admiral Tanarat Ubol ^{%,@,S##}	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
10. Colonel Nimit Suwannarat ^{%,@}	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
11. Mr. Sethaput Suthiwart-Narueput ^{%,@}	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
12. Mr. Chavalit Pichalai ^{%,@}	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-

Director Name	Number of Shares		
	As of January 1, 2014	Changes in 2014	As of December 31, 2014
13. Mr. Piti Tantakasem ^{S,%@@}	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
14. Mr. Tevin Vongvanich ^{S###}	101,876	Acquisition	17,101
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
Former directors resigning during 2014			
1. Mr. Norkun Sitthiphong*	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
2. Mr. Athapol Yaisawang**	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
3. Mr. Viraphol Jirapraditkul***	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
4. Mr. Suthep Liumsirjarearn****	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-

Director Name	Number of Shares		
	As of January 1, 2014	Changes in 2014	As of December 31, 2014
5. General Warawat Indradat****	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
6. Mrs. Varanuj Hongsaprabhas****	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
7. Mr. Maitree Srinarawat*****	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
8. General Pornchai Kranlert*****	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-
	-	Acquisition	-
		Disposition	-

[§] Independent Director

[%] Non-Executive Director

[@] Assumed Position on September 1, 2014

^{@@} Assumed Position on October 1, 2014

^{*} End of Directorship Term in 2014 General Shareholders Meeting on March 27, 2014

^{**} Resigned from the directorship on May 1, 2014

^{***} Resigned from the directorship on July 17, 2014

^{****} Resigned from the directorship on August 30, 2014

^{*****} Resigned from the directorship on August 31, 2014

[#] Chairman of the Board

^{§#} Vice Chairman of the Board

^{§§#} Vice Chairman of the Independent Director Committee

^{§§§#} Chief Executive Officer

^{§§§#} Chairman of the Independent Director Committee

Members of the Audit Committee are directors 3, 6, and 11

Members of the Remuneration Committee are directors 4, 6, and 9

Members of the Nominating Committee are directors 5, 8, and 10

Members of the Governance Committee are directors 6, 8, 9, and 13

Members of the Risk Management Committee are directors 2, 7, 10, 11, and 12

8.2 The Management

As of January 1, 2015, PTTEP's management, according to the definition of management defined by the Capital Market Supervisory Board (CMSB), consists of 16 members. Details of their biography, qualification, and past experience are disclosed in the "Information of the Board of Directors, Management and Corporate Secretary of the Company" section.

List of Management Name and Number of Shares Held by Management* and Their Spouse and Minor Child

Name	Position of Management	Number of Shares			
		As of January 1, 2014	Changes in 2014	As of December 31, 2014	
1. Mr. Tevin Vongvanich	President and Chief Executive Officer	101,876	Acquisition	Others -	118,977
				EJIP 17,101	
			Disposition	Others -	
				EJIP -	
Spouse		-	Acquisition	-	-
			Disposition	-	
Minor child		-	Acquisition	-	-
			Disposition	-	
2. Mr. Somporn Vongvuthipornchai	Executive Vice President, Strategy and Business Development Group	176,787	Acquisition	Others -	187,039
				EJIP 10,252	
			Disposition	Others -	
				EJIP -	
Spouse		3,500	Acquisition	-	3,500
			Disposition	-	
Minor child		-	Acquisition	-	-
			Disposition	-	
3. Mr. Chatchawal Eimsiri	Executive Vice President attached to President and Chief Executive Officer	7,094	Acquisition	Others -	17,484
				EJIP 10,390	
			Disposition	Others -	
				EJIP -	
Spouse		-	Acquisition	-	-
			Disposition	-	
Minor child		-	Acquisition	-	-
			Disposition	-	

*The number of shares held by the management may also include shares purchased under the Employee Joint Investment Program (EJIP) which commences from 2013 to 2018 to build motivation of staff to work efficiently and effectively, create alignment between the employees, management and shareholders, and establish long-term loyalty and sense of ownership to PTTEP. More details are disclosed in the "Policy on Treatment to Stakeholders" part under "Employee" section.

Name	Position of Management	Number of Shares			
		As of January 1, 2014	Changes in 2014	As of December 31, 2014	
4. Ms. Penchun Jarikasem	Executive Vice President, Finance and Accounting Group	13,185	Acquisition	Others EJIP 9,891	23,076
			Disposition	Others EJIP	
			Spouse	-	
Minor child		-	Acquisition Disposition	-	
5. Mr. Phongsthom Thavisin	Executive Vice President, Technology and Sustainability Development Group	6,844	Acquisition	Others EJIP 10,058	16,902
			Disposition	Others EJIP	
			Spouse	-	
Minor child		-	Acquisition Disposition	-	
6. Mr. Thiti Mekavichai	Executive Vice President, Human Resources and Business Services Group	16,073	Acquisition	Others EJIP 11,723	27,796
			Disposition	Others EJIP	
			Spouse	-	
Minor child		-	Acquisition Disposition	-	
7. Mr. Pairoj Rangponsumrit	Executive Vice President, Production Group	107,418	Acquisition	Others 8,000 EJIP 11,303	126,721
			Disposition	Others EJIP	
			Spouse	3,500	
Minor child		-	Acquisition Disposition	-	

Name	Position of Management	Number of Shares				
		As of January 1, 2014	Changes in 2014	As of December 31, 2014		
8. Mr. Nawee Anantraksakul	Executive Vice President, Geosciences and Exploration Group	7,791	Acquisition	Others EJIP 9,086	16,877	
			Disposition	Others EJIP		
			Acquisition			-
			Disposition			
9. Mr. Kanit Sangwongwanich	Executive Vice President, Engineering and Development Group	70,006	Acquisition	Others EJIP 9,746	79,752	
			Disposition	Others EJIP		
			Acquisition			-
			Disposition			
10. Mr. Kitisak Nualchanchai	Executive Vice President, Operations Support Group	22,000	Acquisition	Others EJIP 15,277	37,277	
			Disposition	Others EJIP		
			Acquisition			-
			Disposition			
11. Mr. Yongyos ²⁶ Krongphanich	Senior Vice President, Finance Division	63,056	Acquisition	Others EJIP 7,993	66,049	
			Disposition	Others 5,000 EJIP		
			Acquisition			-
			Disposition			
Spouse		-	Acquisition		-	
			Disposition			
			Acquisition		-	
			Disposition			
Minor child		-	Acquisition		-	
			Disposition			
			Acquisition		-	
			Disposition			

²⁶ During 2014, Mr. Yongyos Krongphanich was also appointed as the Acting Senior Vice President of the Accounting Division.

Name	Position of Management	Number of Shares				
		As of January 1, 2014	Changes in 2014		As of December 31, 2014	
12. Ms. Jaroonsri ²⁷ Wankertphon	Vice President, Accounting Policy and Solution Department	64,560	Acquisition	Others	43,662	
				EJIP		5,102
			Disposition	Others		26,000
				EJIP		
Spouse		-	Acquisition		-	
			Disposition			
Minor child		-	Acquisition		-	
			Disposition			
13. Mrs. Chanamas Sasnanand	Vice President, Capital and Investor Relations Department	13,312	Acquisition	Others	17,572	
				EJIP		4,260
			Disposition	Others		
				EJIP		
Spouse		-	Acquisition		-	
			Disposition			
Minor child		-	Acquisition		-	
			Disposition			
14. Ms. Porntip Jansuksri	Vice President, Treasury Department	8,712	Acquisition	Others	8,712	
				EJIP		
			Disposition	Others		
				EJIP		
Spouse		-	Acquisition		-	
			Disposition			
Minor child		-	Acquisition		-	
			Disposition			
15. Mrs. Sirirat Sararattanakul	Vice President, Accounting Department	187,124	Acquisition	Others	191,555	
				EJIP		4,431
			Disposition	Others		
				EJIP		
Spouse		-	Acquisition		-	
			Disposition			
Minor child		-	Acquisition		-	
			Disposition			

²⁷ During 2014, Ms. Jaroonsri Wankertphon was also appointed as the Acting Vice President of the Managerial Accounting Department.

Name	Position of Management	Number of Shares				
		As of January 1, 2014	Changes in 2014		As of December 31, 2014	
16. Mrs. Thanyaporn Vangvasu	Vice President, Tax Department	116,588	Acquisition	Others	121,868	
				EJIP		5,280
			Disposition	Others		-
				EJIP		-
Spouse		-	Acquisition	-	-	
			Disposition	-		
Minor child		-	Acquisition	-	-	
			Disposition	-		
Management Retiring in 2014						
1. Mr. Asdakorn ²⁸ Limpiti	Executive Vice President, Strategy and Business Development Group	47,783	Acquisition	Others	14,000	54,896
				EJIP	19,113	
			Disposition	Others	26,000	
				EJIP	-	
Spouse		89,000	Acquisition	-	89,000	
			Disposition	-		
Minor child		-	Acquisition	-	-	
			Disposition	-		

8.3 Corporate Secretary

The Corporate Secretary plays a major role in effectively coordinating internally among the Chairman, and the President and Chief Executive Officer, or the management, and externally among companies, shareholders, and regulators. Currently, Mrs. Pranot Tirasai, who possesses knowledge, ability, experiences and graduated in law, is the Corporate Secretary as appointed by the Board, and she also holds a position of the Board's Secretary. More details are disclosed in the "Information of the Board of Directors, Management and Corporate Secretary of the Company" section.

²⁸ During 2014, Mr. Asdakorn Limpiti was also appointed as the Acting Executive Vice President of the Technology and Sustainability Department Group.

8.4 Remuneration of Directors and Executives

8.4.1 Remuneration of the Board and Members of the Sub-Committees

PTTEP has a sound and transparent policy of remuneration for directors of the Board and Sub-Committees. The Remuneration Committee, who is responsible for the policy, reviews the remuneration with prudence by taking into consideration remuneration of listed and comparable companies in the industry, performance of PTTEP, duties and responsibilities of directors, the overall economic situation, and shareholders' opinions. The 2014 Annual General Shareholders' Meeting (AGM) approved the following remunerations for members of the Board and Sub-Committees, as proposed by the Remuneration Committee.

Remuneration Rates for Members of the Board

- (1) Monthly allowance of THB 40,000 per person per month in a full-month payment
- (2) Meeting allowance of THB 40,000 per person per meeting attendance
- (3) Bonus for the Board if there is a dividend in that year, totaling 0.1 percent of the Company's consolidated net profit in that year, but no more than THB 60 million per year, and in proportion to the director's period in the position
- (4) 25 percent increase in all of the above for the Chairman

Remuneration Rates for Members of the Sub-Committees

This is in association to the Company's five standing Sub-Committees, namely, the Corporate Governance Committee, the Audit Committee, the Remuneration Committee, the Nominating Committee, and the Risk Management Committee.

- (1) Meeting allowance of THB 40,000 per person per meeting attendance
- (2) 25 percent increase for the Sub-Committee's Chairman
- (3) No remuneration in a case of circulation
- (4) Excluding the Sub-Committees' members who are in the management from the top executive level down.

Other Remuneration for PTTEP Directors

- None -

Remuneration of Members of the Board and Sub-Committees in 2014

Director Name		Remuneration							2014 Bonus Paid in 2015 [§]	Total
		Board		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Meeting Allowance	Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
1. Mr. Prajya	Phinyawat	610,000	530,000	0	0	0	0	300,000	1,530,826.66	2,970,826.66
2. Mr. Chakkrit	Parapuntakul	560,000	480,000	0	0	0	0	360,000	1,409,209.92	2,809,209.92
3. Mr. Ampon	Kittiampon	560,000	480,000	500,000	0	0	0	0	1,409,209.92	2,949,209.92
4. Mr. Pailin	Chuchottaworn	480,000	480,000	0	0	40,000	120,000	0	1,409,209.92	2,529,209.92
5. Mr. Manas	Jamveha	520,000	480,000	0	0	0	40,000	200,000	1,409,209.92	2,649,209.92
6. Mr. Achporn	Charuchinda	560,000	480,000	400,000	200,000	50,000	0	0	1,409,209.92	3,099,209.92
7. Mr. Nuttachat	Charuchinda	560,000	480,000	0	0	0	0	150,000	1,409,209.92	2,599,209.92
8. Mr. Nuttavudh	Photisaro	120,000	160,000	0	80,000	0	50,000	0	471,023.59	881,023.59
9. Admiral Tanarat	Ubol	160,000	160,000	0	100,000	40,000	0	0	471,023.59	931,023.59
10. Colonel Nimit	Suwannarat	160,000	160,000	0	0	0	40,000	40,000	471,023.59	871,023.59

[§] The 2014 bonus to directors will be paid once the 2015 annual general shareholders' meeting approves the dividend payment to the shareholders.

Note: PTTEP provides the corporate car which is provided to the Chairman to carry out corporate-related purposes while in chairmanship.

Director Name		Remuneration							2014 Bonus Paid in 2015 ^{\$}	Total
		Board		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Meeting Allowance	Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
11. Mr. Sethaput	Suthiwart-Narueput	160,000	160,000	120,000	0	0	0	120,000	471,023.59	1,031,023.59
12. Mr. Chavalit	Pichalai	160,000	160,000	0	0	0	0	120,000	471,023.59	911,023.59
13. Mr. Piti	Tantakasem	120,000	120,000	0	80,000	0	0	0	355,198.12	675,198.12
14. Mr. Tevin	Vongvanich	560,000	480,000	0	0	0	0	0	1,409,209.92	2,449,209.92
Former Directors Resigning in 2014										
1. Mr. Norkun	Sitthiphong	200,000	150,000	0	0	0	0	0	415,041.28	765,041.28
2. Mr. Athapol	Yaisawang	160,000	160,000	0	0	0	0	0	463,301.89	783,301.89
3. Mr. Suthep	Liumsirijareern	230,000	270,000	0	0	0	0	0	667,926.90	1,167,926.90
4. Mr. Viraphol	Jirapraditkul	320,000	280,000	0	0	0	0	160,000	760,571.30	1,520,571.30
5. General Warawat	Indradat	400,000	320,000	0	0	0	200,000	0	930,464.63	1,850,464.63
6. Mrs. Varanuj	Hongsaprabhas	360,000	320,000	240,000	0	0	0	240,000	930,445.09	2,090,445.09
7. Mr. Maitree	Srinarawat	400,000	320,000	0	200,000	0	0	0	934,325.48	1,854,325.48
8. General Pornchai	Kranlert	360,000	320,000	0	250,000	0	160,000	0	934,325.48	2,024,325.48
Total		7,720,000	6,950,000	1,260,000	910,000	130,000	610,000	1,690,000	20,142,014	39,412,014.22

In 2014, remuneration of PTTEP's independent director who also served as an independent director in PTT, which is the Company's parent company, can be summarized as follows:

Director Name	Remuneration		Meeting Allowance for Sub-Committee Director	Total
	Bonus	Meeting and Monthly Allowance		
1. Mr. Athapol Yaisawang	850,936.42	411,766.13	0	1,262,702.55

8.4.2 Remuneration of the Directors of Subsidiaries and Associated Companies

PTTEP's subsidiaries are functional units of the Company's petroleum operations or related businesses, looking out for our optimal benefits as well as compliance with investment conditions. Some subsidiaries carry out full-scale operation. PTTEP appoints executives of PTTEP to hold a directorship position in our subsidiaries. In general, the Company's subsidiaries have been structured to have the least number of directors consisting of the Company's executives such as senior vice presidents, and/or executive vice presidents, and/or vice presidents directly in charge of relevant projects, while the rest are fulfilled by those appointed by PTTEP to ensure that the subsidiaries' assets are managed for the Company's best interest.

The Company's executives who are assigned to be directors of the subsidiaries and associated companies, which are in the E&P business or those directly related such as PTTEP Services Co., Ltd., do not receive additional remuneration. This is because it is considered as a part of their duties and responsibilities to perform on behalf of the Company. On the other hand, according to the Good Corporate Governance and Business Ethics of PTTEP Group, the executives are entitled to additional remuneration as a director of a subsidiary if such subsidiary operates other businesses. This is because it is considered as the duties and responsibilities which are of additional assignments in the companies such as PTT ICT Solutions Co., Ltd., and Energy Complex Co., Ltd.

8.4.3 Remuneration of the President and Chief Executive Officer

Remuneration of the President and Chief Executive Officer is defined under the principles which are unbiased, reasonable, justifiable, and transparent. PTTEP's Remuneration Committee is responsible for reviewing remuneration of the President and Chief Executive Officer prior to proposing for the Board's approval. The approval from the Board is based on his or her performance, duties and responsibilities, the Company's performance, remuneration of listed companies similarly in size and industry, and the overall economic situation. The President and Chief Executive Officer's remuneration consists of both short-term and long-term arrangements such as salary/bonus payment and eligibility in the Employee Joint Investment Program (EJIP), respectively.

Remuneration of the President and Chief Executive Officer is determined using the fair and appropriate procedures, his annual performance, and duties and responsibilities.

8.4.4 Remuneration of the Executives

PTTEP's Remuneration Committee is responsible for the salary structure of the Company's executives. The key principles are to produce an unbiased and reasonable structure, which reflects not only the Company's own business nature, its performance, and his or her performance, but also some of the variables which can be compared to and justified by those of other leading companies in the industry. The Board must give an approval to the structure before its implementation.

Meanwhile, the President and Chief Executive Officer is responsible for reviewing the appropriateness of the remuneration of each of the executives as well as their annual salary increase, taking into consideration his or her overall performance, group-oriented and target-based performance, and the Company's performance.

To maintain the Company's remuneration competitiveness, PTTEP conducts an annual survey on remuneration of leading companies in the industry. The information gathered through the survey allows the Remuneration Committee to better understand the current market situation to further increase its competitiveness in the job market, and to be able to provide the Company's Board with thorough explanations particularly when the changes in the salary structure and payment method are drastic.

Remuneration of the Executives

	2013		2014	
	Number	Total Amount (THB)	Number	Total Amount (THB)
Salary	10 ²⁹	55,799,256	12 ³⁰	75,845,182
Bonus		35,372,310 ³¹		35,826,916 ³²
Other compensation ³³		8,060,883		10,616,211
Total		99,232,449		122,288,309

In 2014, compensation (salary, bonus, and contribution to the provident fund) of PTTEP's and its subsidiaries' (PTTEP Services Limited and PTTEP Siam Limited) employees, including wages of seconded workers, totaled THB 6,254,662,166.

²⁹ Executives, 10 in total, consisted of the President and Chief Executive Office, Executive Vice Presidents, and PTT's executives who has been seconded to PTTEP.

³⁰ Executives, 12 in total, consisted of the President and Chief Executive Office, Executive Vice Presidents, and PTT's executives who has been seconded to PTTEP.

³¹ Bonuses for 2013, paid in January and February 2014

³² Includes bonuses for 2014, paid January and February 2015

³³ Provident Fund

8.5 Personnel

As of December 31, 2014, PTTEP and its subsidiaries had a total workforce of 4,547.

Number of Employees

Employee Type	Total (Persons)
Permanent Employees	2,208
Thai Contract Employees	1,523
Non-Thai Contract Employees	174
Local Employees	623
Seconded Employees	19
Total	4,547

Remarks: - Based on the Company's SAP database as of December 31, 2014

- Seconded employee is an employee of other companies in PTT Group who is assigned to work at PTTEP.

- Of the total number of the permanent employees, 2,208 were of PTTEP while 5 were of PTTEP Siam Limited. The number also included 8 employees who were on a long-term leave.
- Of the total number of the employees abroad, 337 were of non-Thai contract employees, and 286 were of non-Thai permanent employees.
- The total number of Thai contract employees did not include outsourced staff, such as maid and drivers, of 357.

Number of Employees of Each Function Group

Function Group	Permanent Employee	Thai Contract Employee	Non-Thai Contract Employee	Local Employee	Seconded Employee
President and Chief Executive Officer	64	14	-	1	1
Domestic Asset	600	579	7	-	5
Development and Engineering	365	216	47	36	1
Finance and Accounting	151	141	-	-	-
Geosciences, Reservoir Engineering and Exploration	211	54	28	10	-
Human Resources and Business Services	137	128	2	-	-
International Asset	210	56	50	576	11
Operations Supply Chain and Technology	285	269	35	-	1
Strategy and Business Development	91	14	2	-	-
Technology and Sustainability Development	94	52	3	-	-
Total	2,208	1,523	174	623	19

Remarks: - Base on the Company's SAP database as of December 31, 2014

- The Function Group as shown in the table is as of December 31, 2014

Employee Turnover

	Ins	Outs
Permanent Employees	227	94
Thai Contract Employees	231	249
Non-Thai Contract Employees	53	62
Local Employees	217	192
Seconded Employees	7	6

Remarks: - Base on the Company's SAP database as of December 31, 2014

- Turnover number includes outsourced staff, such as maid and drivers.

PTTEP had no significant change in the number of employees and no major disputes about labor in the past three years.

8.5.1 Human Resources Development Policy

In order to improve competency of our staff, both Thai and Non-Thai, and strengthen organizational capability for continuous expansion of the Company's business, both in Thailand and overseas, PTTEP has improved our development systems and processes by implementing competency-based training and approach to accelerate efficiency of the staff development. Based on this competency concept, the Company has provided trainings throughout the past year via the following channels.

1) In-House and External Training

The Company provided in-house and external trainings, both locally and overseas, to our staff at all levels, including management. These trainings comprised a wide variety of courses, including technical and professional training, Safety, security, Health and Environment (SSHE) training, IT training, foreign language training, organizational knowledge as well as business administration and management training.

2) Long-term Training and Development Programs

Long-term training and development programs prepare employees for roles and assignments in the Company's current and future projects. The programs would be provided to selected staff and last from 1-3 years in duration based on their Individual Development Plan (IDP). By this approach, the staff is required to undertake on-the-job training with or be temporarily transferred to the Company's business partners as well as services companies, either in Thailand or overseas, such as TOTAL, Chevron, Schlumberger, and British Gas.

In 2014, PTTEP invested in human capital development programs costing THB 267,608,567.74 with average training hours of 75.4 hours per person per year.

3) Master's Degree Scholarship Programs for Employees

The Company provided scholarships to employees to help them pursue master's degree studies in world-class universities, both in Thailand and overseas, in the following fields.

- 1) Petroleum Geosciences
- 2) Petroleum Engineering
- 3) Engineering
- 4) Drilling and Well Engineering
- 5) Business Administration

The Company also provided master's degree scholarships for employees to study in Thailand's reputable institutes as follows:

- 1) SASIN Graduate Institute of Business Administration of Chulalongkorn University
- 2) Petroleum Geoscience (International Program), Chulalongkorn University
- 3) Petroleum Engineering (International Program), Chulalongkorn University
- 4) Petroleum Geophysics (International Program), Chiang Mai University

PTTEP calculated Human Capital Return on Investment (HCROI) in several dimensions, including man-hours and cost spent on development activities against total revenue and production rate, as well as time to autonomy of young technical professionals and readiness of immediate successors for senior management positions. In turn, the results are used to evaluate and elevate the efficiency and effectiveness of the development activities for continuous improvement.

9. Corporate Governance

9.1 Good Corporate Governance Policy

PTTEP's Board of Directors ("the Board") recognizes of the significance of strictly operating businesses under the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE). The Board is also confident that the strict adherence will successfully lead PTTEP to achieve our goals of "Growth, Prosperity, Stability, Sustainability and Dignity", and this will provide a strong support to enhance the confidence of our shareholders and other stakeholders. In this respect, the Board has assigned the Corporate Governance Committee to govern, supervise and provide necessities to ensure that Company's operations are in line with CG&BE, and that the Good Corporate Governance is maintained at the level comparable to that of international standards.

In 2014, PTTEP earned various acceptances through numerous awards and recognitions for our good corporate governance, domestically and internationally. More details are disclosed in the "Awards and Recognitions for Good Corporate Governance" part. The Company also has dutifully continued to comply with the Corporate Governance Principles for Listed Companies of 2012 (CG 2012) established by the Stock Exchange of Thailand (SET), as well as practices comparable to those internationally accepted standards.

9.1.1 Shareholders' Rights and Equal Treatments

PTTEP understands the importance of shareholders' rights and equal treatments, and we therefore include these issues in the Company's Good Corporate Governance which includes a number of guidelines to assure shareholders of their basic rights which, among others, allow them to trade and transfer PTTEP shares, declare the share ownership, and attend the Company's shareholders' meetings in person or through their proxies. In addition, shareholders and their proxies are allowed to participate and vote in significant issues which require an approval at a shareholders' meeting. These issues are, for example, election of new members of the Board in replacement of those retired by rotation, determination of the Board's remuneration of all forms, appointment and approval of the external auditor and remuneration, approval of connected transactions, acquisition or disposition of assets which, according to relevant laws, are sizeable, and other issues which are of significance to PTTEP. Shareholders are also entitled to profit sharing in a form of dividend and receive adequate and timely information from the Company. Our efforts to ensure and enhance shareholders' rights are listed as follows:

1) PTTEP held the 2014 Annual General Meeting of Shareholders (AGM or the Meeting) on March 27, 2014 with a primary objective to maintain good relationship with our shareholders particularly over the matters related to their shareholding rights.

1.1) Shareholders were allowed to propose agendas and nominate qualified candidates for the election of PTTEP directors prior to the AGM from October 1 to December 31, 2013. The proposed agenda would be considered and treated with equality by using the Company's regulations whether or not they were primarily for our best interest. Meanwhile, in selecting of a director, the pre-requisites and criteria for a candidate were released in advance on September 11, 2013 through SET and the Company's website. Shareholders' proposals were then considered using PTTEP's relevant rules and regulations to ensure that the qualification of each candidate was in line with our business in order to truly be beneficial to the Company. The Nominating Committee was in charge of shortlisting candidates to the Board for approval. Consequently, the Board would inform shareholders of the resolution together with rationale for each proposal at AGM. None of such agenda or a candidate for the directors' nomination was proposed at the AGM however.

1.2) The Board determined the date which would be the AGM date on January 30, 2014, and PTTEP disclosed the AGM date to shareholders two months prior to the Meeting date to provide shareholder adequate time to prepare themselves. On that same date, the Board also resolved to set the record date on which shareholders have the right to attend the Meeting and to receive dividend to be on February 13, 2014, resulting the share registration closing date to be on February 17, 2014.

1.3) The AGM invitation letter and supplementary documents, both in Thai and English, were distributed to shareholders 16 days prior to the Meeting. The invitation letter included details of each agenda, which clearly stated type of the agenda, be it for the acknowledgement or approval. The invitation letter meanwhile was completed with the Meeting agenda items, supplementary documents, the Board's opinions on each agenda as well as other rules and regulations related to the Meeting. A proxy form, which was required by the Ministry of Commerce, was also included in the invitation letter. A comprehensive list of required documents that shareholders were required to bring to the Meeting, on the other hand, was provided to preserve their rights to attend, while other important attachments included were instructions of the Meeting, voting procedures, and a map of the venue. All of the aforementioned information was both in Thai and English and published on the Company's website (www.pttep.com) 31 days prior to the Meeting. We also notified shareholders about the publication of this information on our website.

1.4) PTTEP provided names of the three independent directors in the proxy form to provide shareholders with an option to appoint one of them as their proxy. The Company also informed shareholders about the stake of independent directors in each agenda. In electing new directors in replacement of those retired by rotation, an independent director whose term was completed, but was then re-nominated for another term, would be considered as having a conflict of interest (but not a special one). In the agenda to approve the remuneration of the Board, all directors would be however considered as having a special conflict of interest and therefore were abstained from voting regardless of the amount of their shareholding percentage. We also provided shareholders with advices on how to use the proxy form which would properly represent their voting right to ensure that they could cast votes on their own.

1.5) At the Meeting, the barcode and electronics system were used for registration, vote counting, compilation, and display of each resolution in order to ensure that the Meeting was carried out with full efficiency and accuracy. To accelerate the registration process, the registration was opened to shareholders four hours prior to the Meeting, and the barcode system was used to confirm details of each legitimate shareholder by using the barcode appeared on the proxy form. We also provided a revenue stamp for shareholders who intended to vote through a proxy.

1.6) PTTEP provided a manual underlying the entire procedure of the Meeting to all of the participants to ensure a better understanding among shareholders. Examples of details included in the manual were voting procedure for shareholders and for the proxies whose voting rights could not be split (with exception of the C-type proxy), vote-tallying process, and procedures for making inquiries and voicing of one's opinion in the Meeting.

1.7) Before the start of the Meeting, the Chairman had assigned the PTTEP's Corporate Secretary to inform before the Meeting of the voting and vote-tallying procedures as specified in the Company's Articles of Association (AoA). Shareholders and proxies were required to use voting ballot for voting on each agenda scheduled for the Meeting. For each agenda, a barcode system was used to tally disagreed and abstained votes, and to deduct them from the total eligible voting rights to ensure accurate and effective vote counting procedure. The voting procedure was in compliance with relevant laws and the AoA. Voting results for all agendas were summarized and reported in the Meeting room. In additions, volunteers selected from the Meeting's participants and independent inspectors were appointed as witnesses of the Meeting. Moreover, to protect rights of shareholders, each agenda was treated and voted separately, whereas, for an agenda regarding an election and appointment of directors, shareholders were allowed to cast their votes to appoint a director on an individual basis. Under the quota for the director appointment, candidates who received the most "Agree" vote were appointed as new director. Appointed candidates however must also receive the "Agree" vote from more than half of shareholders who attended the Meeting and casted the vote.

1.8) External independent legal advisors (inspectors/witnesses) were engaged to oversee the Meeting to ensure its transparency and that it was conducted lawfully and according to the AoA. Responsibilities of inspectors included examination of documents provided by shareholders or their proxies as well as verification of potential conflict of interest as to whether he/she shall be abstained from voting on the given agenda. Moreover, inspectors, who represented shareholders at the Meeting, were assigned to monitor, collect, and tally the ballots as well as to review the Meeting's resolutions and voting results to ensure accuracy.

1.9) The Meeting proceeded with all agendas in the sequence stated in the invitation letter. There was also a policy of not allowing any new agenda to be proposed at the Meeting without a prior notification to shareholders in order to provide them with an opportunity and adequate time to carefully consider before making a decision.

1.10) The Chairman allocated sufficient time for the Meeting and conducted it with transparency and according to the agendas specified in the invitation letter. During the Meeting, shareholders were allowed to share their views and make in-depth inquiries in subjects relating to PTTEP's operations and the Meeting's agenda, prior to the voting and the resolutions. We also permitted shareholders to submit questions to the Board prior to the Meeting regarding matters relating to the Meeting or other information relevant to the Company.

All information presented at the Meeting was available in both Thai and English, and we also provided a translator from Thai to English for foreign shareholders who attended the Meeting to ensure fairness and equality amongst all shareholders.

1.11) PTTEP encouraged shareholders to use a voting ballot cards in all agendas by issuing different ballot cards for each agenda. Shareholders therefore could cast their votes as they deemed appropriate. For the disagreed and abstained votes, shareholders' ballots would be collected, combined, and counted together with those voted in the proxy form by the shareholders' proxies. The resolution of each agenda would then be reported at the Meeting. For a higher level of transparency, volunteers who were selected from shareholders and independent inspectors would be appointed to witness the vote tallying and sign off on all ballot cards collected, counted and signed. These cards were for internal reviews after the Meeting adjourned.

1.12) PTTEP permitted shareholders who arrived at the Meeting after it was commenced to cast their votes in the agenda that was in the consideration process or had not been considered or voted at the time of their arrivals.

1.13) All PTTEP directors attended the Meeting. Moreover, members of the Sub-Committees, senior executives from the Finance and Accounting Group, and external auditors also participated in responding and providing clarifications to inquiries from shareholders.

1.14) Minutes of the Meeting, in both Thai and English, were accurately and completely recorded, and they covered explanations of the Meeting's voting and vote-tallying procedures, its contents, questions or opinions related to PTTEP's business operation and the Meeting's agenda, as well as clarifications of each agenda made by directors and top executives. In addition to the inclusion of directors who attended and who were absent from the Meeting, we also recorded the resolution of each agenda, categorized as agreed, disagreed, abstained, and voided (if any) as well as the name and position of the directors. If a director was absent, we also disclosed the reason of the absence in the Minutes. Resolutions from each agenda were immediately submitted to SET and disclosed in the Company's website after the Meeting. Meanwhile, within 14 days after the Meeting, the final version of the Minutes of the Meeting would be delivered to the Ministry of Commerce, SET, Office of the Securities and Exchange Commission (SEC), and shareholders in order to provide evidence of the Meeting as well as to allow shareholders to make objections within the timeline enforced by relevant laws. In 2014, PTTEP however did not receive any objection or adjustment from shareholders regarding the Meeting. The approved Minutes, video and audio clips of the Meeting were also published in Thai and English in the Company's website.

2) PTTEP regularly discloses information to shareholders through various channels such as SET, media or printed media, and our website to ensure understanding of the Company's business operations in order to develop a long-term and committed relationship with shareholders. In June 2014, we organized the Corporate Social Responsibility (CSR)-related activities for shareholders by inviting them to join the forest plantation activity under the Forest Rehabilitation at Sri Nakhon Khuenkhan Park Project (under patronage of Her Royal Highness Princess Maha Chakri Sirindhorn) at Bangkajao, Samutprakarn province. Moreover, in October and November 2014, we also organized four trips for shareholders to visit our Sirikit Oil Field in Kam Paeng Petch province. Meanwhile, we also publish the PTTEP Newsletter to provide additional means of communication about PTTEP to shareholders on a regular basis.

3) PTTEP provides a direct communication channel between our minor shareholders and independent directors through e-mails. Shareholders, for instance, are able to attain more information from or make inquiries to independent directors regarding their activities, PTTEP's Good Corporate Governance, and audit-related issues. In addition, shareholders are allowed to directly contact the Corporate Secretary or Investor Relations of the Company for additional information.

4) PTTEP clearly discloses shareholding interests in our subsidiaries and associated companies, as well as PTT's controlling votes in PTTEP, to ensure shareholders that our operational structure is transparent, verifiable, and does not constitute any form of cross- or pyramidal-shareholding structure.

5) PTTEP operates businesses with optimal efficiency, with a focus on sustainability of the organization, appropriate and consistent returns to shareholders, and long-term relationship with stakeholders. We ensure that all of which are managed by professional management with appropriate monitoring systems.

6) PTTEP strongly prevents misuse of the Company's internal information.

PTTEP puts a great emphasis on controlling the use of our internal information by including this issue in CG&BE. In addition to being in line with securities laws, policies relating to use of the internal information are regularly reviewed to preserve the integrity and equality among all stakeholders.

6.1) Directors, management, and employees are always informed of the PTTEP's regulations and policies regarding use of the internal information to ensure that they are understood and strictly followed to prevent one from misusing the information for his or her personal interests, or the others'. Disciplinary actions are clearly specified, while the supervisors, who are appointed as the CG leaders, are responsible for advising and encouraging their subordinates to follow suit. During 2014, there was no report of any misuse of internal information.

6.2) Starting from the release of the 2011 financial statements, PTTEP requires a group of personnel to abstain from trading of PTTEP's securities during the silent periods, which are announced in advance by the Corporate Secretary Division and the Compliance Department. These personnel include all directors and senior executives, including all Executive Vice Presidents (EVPs) and Senior Vice Presidents (SVPs), as well as Vice Presidents (VPs) of the Finance and Accounting Group (FNA). This prohibition also applies to their spouses and minor children. Moreover, the aforementioned individuals are also refrained from directly and indirectly selling and/or buying of PTTEP's securities. For example, a trading through a nominee or a private fund is prohibited. The silent periods commonly take place prior to PTTEP's disclosure of important information which can potentially affect PTTEP share price. An example of a silent period is between one month prior to the release of the Company's financial statements or operating results and one day after such information is submitted to SET and disclosed to the public. Violation of this prohibition is considered as a disciplinary offense.

6.3) PTTEP must disclose a complete information regarding securities held by the Company's directors and seniors executives in the annual report as required by SEC. These executives include the position of EVPs and above as well as SVPs and VPs of FNA. While being monitored by the Board for their use of PTTEP's internal information, these individuals must also submit a report each time when there is a change to their shareholding interest in the Company to the Corporate Secretary Division which is responsible for submitting this report to the Board for acknowledgement. Meanwhile, it is also a duty of the Corporate Secretary Division to oversee the Company's Business Ethics in respect to use of the internal information.

7) PTTEP requires directors and senior executives, as mentioned in 6.3), to immediately report their conflicts of interest to the Company shall there be concerns, either by him or herself, or a related person. The Chairman of the Board must then review the report within seven working days after receiving the report from the Corporate Secretary, as stipulated by the Board, the Securities and Exchange Act (Volume 4), B.E. 2551, and regulations of the Capital Market Supervisory Board.

8) PTTEP assembles a set of guidelines to handle conflicts on interest in CG&BE in order for directors, management, and employees to strictly follow. These guidelines require directors and senior executives mentioned in 6.2) to report to the Company about the conflicts of interest of themselves and their related persons. Shall there be a conflict of interest, the individual must immediately report to the Company and be excluded from participation or abstained from voting in the issues involved.

9.1.2 Roles of Stakeholders

The Board has approved PTTEP mission, which puts an emphasis on significance of the stakeholders' rights. Our mission is to operate globally to provide a reliable energy supply and sustainable value to all stakeholders, and we also have a vision to become leading Asian E&P Company, driven by technology and green practices. Our stakeholders, whether they are internal or external parties, have always been taken into account when the Company's decisions are made. Major stakeholders of PTTEP are, including but not limited to, shareholders, customers, employees, governments, associated partners, societies, environment, suppliers/contractors, creditors, competitors, customs and cultures, and human rights. The importance of the Company's stakeholders is clearly written in our CG&BE where practical guidelines with respect to business ethics are established in an effort to maintain the balanced duties and responsibilities between PTTEP and our stakeholders. More details of CG&BE are disclosed in the Company's website.

9.1.2.1 Anti-Corruption

The Board recognizes the importance of having a governing mechanism in place to effectively manage the organization in order to be transparent, fair, and completely free from all forms of corruption. On February 27, 2014, the Board approved the amendment of CG&BE, a written regulation which is considered as the highest regulation of the Company that directors, management, and employees at all levels must strictly follow. The Company's Anti-Corruption Policy in the revised version of CG&BE includes relevant principles, practical guidelines and issues such as political neutrality, conflict of interest, procurement and contract, acceptance of gifts and hospitalities, and anti-money laundering. Currently, CG&BE is being more complete and easily understandable for the audience. The Board is confident that compliance with CG&BE is an effective measure against corruption. In addition, CG&BE was revised according to PTTEP's internal control principles and distributed to all related stakeholders. PTTEP's CG&BE can also be found in the Company's website for those interested to download for further study.

PTTEP displays our strong commitment towards anti-corruption by setting the “Integrity and Ethics” value as one of the eight components of PTTEP values and instills this value to all employees across the organization for them to adhere with. In addition, we are also a participant of the United Nations (UN) Global Compact since 2011 and continue to adhere to its ten principles in the areas of human rights, labor, environment and anti-corruption.

In 2014, PTTEP filed an application to the Thailand's Private Sector Collective Action Coalition against Corruption (CAC) Council and was awarded with a title of Certified Companies of Thailand's Private Sector Collective Action against Corruption on July 4, 2014. This clearly demonstrates our commitment and effort to fight against all forms of corruption.

Implementation

PTTEP has a clear action plan to embed the Company's Anti-Corruption Policy into the culture in order to ensure that all employees comply with the Policy by organizing trainings and other related activities such as CG&BE workshop. This workshop integrated the anti-corruption policy and was organized for employees from all function groups with cooperation from the President and Chief Executive Officer, top management and the Corporate Governance Committee. In addition, the Company also provides E-Learning activity which includes online lessons and quizzes with an objective to assess awareness and understanding of employees regarding anti-corruption matters. The activity includes contents from the Anti-Corruption Policy, from which the Company's employees can globally access the contents online through multiple types of technological devices such as computer, smartphone and tablet. Consequently, all activities will be analyzed, while the findings will be reported to the President and Chief Executive Officer as well as the Corporate Governance Committee for acknowledgement. In 2014, there were a number of other related activities and courses conducted in order to ensure that the anti-corruption measures were effectively communicated and implemented to achieve our objective. More details are disclosed in the “Business Ethics” part.

We also introduce our Anti-Corruption Policy to suppliers/contractors, especially during the festive seasons, by sending an e-mail to inform and remind them of our policy of not accepting gifts, hospitalities, and other benefits from suppliers/contractors. In addition, the Company has determined that risk management is the responsibility of everyone from directors, management and employees as well as suppliers/contractors. The risks associated with corruption have been taken into account in the risk assessment. Those risks will also be under proper management and control activities through tools such as reporting of the conflict of interest, procurement regulations or the Delegation of Authority and Signatures (DAS)

Segregation of Duties

PTTEP assigns and allocates all of our internal works using DAS in order to eliminate redundancy and ensure the alignment of all tasks. Major duties are as follows:

1) The Board has a duty and responsibility to set policies and ensure that internal controls and risk management mechanisms concerning anti-corruption are adequately in place and efficient to the extent that fighting against all forms of corruption becomes a part of our organizational culture. The Board and management must also act as exemplary models and Corporate Governance Leaders (CG Leaders) in strictly applying the Policy in real-life situation.

2) The Audit Committee has a duty and responsibility to review the finance and accounting reports as well as internal controls, internal audits, and risk management systems to ensure PTTEP Group's business operations are not only efficient, but also in compliance with international standards.

3) The Internal Audit Department has a duty and responsibility to audit and review whether or not operations of PTTEP Group are in compliance with the Anti-Corruption Policy to ensure that our internal control systems are appropriate and adequate.

4) Management has a duty and responsibility to establish, regularly review, and closely monitor the mechanisms which have been established to support processes or activities which combat against corruption, including the recruitment process. Moreover, management is also responsible for promoting and encouraging employees and related persons to refrain from those activities which might potentially be involved with corruption, in addition to acting as a CG Leader to be a role model for other organizations.

5) The Board is responsible for assigning the Corporate Governance Committee to monitor the compliance of the Anti-Corruption Policy by the Company's employees as well as to regularly report related findings to the Board to ensure that the policy is being effectively implemented to achieve our business objectives.

Internal Controls and Risk Management of the Anti-Corruption Policy

PTTEP establishes effective internal controls and risk management systems to align with our acceptable level of risks, and these include the anti-corruption measures. We have written regulations, policies, rules, and procedures for all employees to comply with in order to operate businesses transparently as well as to ensure that each operation has controls and systems in place to combat against corruption. In addition, the Company has developed, implemented, regularly assessed, and continuously improved our internal controls. The Company's Audit Committee is responsible for reviewing the results of the assessment by considering all the five elements of the internal controls, all of which are according to the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

PTTEP establishes procedures to discuss with related employees about the findings of internal controls issues relating to anti-corruption measures by implementing the Fraud Risk and Control Self-Assessment which include anti-corruption matters. The responsible unit will discuss with each operating and supporting unit to identify the root cause of potential fraud risks as well as to identify internal controls required for further improvement. Measures in response to the identified risks and controls are then designed and implemented. Meanwhile, the Internal Control Section is responsible for monitoring the implementation of such measures and periodically reviewing the fraud risks of each unit. All findings from the Assessment are then reported to the Audit Committee and/or the Risk Management Committee (as the case may be) for consideration at least once a year. The summary of comments and suggestions from these Sub-Committees must also be reported to the Board.

Auditing

The Internal Audit Department has developed the fraud audit guideline which includes details in the areas of fraud risk assessment, fraud protection and detection, and fraud investigation. One of the objectives of developing this guideline is to provide a comprehensive and concise investigation guideline when the Company receive complaints or alleged reports related to frauds.

PTTEP has a procedure to regularly audit sales and marketing activities to closely monitor and prevent ourselves from risks derived from corruption as well as to provide appropriate measures to handle with the issue. Although our major sales transaction is with PTT, we audit the pricing structure stipulated in such sales contracts which are mutual agreements from all joint venture partners. These contracts can be referenced with the world market price and have also been approved by the Audit Committee and the Board prior to entering into the agreements. Directors are required to leave the meeting room and are refrained from discussing and voting in all agendas in which they have a conflict of interest.

PTTEP has a procedure in place to regularly audit activities relating to procurements and contracts in order to monitor and prevent ourselves from risks stemmed from corruption, as well as to provide appropriate mitigation plans. The Internal Audit Department is responsible for regularly auditing such activities which include fraud-related risks and internal controls in order to efficiently manage these risks.

Reporting

PTTEP has a reporting line to report the progress of anti-corruption measurements. The Board has assigned related Sub-Committees to govern and monitor all operations and activities relating to the anti-corruption measurements and procedures as well as to report the findings to the Board for acknowledgement on a regular basis. Meanwhile, management is responsible for implementing such measures and providing related information to the Sub-Committees.

Protection

PTTEP provides protection to anyone complying with the regulations and policies of PTTEP Group. The Company's employees will be protected from retaliations such as demotion, punishment, or discrimination acts resulting from their refusal to engage in corrupt activities even if the given refusal may negatively impact business of PTTEP Group. This commitment is clearly writing in our "Reporting and Whistleblowing Regulation 2013".

For internal and external parties to be confident, we also provides secured and confidential reporting channels for everyone to report or provide details when there happens or is suspected to be an act which may violate laws, CG&BE, or other regulations of PTTEP Group. More details are disclosed in the "Reporting Whistleblowing Regulation 2013" part.

Punishment

In case of a breach of or a non-compliance with the Anti-Corruption Policy, a disciplinary action will be taken depending on the severity of the impact on PTTEP Group. Disciplinary action may also include dismissal or termination of contracts of the wrongdoer. Moreover, if the act violates any laws, the wrongdoer will also be prosecuted by law. All supervisors therefore have a duty to monitor and provide advices to their subordinates as well as to rigorously act in compliance with all laws and regulations of PTTEP Group. If any supervisors fail to carry out such responsibilities, a disciplinary action will be taken against him/her according to the Company's human resources management regulation.

9.1.2.2 Policy on Treatment to Stakeholders

1) Shareholders

PTTEP respects the shareholders' rights and treats them with equality, while adhering to carrying out the Company's business with CG&BE in order to achieve the sustainability and create the optimal value for the shareholders. More details are disclosed in the "Shareholders' Rights and Equal Treatments" part.

2) Employees

2.1) PTTEP is in compliance with the UN principles by not employing illegal workforce and child labor in every area in which we invest. The following guidelines are described in the Company's CG&BE.

1) To understand and comply with all laws applicable to the Group's operations in the locations in which we conduct our business

2) To understand the local customs, cultures and traditions of the locality in which you work

3) To respect the local traditions, cultures and cultural differences, and to not conduct ourselves in any way that contradict them

4) To not discriminate against an individual based on our personal relationship with that individual, his or her ethnicity, nationality, gender (including pregnancy, and sexual preference), age, religion, disability, personal views or any other conditions or characteristics which are not concerned with work

2.2) PTTEP nominates, selects, and employs our staff regarding their records, experiences and abilities to work in the right position. Employees are consistently developed, promoted in their career path, and allowed to join external activities under the Company's policy.

2.3) PTTEP sets up, regularly reviews, and revises a fair wage system for our staff according to the short- and long-term corporate performance in order to attract and retain competent staff. The salary rate and payment method paid within the petroleum industry in the country are also considered. The difference of each work position, the required skills and expertise, the level of work difficulty, the assigned responsibility, and the capacity of the Company's employees are also considered.

2.4) PTTEP manages and enhances fair welfare for the Company's staff as well as for ourselves. We consider the payment capacity not only for the present, but also for the long term, and we emphasize sustainable welfare not only for the staff, but also their families. The welfare is meant for those staff who has a difficult time financially, and without sufficient governmental support, such as housing interest subsidy program and healthcare benefits for employees and their families. This is generally a common provision provided within the domestic industry. PTTEP regularly reviews our welfare program for its appropriateness and pertinence in response to changing social, economic and other obligatory conditions of the business. In addition, the Company has also helped the staff to be relieved from anxiety through the Sabaijaidee program which provides consulting services to all of the Company's staff, their spouse and children on the matters relating to family, private life, work, love, law, by the psychologists recommended by one of our consulting companies.

PTTEP provides the welfare and benefits which are consistent with the Company's performance both in short- and long-term. In the short term, the Company provides the special payment which varies according to the performance. In the long-term, PTTEP has established a provident fund for staff in order to enrich their living and provide them with supposedly a sufficient financial security once they resign or retire. The provident fund consists of contributions from the Company as well as our staff. The Company makes a monthly contribution at a rate of 15 percent of the staff's basic salary, while the staff contributes 2 percent, but not more than 15 percent of their monthly salary. Receiving this fund is subject to the PTTEP's regulations. The Company has also established the Employee Joint Investment Program (EJIP) which is intended to encourage our staff to participate and on a voluntary basis. The purpose of this program is to provide the Company's staff with motivation to work efficiently and effectively, create alignment among the employees, management, and shareholders, as well as to establish a long-term loyalty and sense of ownership within. Purchasing of ordinary shares generally is carried out through SET's trading system. This program commenced on February 1, 2013 and will be opened until January 31, 2018, carrying over a total of 5 years. In principle, eligible staff will ask PTTEP to deduct from their basic salary at the rate of 2 – 10 percent of their basic salary, while the Company will contribute another portion for the staff equally to 100 percent of the money paid by the staff in each month. Receiving and realizing the share value, on the other hand, is subject to the Company's performance in the long-term.

2.5) PTTEP gives priority in human resource development in order to enhance our capacity for business performance as we deem that human resource is a key to the Company. The Company supports and promotes staff through training and curriculum in both short- and long- term. Apart from academic and technical capacity building, we also plant the working values altogether so that all staff can work with the same standard to attain the Company's vision and mission as targeted. In 2014, PTTEP employees attended courses and trainings for an average of 75.4 hours per person per year. More details on the trainings are disclosed in the "Human Resource Development Policy" part.

2.6) PTTEP realizes the value and importance of a timely consultation between employees and their supervisors in order to maintain a good relationship. Shall any conflict arise among employees and supervisors, employees may file a complaint via communication channels provided by the Company. The employees who comply with the provided measure and procedure and act in good faith as well as those relevant witnesses shall be protected, without facing a penalty, termination, or any other negative consequences. The CG Hotline channels are also established for our employee to raise issues relating fraud, while reports received through these channels will be investigated confidentially and made known only to relevant persons in order to protect the whistleblower.

2.7) PTTEP conducted the Employee Engagement Survey for the third time in 2014 with the objective to understand factors impacting the Company's employee engagement. We will continue to find out more details from this quantitative research in order to initiate the 2015 improvement plan for the organization and the Function Group levels.

PTTEP executes the improvement plan in an effort to increase the engagement level and occasionally monitors the progress of the plan. The next Employee Engagement Survey is planned to be concluded in 2015.

3) Clients

PTTEP is committed to our mission to be a dominant producer and supplier of crude oil, condensate, and natural gas at fair and competitive prices. We sell the products under short to long-term contracts as well as in the spot markets. The Company assesses clients' suitability by the following four criteria, namely, economic return of product price, financial stability, operational readiness, and compliance to local laws and regulations, of each client. We treat all buyers equally for the optimal benefit to all parties. The Company is also committed to strictly comply with contracts, regularly coordinate with buyers so that we can produce and deliver quality products as specified in the contracts on schedule and according to their demand.

4) Governments

PTTEP engages in petroleum exploration and production businesses under the good corporate governance and business ethics of government agencies in the countries in which we have an investment, be it domestic or international. The Company places importance on the government sector as it plays significant role in energy security. We therefore are committed to complying with policy, rules and regulations as required by each country. Regularly, we also coordinate and exchange information with the local and foreign government agencies with transparency and integrity.

The Company also recognizes importance of developing and maintaining a long-term relationship with the local and foreign governments by arranging relationship-building activities with them on a regular basis. More details are disclosed in the Sustainability Report 2014.

5) Joint Venture Partners

Joint venture projects between PTTEP and our domestic and foreign joint venture partners operate businesses under mutual working agreements according to international standards. These agreements include details regarding the rights and duties of joint venture partners such as the right to be a member of a project's management committee. The committee is responsible for establishing guidelines on the procurement of products and services as well as for developing a strategic plan and an annual budget with a clear scope and approach. Moreover, the partners also have the right to audit annual financial and accounting records as well as to set proper and clear measures. For example, this includes penalty imposed on partners for failures to honor an agreement. The Company remains focused on distributing information to joint venture partners and external parties with transparency.

6) Communities and Societies

To adhere to business ethics and social responsibility, PTTEP is committed to improving the communities' living quality which is a major foundation for a sustainable social development. Along with our core business in petroleum exploration and production, our mission is also to improve the living quality and society as well as to conserve culture and environment in order for communities, societies and the Company altogether to grow under the concept of "From Natural Treasure to Intellectual Wisdom and Environmental Conservation" More details are disclosed in the Sustainability Report 2014.

7) Environment

PTTEP strives to achieve excellence and a position of leadership in Safety, Security, Health and Environment (SSHE). Our SSHE Policy is the core of SSHE management, allowing us to deliver our vision and commitment in SSHE. The Company publicly discloses our SSHE performances indexes, such as Lost Time Injury Frequency Rate, Total Recordable Injury Rate, and Hydrocarbon and Chemical Spill rates, in the Company's website and in our annual Sustainability Report. In addition, PTTEP has the SSHE Management System (SSHE MS), which comprises seven elements with 27 standards which are implemented throughout all of the Company's operations.

A cornerstone of sustainability is a strong environmental performance. Our approach to managing the environmental impacts concentrates on our Green Practices such as having an international standardized environmental management system, eco-efficiency practices for mitigating environmental impacts from our operations, lowering our ecological, carbon and water footprints, increasing biodiversity, as well as creating value added processes to our business. To mitigate environmental impacts from our operations, PTTEP also implemented the ISO 14001:2004, a common system to improve the efficiency of the Environmental Management System. Year 2014's certification was issued by AJA Registrars under the United Kingdom Accreditation Services (UKAS). The certified sites which were certified include Arthit Project, the Greater Bongkot North and South fields of Bongkot Project, S1 Project, PTTEP 1 Project, Petroleum Core Research Center, and PTTEP Petroleum Development Support Base in Songkhla and Ranong, as well as in Australia for PTTEP Australasia Project, support base at Darwin and office of PTTEP Australasia (Ashmore Cartier) Pty Ltd.

PTTEP has a Green Practice Roadmap, which outlines our roadmaps for reducing our ecological footprint and carbon footprint. The roadmap guides PTTEP in maintaining the biodiversity of our operating sites as well as improving our business values by reducing costs, improving resource efficiency, and reducing wastes. We also implement the Green Supply Chain practices which involve Green Procurement, Green Logistic and Green Office to use green and environmentally friendly products in our operations. In addition, the Company also encourages all employees to understand the environmentally friendly business practices by, in compliance with the laws, organizing fundamental and intensive environmental awareness training courses for employees, existing and new hires, and management. More details on our Green Practices are disclosed in the Sustainability Report 2014.

8) Suppliers/Contractors

PTTEP believes that suppliers/contractors and joint venture partners are important parts that support our businesses. We therefore employ a policy to treat our business partners equally. The Company's procurement operations are carried on the basis of equality and fair competition. We also comply with the laws and terms of concerned legal transactions, taking as well quality, safety, security, health, and the environment into account. Suppliers/contractors and joint venture partners must follow the operational standards which adhere to the Company's policy. Their employees meanwhile are required to have good business ethics and respect basic social rights.

In 2014, PTTEP amended the Good Corporate Governance Policy regarding suppliers/contractors and joint venture partners by adding that the Company will strongly support those with suppliers/contractors and joint venture partners with good corporate governance and social responsibility toward the environment. This addition encourages them to follow us to develop and improve their operating standards to increase awareness of safety, security, occupational health, environment, and human rights of their own employee.

In addition, PTTEP has enhanced our new measures relevant to the management of suppliers/contractors in the area SSHE which is one of the Company's core value. The SSHE Contractor Management Procedure and Plan has been implemented to enhance the understanding of the suppliers/contractors including the operation guideline, to ensure that correct actions are taken. The Company also strongly encourage suppliers/contractors to strictly comply with the SSHE Contractor Management Procedure and Plan through our annual SSHE Contractor Forum, as an effort to ensure that they correctly understand the SSHE policy, manual and work procedures, and plan for the operations in every area that we operate. Moreover, the Company also annually organizes the PTTEP Golf Charity along with our suppliers/contractors and joint venture partners every year. This is not only to strengthen the good cooperation but also to build good relationships between the Company and our suppliers/contractors, and joint venture partners

PTTEP has established the Sustainable Development (SD) Committee to set policy, strategy and action plans, such as the Green Procurement Guideline, in 2013 to reduce pollution, use of resources, and global warming. The policy, strategy and action plans have been acknowledged by the Board, before being passed down to management and employees in throughout the Company. We also introduce them to our suppliers/contractors and other relevant stakeholders for effective and efficient operation of the earth.

PTTEP still maintains the concept of fairness and free competition without trade barriers toward suppliers/contractors. All our suppliers/contractors can register their company profiles with us as well as offer their products and services to us through the following channels:

1) PTTEP website: PTTEP users and the Procurement Department can access and view profiles of suppliers/contractors submitted through this below link (https://vendor.pttep.com/sap/bc/webdynpro/sapsrm/wda_e_suco_sreg?sap-client=310).

2) The Procurement Department: Suppliers/contractors can contact the Procurement officers anytime during the department's working hours.

3) PTTEP Users: Users may propose the names of suppliers/contractors to the Procurement Department who will then consider whether or not the suppliers/contractors are qualified to proceed to the new vendor pre-qualification process.

For the new vendor pre-qualification process, the Company pre-qualifies suppliers/contractors by screening and evaluating them according to their business categories. The evaluation process is carried out by the Committee consisting of the following sections

- 1) Technical and Quality
- 2) Safety, Security, Health and Environment (SSHE)
- 3) Commercial, Legal and Social

Each section of the Committee has the authority to independently consider and evaluate from one another to ensure that the suppliers/contractors have the qualification to deliver products or provide services to PTTEP. The evaluation is based on fairness, equality, and transparency for the highest benefit to the Company.

PTTEP has also asked all suppliers/contractors for their cooperation to strictly comply with the notification of the National Anti-Corruption Commission (NACC) or Por.Por.Chor. concerning the principles and methods of accounting records and submission of person being a party to the contract made with State Enterprise or State Agency B.E. 2554. Moreover, according to the NACC announcement, the Company has also made it available in our website to disclose information regarding biddings and reference prices for the suppliers/contractors.

For procurement activities, PTTEP has started preparing a business analysis especially to review the overall performance of the Procurement Department by using the procurement spending data from the past three years. This data is to be analyzed to identify the suppliers/contractors classification and risk assessment relating to operations and market trends. The results from the evaluation, in turn, help the Company to identify name of the critical suppliers/contractors who are vital to the operation of PTTEP.

Upon identifying the critical suppliers/contractors, PTTEP uses the analysis to prepare procurement and contract strategies and plans for each product and service group. The Supply Market Analysis (SMA) will then be generated to support future procurement and contractual activities.

PTTEP needs to submit the procurement and contract strategies and plan, including the bidder lists to the Procurement Committee (PC) and joint venture partners (if any) for approval before proceeding with the bidding. The bidder lists and the procurement/contract strategy and plan must be internally approved from three parties, namely, those responsible from the operations involved, assets unit, and procurement unit before submitting to the PC and business partners in order to counter balance for transparency purposes.

For the bidding process, two sealed envelopes, two-stage bidding, are required. One envelope is for technical, while the other is for commercial. The technical envelope is opened first for evaluation of the technical quality and SSHE. Then, after having qualified bidders from the first stage, the process will continue with opening of the commercial envelope. The result of the bidding will be submitted to the Procurement Committee and joint venture partners (if any) for approval before initiating the contracting activities with the suppliers/contractors.

As an important and integral part of PTTEP's Supplier Relationship Management (SRM), during the operation and contract management, the contract holder must monitor the suppliers/contractors and periodically follow up on the performance to ensure that the suppliers/contractors operate according to the contractual terms regarding quality, SSHE, and human rights. At the end of the contract management, the contract holder must complete the final performance evaluation on the suppliers/contractors in order to drive their performance even further, a proven formula for a long-lasting supplier relationship.

PTTEP supports domestic procurements and services, and we also encourage the procurement of goods and services from the operation areas in order to provide employment and income generation to support for the locals as well as to reduce costs and delivery time. As a result of our commitment to building long-term relationship with the communities where we operate, the Company has gained from each of the communities a license to operate. In addition, PTTEP also encourages the suppliers/contractors to operate with care and responsibility wherever they are and local communities and to support local procurement within their local area in order to lower the cost of goods as well as to support the local community.

9) Creditors

PTTEP recognizes the importance of internal and external stakeholders including creditors. This is firmly based upon the Company's policy of equitable treatment for all stakeholders, which is an integral part of our CG&BE.

Great emphasis is placed upon accurate, complete, timely, and transparent information disclosure to all stakeholders. Information disclosed by PTTEP consists of financial and non-financial information. Financial information particularly the financial statements are reviewed and audited by an independent auditor in compliance with the Generally Accepted Accounting Principles. The information is also endorsed by the Company's Audit Committee as well as the Board prior to public disclosure to shareholders and other stakeholders.

Regarding creditors, the PTTEP's debentures issuance and all relevant processes are in compliance with the laws as well as policies and regulations stipulated by SEC. The Company's debt issuance complies with the policies, purposes, and resolutions set forth at the Company's shareholder's meeting. The Company agrees to fulfill our obligations stated in our bond and debt agreements and ensures that information is accurately and adequately disclosed to all stakeholders. Furthermore, PTTEP also maintains necessary measures in place to remedy any incidents or other types of impairments that may arise as a result of non-compliance.

10) Competitors

Based on professionalism and equality, PTTEP treats our competitors under transparent and fair rules. We, in our greatest effort, try to avoid all unethical manners and all ill-intentions to defame reputation of our competitors through false or unfair statements or acts. We are also committed to complying with local laws and regulations regarding trade competition. More details about the Trade Competition Policy are disclosed in CG&BE, which is available in PTTEP website.

11) Customs and Traditions

PTTEP adheres to local customs and traditions of all the areas and locations in which we operate. Trainings are provided to our employees by knowledgeable and experienced instructors, including representatives from the Ministry of Foreign Affairs or Embassy. Instructors will provide suggestions and information regarding customs, traditions, sensitive issues, and local practices to the employees who will be transferred there in order for them to understand and behave in a proper manner.

12) Human Rights

PTTEP has a human rights policy which clearly states our commitment to comply with all labor laws in all areas of the Company's operation, with a strict prohibition of direct and indirect employment of child and forced labor. This complies with the UN Universal Declaration of Human Rights. Whether or not the country in which PTTEP invests in has local laws on human rights, we are still committed to providing fair employment while ensuring employees with a safe working environment and hygiene. PTTEP ensures that no threats exist among employees or those related to the Company. Ethical partners without any infringement of human rights are employed. PTTEP promotes consultation between executives and employees through the employees' representatives in the welfare committee. Views and suggestions are communicated for improvement of welfare and other proper and necessary benefits to improve our employees' quality of living.

13) Laws

PTTEP respects laws in everywhere we operate business. The Board sets the matter related to the compliance with applicable laws in the Business Ethics of PTTEP Group. The directors, management and employees are required to understand them as well as strictly abide by laws related to our operations in all areas to enable PTTEP Group to operate with accuracy and efficiency.

PTTEP has established the Compliance Department as the center of compliance performance supervision for the PTTEP Group. The Department has a direct reporting line to the Senior Vice President of the Legal Division and to the President and Chief Executive Officer. In 2013, the President and Chief Executive Officer announced the Compliance Policy to express our commitment to full legal compliance and define roles of all management and employees in promoting compliance. The Compliance Program has also been implemented to enhance awareness on compliance-related matters among employees.

9.1.2.3 Whistleblowing Reporting and Protection Procedures

The ultimate operational goal of PTTEP Group is to optimize value of the Company for shareholders, create a long-term satisfaction for our stakeholders, and, for ourselves, become the Company with "Growth, Prosperity, Stability, Sustainability and Dignity". To achieve our goal, we understand that confidence and faith in CG&BE must be put in place as well as into practice. To provide ourselves with the opportunity to succeed, PTTEP has established the CG Hotline channels where directors, management, employees, and external parties are able to report in good faith of suspicious misconducts or wrongdoings that might be of violation to the laws, CG&BE, or other regulations of PTTEP Group.

To instill confidence for a whistleblower from possible retaliations as a result of reporting in good faith, PTTEP has formally developed a set of regulations specifically to handle whistleblowing cases and provide protection for those related parties. The information received and the identity of a whistleblower is treated with confidentiality, only to be disclosed to those who must be involved in the case. Meanwhile, the investigation is conducted strictly in order and within the timeframe as prescribed in the “Reporting and Whistleblowing Regulation 2013” of PTTEP Group. The result of all the investigations must be reported to the Audit Committee or the Corporate Governance Committee (as the case may be), and later to the Board on a quarterly basis. The followings are the CG Hotline channels of PTTEP Group.

- 1) Mail to PTTEP director, supervisor, or Corporate Governance Section of the Corporate Secretary Division
PTT Exploration and Production Public Company Limited
555/1 Energy Complex Building A, 33th Floor
Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900, Thailand
- 2) Fax to supervisor or Corporate Governance Section of the Corporate Secretary Division (+66-2537-4949)
- 3) E-mail to supervisor or Corporate Governance Section of the Corporate Secretary Division (cghotline@pttep.com)
- (4) Report through PTTEP website (www.pttep.com)
- (5) Report through PTTEP Intranet (CG Portal)

In addition, if there is a complaint made in good faith regarding subsidiaries, the complaints can also be reported to the coordinator of those related subsidiaries.

In 2014, the CG Hotline channels received a total of eight complaints which were related to misconducts committed by employees and other persons acting on behalf of PTTEP Group. These conducts, however, had not produced any significant financial or reputational impacts on the Company. During the year, we had completed the investigation for six of the complaints and had reported the results to all of the whistleblowers whether or not they made the complaint anonymously. Meanwhile, disciplinary actions had since been taken against all those who violated regulations of the Company. All of the remaining two complaints are still under an investigation; however, these complaints do not involve with child labor, labor force, or any matter regarding the Company obstructing employee integration to negotiate with the employment or related termination.

9.1.3 Information Disclosure and Transparency

9.1.3.1 Disclosure of Financial and Non-Financial Information

Information disclosure is a key aspect of good corporate governance. PTTEP gives importance to the information disclosed to the Stock Exchange of Thailand (SET) and as well as to shareholders. At the very least, the information must be accurate, sufficient, timely, and equally available to all parties. The information is prepared according to our Business Ethics guidelines. In PTTEP, the departments responsible for providing information and replying to external queries from the SET and the general public are the Investor Relations Section (IR) and the Corporate Communications Department.

Our information disclosure consists of financial information and non-financial information. Financial information is disclosed through financial statements, which are reviewed and audited by the external auditor to confirm that they are presented accurately, in all material respects, according to Thai Financial Reporting Standards. The financial statements are subsequently approved by the Audit Committee and the Board before being disclosed to the public. The Board reports their responsibilities with respect to the financial statements in the PTTEP Annual Report. In addition to SET's requirements, we also release our unreviewed quarterly financial statements and unaudited annual financial statements in advance to allow timely access to the financial information for shareholders and investors. Unless stated otherwise, the information before and after review and audit usually do not contain any significant changes. PTTEP also discloses non-financial information, they are such as the acquisition and disposal of assets, related party transactions, dividend payments, management's discussion and analysis, risk management, invitation letter for shareholders' meetings, minutes of meetings, Annual Corporate Governance Report and the 56-1 Form, as well as other information which is important for investment decisions, all according to the requirements of SET and SEC.

Information that PTTEP discloses to SET, shareholders, investors and the general public are disseminated in both Thai and English in the Company's website which also features other up-to-date information viewed to be of interest to the aforementioned audience. Key information available in the website are petroleum exploration and production projects, investment projects, quarterly and annual analyst meeting presentations, webcasts, roadshow presentations, historical and latest stock performance, analyst coverage, and news releases. PTTEP also reports security, occupation health, safety and environmental performance which are included in the Annual Sustainability Report. In 2014, the Company also made available in the website a downloadable excel spreadsheet which contains historical financial information and operating results to facilitate investors' access to information.

PTTEP also publishes a quarterly investor newsletter, Explorer's Journal, which includes information that may be beneficial to shareholders and investors, such as quarterly performance highlights, project updates, good corporate governance practices, topics on sustainable development, and knowledge sharing on the fundamentals of the exploration and production business. The newsletter is bi-lingual, Thai and English, and available in both hardcopy and electronic formats. The latter can also be downloaded from our website, effectively serving as another communication channel between the Company and shareholders for news and updates. In 2014, PTTEP disclosed a total of 40 articles through the SET Portal and organized the following activities for shareholders and analysts.

Activities	Amount (Times)
Domestic and overseas roadshows/conferences	17
Analyst meeting	4
Opportunity day (by SET)	4
Shareholders' and investors' site visit	7
Daily telephone correspondence	Average 4

Apart from the activities above, the Company also participated in events organized by SET to meet retail investors such as SET in the City. Meanwhile, regularly and throughout the year, we extended interaction with analysts and fund managers, through company visits and conference calls, regularly throughout the year, accumulating to more than 60 meetings in 2014. The information above could also be found at the AGM Meeting, while IR was readily prepared to provide information and answers to questions raised by the Company's shareholders.

PTTEP understands that disclosure of the information which is accurate, complete, timely and transparent is the key to CG&BE; we therefore are committed and dedicated to delivering the best possible performance from our business operations.

9.1.3.2 Investor Relations

The Investor Relations section (IR) is responsible for communication of relevant information and news that reflect PTTEP's fair value to analysts, shareholders, and general investors under the rules of SET and SEC in order to foster confidence in the analysts and the investment community. Moreover, IR is also entrusted with upholding the corporate image and perception among analysts and investors, while also relied upon to coordinate and advice over IR related issues to the Company's executives.

Our IR can be contacted through the following three channels.

- 1) By phone: +66-2537-4675, +66-2537-4378, +66-2537-4075, +66-2537-7347, +66-2537-5746, +66-2537-5517, and +66-2537-4446
- 2) By e-mail: ir@pttep.com
- 3) By fax: +66-2537-4444 and +66-2537-4467

9.1.4 Board's Responsibilities

The followings are the major responsibilities of the Board, while the full details are disclosed in the "Duties and Responsibilities of the Board" part.

- 1) Policy-making and operational direction

The Board is responsible for making decisions regarding PTTEP's operational policies and determination of the corporate vision, mission, and values. The Board is also assigned to be directly involved in the Company's budgetary and planning, and organization development strategy to accommodate continuous changes in the business environment, as well as to provide management with advices to lead the Company toward our five ultimate goals, being "Growth, Prosperity, Stability, Sustainability and Dignity".

- 2) Good Corporate Governance and Business Ethics

The Board is responsible for establishment of PTTEP's CG&BE for all directors, management, and employees to adhere to while operating businesses for PTTEP Group. This is to ensure that our businesses are operated with good standards, transparency, efficiency, ethics, and justification, and that the rights of the Company's stakeholders are preserved proportionately to their fair share to maintain the general confidence and acceptance in the Company. The Corporate Governance Section meanwhile has been established to be responsible for matters regarding CG&BE.

- 3) Internal control and auditing

The Board is responsible for assuring that PTTEP Group is equipped with an effective internal control system that is comparable to the acceptable risk levels. The Audit Committee and the Internal Audit Department are assigned to periodically and regularly review and monitor internal controls as well as to submit the results directly to the Audit Committee to ensure that they are in line with the operational objectives of PTTEP Group, in compliance with relevant laws and regulations, and in trust of management, investors, and other stakeholders.

Our internal control system is comparable to those accepted by the international standards, considering the control environment, risk assessment relative to objectives, effective control plans, internal and external provisions of adequate and reliable information and communications, as well as routine monitoring and evaluation procedures.

4) Risk management

The Board is responsible for regulating and overseeing the management of risks that might deter PTTEP from achieving our strategic goals. In doing so, the Board has appointed the Risk Management Committee which is a standing Sub-Committee to monitor and ensure the efficient and effective management of risk for PTTEP Group as defined by the Risk Management Charter of 2014. The Risk Management Committee has also been assigned to assess risks which are of significance at the organizational and project levels, evaluate and monitor operational plans, oversee the implementation and revision of risk mitigation to allow for continuous evaluation of risks in order to ensure that the risks are at acceptable levels, as well as to report the results to the Board immediately or periodically.

5) Prevention of conflicts of interest

The Board establishes various management measures to ensure that the management is efficient and transparent and acts in the best interest of PTTEP Group, by assuring that the Company and our management are without any conflicts of interest. Shall anyone of the Company's directors, executives, or employees have a stake potentially leading to a conflicts of interest, he or she must withdraw from participation or be abstained from voting in the given issue. Consequently, a report must be filed to inform the authority of the stake according to our Business Ethics as specified for the directors, management, and employees to follow as our business codes of conduct.

6) Compliance

The Board values importance of full legal compliance in all of the areas in which the PTTEP Group operates. The Board also provides the Group with the supports required to conform to the applicable laws and to properly manage relevant compliance risks. Compliance is considered one of the keys that allow the Group to function discretely as well as to be able to operate in accordance with our strategy toward the business goals. The Compliance Department has been assigned by the Board to be responsible for this matter.

9.2 Sub-Committees

The Board is responsible for appointing directors who have expertise and knowledge in certain areas according to the regulations specified by PTTEP. Each Sub-Committee meanwhile is responsible for a specific set of tasks specified by its respective charters' directors. Qualifications, responsibilities and service term of the Sub-Committees are prescribed by the Company's regulations, through the designated charter. All the members of the Audit Committee and the Corporate Governance Committee must be independent directors, while the majority of the members of the Nominating and Remuneration committees must be independent

directors. The Chairman of the Board however is not allowed to obtain any chairmanships or directorships in the Sub-Committees. In addition, each Chairman of all Sub-Committees, only with exception of the Risk Management Committee, must be an independent director.

From every meeting, the Sub-Committees are required to report the results to the Board for acknowledgement on a regular basis, as well as to disclose in the 56-1 Form and PTTEP Annual Report their duties completed over the year.

Currently, the Company has five Sub-Committees, namely, (1) the Corporate Governance Committee, (2) the Audit Committee, (3) the Remuneration Committee, (4) the Nominating Committee, and (5) the Risk Management Committee. More details about the directors' names, duties and responsibilities, meeting attendance, and remuneration policy are disclosed in the "Management Structure" section. For the reports of all the Sub-Committees, they are disclosed in the "Reports of the Sub-Committees" part.

9.3 Nomination of Directors and Management

9.3.1 Nomination of Directors

When there is a vacancy of a director position, it is the duty of the Nominating Committee to search for candidates in replacement. The process begins with the Committee going through a list of directors from state-owned enterprises (Directors' Pool), gathered by the State Enterprise Policy Office (SEPO) whose top personnel are regarded as highly-qualified in the area of state-enterprising. Moreover, PTTEP also seeks advices from our major shareholder, PTT, for consideration. We place importance on those individuals with expert skills, experience, and the qualifications which are crucial, yet perhaps remained missing in the Boardroom, to the Company's business in making the organization more completed and well-rounded for the optimal benefits of PTTEP Group. Potential conflicts of interest of the new director are also being considered during the process. More details are disclosed in the "Management Structure" section.

Election of directors to replace those who are due to retire by rotation must obtain an approval from the annual general shareholders' meeting by the majority vote which is based on the number of the Company's shareholders with voting eligibility at the Meeting. The election process is as follows:

- 1) The Nominating Committee proposes a list of qualified candidates to the Board for their review prior to the annual general shareholders' meeting. PTTEP's shareholders meanwhile may also nominate other individuals whom they see fit for the director position. The Company provides channels for shareholders to nominate candidates prior to the meeting each year from October 1 to December 31. We declare this process through SET and also publish on the Company's website. Moreover, PTTEP also discloses the procedures for shareholders to nominate a candidate, together with the Director Nomination Form, on the website.

2) Should the number of director candidates be less than the number to be elected, PTTEP will propose at the shareholders' meeting to elect those candidates as directors by voting for individual candidates, under which they must receive majority votes.

3) Should the number of director candidates exceeds the number to be elected, a ballot is to be held. Each shareholder may vote for as many director candidates as the number of the opened positions, and voting will then be carried out for the individual candidates. Those with the highest ballots will be elected, as many as the number of opened positions accommodates.

When a director position becomes vacant for reasons other than rotation, the Board may elect a new director using the three-fourth majority voting rule. Such director however is to remain in his or her position for only as long as the remaining term of the predecessor.

9.3.2 Nomination of Management

The Board grants the President and Chief Executive Officer the authority to select and appoint those individuals who possess qualified knowledge, capabilities, and experience to hold management positions, preferably in consultation with the Career Review Board Committee (CRB) and strictly according to the Company's personnel administration regulation. The management appointment shall be reported to the Board for acknowledgement. Exceptions are made in the case of appointing of the Executive Vice Presidents, and the President and Chief Executive Officer where the Board's approval is necessary. Moreover, the Board is also required to hold at least an interview session if the candidate is from an external organization. It should also be noted that the appointment of management from Internal Audit Department must be approved by the Audit Committee.

9.4 Development of Directors and Executives

9.4.1 Directors Development

Orientation of New Directors

Orientations are being provided to the Company's new directors which consist of the following elements.

1) Presentation by the President and Chief Executive Officer, and executives: This briefing involves the nature and the operation guideline of the business, knowledge and techniques regarding to the petroleum exploration and production business of PTTEP Group, relevant rules and regulations, CG&BE, and essential information for directors to perform duties with efficiency.

2) Director Manual: This contains essential information, including strategic plan, relevant rules and regulations, and CG&BE, which will be beneficial for him or her to perform director duties. The Manual is regularly reviewed and updated for directors to use as a reference.

3) Plant visit: New directors will visit operational sites of PTTEP Group as appropriate to increase their understanding in PTTEP business operations.

At the end of each orientation, new directors will evaluate the effectiveness of the orientation for further improvement. Director elected to be the Chairman and/or a member of the Sub-Committee are also required to attend an extra session in order to be informed of the important subjects which come with the additional new role, including, performing duties of the Chairman and/or a member of the Sub-Committee with efficiency as well as conducting and leading meetings of directors and shareholders.

Trainings of Directors

PTTEP directors are knowledgeable and ambitious to learn and understand more about the business and their duties as a director; therefore, the Company fully supports them to attend seminars and trainings, which were organized by the Thai Institute of Directors Association (IOD), which the training topics are relative to the Company's business operations. The followings are the details of the seminars and trainings attended by six directors during 2014.

Directors	Courses
1) Mr. Prajya Phinyawat	<ul style="list-style-type: none"> - Role of the Chairman Program (RCP 35/2014) by IOD - Chairman Forum: Clean Business - What is the Chairman Role? (1/2014) by IOD
2) General Worawat Indradat	<ul style="list-style-type: none"> - Role of the Compensation Committee (RCC 18/2014) by IOD
3) Mr. Chakkrit Parapuntakul	<ul style="list-style-type: none"> - Senior Executive Program on Administrative Justice (Class 5) by The Administrative Court - The Programme for Senior Executives on Justice Administration (Class 19) by Office of the Judiciary
4) Mr. Manas Jamveha	<ul style="list-style-type: none"> - Top Executive Program (Class 5) by Thailand Energy Academy - Top Executive Program in Commerce and Trade (TEPCoT) (Class 7), University of Thai Chamber of Commerce
5) Mr. Sethaput Suthiwart-Narueput	<ul style="list-style-type: none"> - IOD Committee Forum: Internal Audit Topics for Audit Committee Consideration
6) Mr. Ampon Kittiampon	<ul style="list-style-type: none"> - How to Develop a Risk Management Plan (RMP 6/2014) by IOD

Currently, eight out of 14 directors have participated in IOD's Director Certification Program (DCP), while three directors also attended the IOD's Director Accreditation Program (DAP). Therefore, there are 11 out of 14 directors (78.57%) attended trainings organized by IOD. Moreover, PTTEP has applied an IOD membership for all directors, as well as provide them with information regarding new and updated seminars or trainings to keep directors consistently informed. More details on the training courses attended by the directors are disclosed in the "Information of the Board of Directors, Management and Corporate Secretary of the Company" part.

To continuously provide knowledge and share opinions with the directors, PTTEP has invited two guest speakers to provide lecture sessions and exchange opinions with the Board in 2014 with details as follows:

- 1) "Anti-Corruption & Bribery" issue by Mr. Chinnawat Thongpakdee, Managing Partner of Herbert Smith Freehills (Thailand)
- 2) "Duties and Roles of the Board of Director in M&A Decision-Making" issue by Professor Kitipong Urapeepatanapong, Chairman of Baker & McKenzie Limited (Bangkok Office)

In addition, PTTEP regularly update the directors with laws and best practices regarding good corporate governance for their better knowledge and understanding.

9.4.2 Management Succession Plan

PTTEP uses the assessment center to evaluate levels of management competency, while the results are then used to compare with the PTTEP Management Success Profile which includes several elements, namely, competency level, personal attributes, and organization knowledge and experience. Management shall individually receive the results of the assessment center and will work together with their superiors to create a competency development plan to enhance their management and leadership skills, especially in technical and behavioral areas as well as the corporate culture.

In addition, the Company has a systematic succession planning for key positions to replace retiring staff and/or fill new positions as a result of the Company's expansion domestically and internationally in order to serve our business growth. The Career Review Board Committee is authorized to select and appoint successors with required qualifications, knowledge, ability, their currently Estimated Potential (CEP) result, and experience comparably to the targeted key positions. Thereafter, short- and long-term individual development plan will be created to ensure that each of the successors will be ready and qualified for the positions that they will assume.

9.4.3 Nomination and Succession Plan of the President and Chief Executive Officer

The Nominating Committee is responsible for considering the candidates' skills, experiences, and various other specific qualifications of the candidates to bring about the best of interests to PTTEP, as well as looking into their probable conflicts of interest. After the consideration, the Committee shall propose the qualified candidates to the Board for approval.

PTTEP formulates a succession plan for the President and Chief Executive Officer to prepare the Company in case of the situation where the President and Chief Executive Officer is unable to perform his or her duties or when the serving term is completed. The plan helps to minimize the risks and the impacts, potentially resulting from the discontinuity, on the management. The succession planning procedure is as follows:

1) PTT Group Management Committee (PTTGMC), a committee in which the Company's President and Chief Executive Officer is a director, forms the Group Leadership Development Program (GLDP). The program primary focus is to enhance the capability of the PTT Group's executives, vice presidents and above, in order to prepare them for the possible nomination to become a President and Chief Executive Officer in one of PTT Group of companies.

2) PTTGMC, with PTT being the Company's major shareholder, reviews the executive names from the shortlist from 1) and proposes them to the PTT's Board of Directors who is responsible to select PTTEP's next President and Chief Executive Officer.

3) After receiving candidate names, accompanied by opinions of PTT's Board from 2), the Company's Nominating Committee reassesses the individual's knowledge, capability, and experience beneficially related to the business, conflict of interest, and his or her vision to lead the Company to grow according to the strategic plan.

4) The Nominating Committee proposes the name of the final candidate, together with opinions, to the Board for approval and consequently finally appoints the Company's President and Chief Executive Officer.

9.5 Authority of the President and Chief Executive Officer

1) Authority under resolutions from shareholder meetings

The President and Chief Executive Officer is the authorized signatory who may sign to bind PTTEP with external parties under clause 9, paragraph 6, of the Company's Articles of Association registered with the Ministry of Commerce.

2) Authority under resolutions from the Board's meetings of PTTEP

The Board authorizes the President and Chief Executive Officer to act and conduct, on the Company's behalf, normal course of business operations under the stated objectives in our Memorandum of Association, petroleum concessions and other agreements, including other

businesses in which the Company has interests. In addition, the President and Chief Executive Officer is also authorized to be the acting body and conduct the business under PTTEP regulations, namely, the Budgetary, Finance and Accounting Charter B.E. 2555, Regulation on Human Resources Management B.E. 2548, Regulation on General Procurement B.E. 2556, Regulation on Procurement for E&P Business B.E. 2556, and Regulation on Project Investment Management B.E. 2557, by applying of the practices comparable to those of other private companies in the E&P business as well as in best interests of the Company. Delegation of authority is permitted unless the concerned attorney has a direct or indirect conflict of interest with the Company or our subsidiaries in exercising of the authority.

9.6 Corporate Governance Concerning Subsidiaries and Associated Companies

PTTEP has established subsidiaries and/or associated companies mainly to support our core business. Our continuous expansion in domestic territory and overseas necessitates the establishment of subsidiaries and/or associated companies in the regions where the Company invests for flexible and efficient business operations and competitive advantages comparable to other international oil companies. To achieve this, PTTEP has considered various factors, such as laws and regulations, financial structure, tax regimes, and risk management.

Our policy is to manage our subsidiaries as “One Company” with a clear direction, ensuring that the subsidiaries will always follow PTTEP’s business direction and strategy and are mainly managed as one team by PTTEP’s executives and employees. In addition, our management and internal control systems are also to be adopted by and implemented in all of the subsidiaries and in the same way that they are standardized and practiced at PTTEP. To manage associated companies, PTTEP nominates representatives to serve as a shareholder and/or a member of each associated company’s board of directors to participate in defining the overall business strategy and policy. To manage subsidiaries and associated companies, the Company strictly adheres to our CG&BE as the compelling philosophy to ensure effectiveness, transparency, fairness, and achievement of our business goals.

PTTEP management is responsible for appointing of directors of the subsidiaries and associated companies by selecting 1-3 individuals from the Company’s executives, from departmental level or above. The Company may also have to appoint a local director, if required by laws and regulations of the countries in which the investments are made, to manage subsidiaries within the framework and in line with our policy and business strategy. To encourage operational flexibility of the subsidiaries and associated companies work, the Company delegates our authority as specified by the Corporate DAS (Delegation of Authority and Signatures) according to the practice of other leading E&P companies. In addition, subsidiaries and associates companies have to report their performance to PTTEP on a quarterly basis in order to ensure their performance and effectiveness.

9.7 Directors' Serving Terms and Their Directorship in Other Companies

PTTEP prescribes that one-third of the directors shall be retired by rotation in each annual general shareholders' meeting. According to PTTEP Articles of Association, the Board shall consist of no more than 15 members, each with a 3-year serving term. Effective since 2006, the Board has determined that all directors, including independent directors, are allowed to be in the directorship of no more than three consecutive terms or nine years. This essentially allows our competent and qualified directors to continuously and effectively perform duties for PTTEP.

A two-term limit, or six years in equivalence, is too stringent for the Company to benefit from the capability and experience which our directors have earned over the years in the position, as well as often too soon for the Nominating Committee to best select the replacements for optimal benefits of the Company and our shareholders.

In terms of qualification, the directors shall not assume a directorship or executive-level position in more than four listed companies at once. More details on the number of directorships held by each director are disclosed in the "Information of the Board of Directors, Management and Corporate Secretary of the Company" part. Currently, no director holds a directorship or executive-level position in more than three other listed companies. Similarly, serving term is three years for those directors who are also a member of PTTEP's Sub-Committees as prescribed in the Charter of each of our Sub-Committees.

9.8 Roles of the Chairman and the President and Chief Executive Officer

The Chairman, and President and Chief Executive Officer of PTTEP are of two different directors. The Chairman does not participate in the daily management of the business, providing that conducting and monitoring of the business policies are entirely separated from the daily operational management. Duties and responsibilities of Chairman of the Board are as follows:

- 1) Be the leader in supervising the Board to perform its duties with efficiency and to be independent from the management
- 2) Determine agenda of PTTEP's meetings with the President and Chief Executive Officer as stipulated in the duties and responsibilities of the Board
- 3) Be the effective Chairman at meetings of the Board and shareholders, and ensure that all directors carry out duties as stipulated in CG&BE

For transparency and appropriateness, the Chairman is not allowed to hold any position in any of PTTEP's Sub-Committees, which is clearly stated in the charter of each Sub-Committee. Meanwhile, the President and Chief Executive Officer is responsible for the Company's daily management with the authority as empowered and granted by the Board.

9.9 Independence of the Chairman

PTTEP considers independency as the first priority in electing the Company's Chairman of the Board. Shall there be none who is suitable for the position, other directors will be considered. The current Chairman, Mr. Prajya Phinyawat, is an independent director and has performed his duties with autonomy and discretion. The Chairman and his performance are appraised by members of the Board and examined for future improvements. More details on the appraisal results are disclosed in the "Performance Appraisal of the Board" part.

In addition, all of the Company's directors are allowed to independently express their views with freedom regarding the business operation, whether in the meetings of the Board, Sub-Committees, or in other occasions. This is to ensure that the management is able to operate businesses with efficiency, accuracy, transparency, and in the best interests of shareholders.

9.10 Policy and Practices for the President and Chief Executive Officer, and Executives with Directorships in Other Companies

PTTEP recognizes value of knowledge and experience that the President and Chief Executive Officer, and executives have gained from holding a directorship in other organizations outside PTTEP. To ensure a productive, uninterrupted, effective management, the Company however clearly states in CG&BE regarding the amount of time that the President and Chief Executive Officer, and executives are allowed, on only-if-necessary and no-harms-done basis, to hold a directorship position in other companies or organizations which are not of their own or families. In addition, the individuals must be given an approval from the Company's authorized personnel as well as accept the condition that they shall not, in every aspect, associate the Company and their position in the Company in those external activities. Meanwhile, remuneration of the executives who are assigned by the Company to assume a directorship in the organizations or units in, or related to, the petroleum exploration and production are considered PTTEP's; otherwise, the remuneration is considered theirs. More details on the number of directorships held by each executive are disclosed in the "Information of the Board of Directors, Management and Corporate Secretary of the Company" part.

9.11 Conflict of Interest Policy

PTTEP, with the following principles, is committed to preventing all potential conflicts of interest to ensure the Company's stakeholders' confidence that our business management is efficient, transparent, and in compliance with CG&BE.

- 1) Directors, management, and employees shall treat the interests of PTTEP Group with priority and shall not involve or be involved in any activities potentially leading to a conflict of interest.
- 2) Directors, management, and employees shall review and disclose their transactions of conflict of interest to the Company.

3) Directors, management, and employees shall not participate in considering or voting in any matters in which they have stakes and, if such exists, shall completely disclose the information.

4) Directors, management, and employees shall strictly adhere to laws and regulations as required by SET, particularly when involved with connected transactions.

PTTEP establishes preventive measures for the conflict of interest as follows:

1) Directors, management, employees, and related persons must avoid financial involvement or engagement in a relationship with outsiders which may result in PTTEP Group's loss of benefits, conflicts of interest, or operational inefficiency.

2) Directors, management and employees, who may have potential conflicts of interest regarding procedures relating to a bidding process, selection and awarding or the transactions, must report to their supervisor or those participating in the given process through the Company's "Conflict of Interest Declaration Form". They must also withdraw themselves from participating in such processes.

3) Directors, management, and employees must notify the Company immediately if there is a suspicion or uncertainty that their job, they or their related persons involve or hold shares in any business that has a transaction with the Company which may lead to a conflict of interest.

9.12 Business Ethics

PTTEP is committed to operating ethically as Business Ethics are regarded as the behavioral framework and guideline for directors, management and employees to carry out business operations effectively, transparently and ethically, as well as treat all stakeholders fairly. These practices will result in confidence and acceptance in the efficiency and transparency of the Company's business operations, thereby creating a long-term sustainable value for all stakeholders.

The Business Ethics of PTTEP Group is part of CG&BE. The Board first established the Business Ethics in 1989, and it has since been revised every year. The current version of CG&BE was approved by the Board on February 27, 2014, and it is regarded as the highest regulation for operating businesses with PTTEP Group. The new structure of CG&BE enables audiences to understand the contents more easily. In addition, new topics, such as "Protection against Money Laundering" and "Trade Competition", were also added. PTTEP engaged international consultants to participate in this revision project, as well as our executives with the position of Senior Vice President and above, to provide their valuable insights. CG&BE is available for download from the Company's website.

Components of our Business Ethics consist of principles, samples of questions and answers, information for additional study, and departments responsible for each of the principles. There are 10 ethical issues reflecting our organizational values in operating businesses to which all directors, management, and employees must adhere.

- 1) Compliance with Laws, Regulations and Rules, and Respect for Different Customs and Cultures
- 2) Political Neutrality
- 3) Human Resources
 - Workplace environment
 - Privacy, Equal Treatment and Anti-Harassment
 - Illegal Drugs, Substance Abuse and Alcohol
 - Outside Employment, and Executives and Employees' Participation in Outside Activities
- 4) Use and Protection of Information and Assets
 - Keeping Records, Using, Disclosing and Safeguarding Information
 - Use and Storage of Electronic Data and Information Technology Resources
 - Use and Protection of Intellectual Property
 - Insider Trading and Use of Inside Information
- 5) Conflicts of Interest
- 6) Procurement and Contracts
- 7) Anti-Corruption
- 8) Trade Competition
- 9) Anti-Money Laundering
- 10) Safety, Security, Health and Environment

PTTEP distributes CG&BE booklets to all directors, management, and employees for their reference and adherence. They are also required to sign their names as an accord to be committed to applying CG&BE principles and carrying them out to the highest working standards. In addition, the booklets are provided to the Company's business partners, regulatory organizations, parties with regular business relationships with the Company and other interested parties. For the convenience of shareholders, investors and interested parties, contents of the CG&BE booklets can also be found on the website, under the Corporate Governance section.

PTTEP continuously enhances and promotes knowledge and understanding of CG&BE among directors and personnel. The Board governs the ways CG&BE is communicated to the directors and personnel to ensure that they are able to perform according to CG&BE for their business conduct. Means of communication endorsed by the Board are as follows:

1) Introduction to CG&BE was included as one section of the orientation for new directors, new members of the Corporate Governance Committee, and new employees. In 2014, three CG&BE orientation sessions were conducted for new directors, one for new members of the Corporate Governance Committee, and 12 for new employees.

2) CG&BE workshop, which was a full-day course, was developed and conducted for employees with an aim to provide them with the applicable knowledge to be applied to their works and to adjust attitudes of the employees to match the expectations of PTTEP through several learning materials and activities which were fun and motivational. Employees also had a chance to share their opinions on how CG&BE issues could relate to their works. Members of the Corporate Governance Committee, the President and Chief Executive Officer, and the management from their respective Function Group also participated throughout the Workshop to demonstrate to all employees that the directors and management placed high importance on this matter and expected everyone in the organization to strictly comply with CG&BE for their work conducts. In 2014, the Workshop was organized five times to employees at the headquarters from all the 10 function groups, and one time to employees working at the S1 Project.

3) CG&BE course for management was conducted to the new management of PTTEP in an effort to provide comprehensive knowledge and application of CG&BE so they can be a role model for their subordinates, through rigorous discussions and opinion exchanges between the Corporate Governance Committee and the new management.

4) CG&BE promotions to the Board and management were prepared eight times in 2014 to update them with the latest information regarding CG&BE which will be beneficial to their duties in governing PTTEP's businesses to comply with CG&BE. At the beginning of the Board's meetings, the Chairman of the meeting would personally inform the members of new CG&BE issues regarding the duties and responsibilities of the Board as well as encourage directors to adhere to CG&BE.

5) The E-Learning activity was developed for all management and employees to refresh their CG&BE knowledge, assess their level of CG&BE understanding, and monitor the efficiency of business ethics. The activity was also set on an online platform which everyone could access via computers, smartphones and tablets. There were a total 2,737 management and employees participating and passing in the activity or equivalent 70 percent of the total number of management and employees. The result of this activity will be used as a part of the 2015 action plan.

The Corporate Secretary Division has a duty to report CG&BE promotion activities of PTTEP on a quarterly basis to the Corporate Governance Committee and the Board, who is responsible for the follow up and evaluation of these reports. The objective is to allow the Board and the Corporate Governance Committee to effectively keep track of the business operations regarding CG&BE issues. Moreover, for continuous improvement, the 2014 performance results regarding CG&BE will be used as an input to develop the work plan for 2015, which has already been approved by the Corporate Governance Committee.

9.13 Internal Controls

Internal control is one of the key foundations for PTTEP Group to achieve the three objectives, namely, efficient and effective operations, prudent use of resources and safeguarding of assets, accurate, reliable, timely and transparent reporting while in compliance with laws, rules and regulations as well as PTTEP Group's policy and procedure. The Group meanwhile acknowledges importance of an internal control system by ensuring that there is an adequate and effective internal control that suits our business and able to manage risk at acceptable level.

Our internal control is based on the COSO Framework (The Committee of Sponsoring Organizations of the Treadway Commission) and guidance of the State Audit Commission. The framework comprises of the five components as follows:

1) Control Environment

PTTEP recognizes importance of the control environment. We perform our businesses under the standards of good corporate governance in order to meet our corporate objectives, of "Growth, Prosperity, Stability, Sustainability and Dignity". We have designed the organization structure, reporting line, and delegated authority within PTTEP Group, where appropriate and distinct roles and responsibilities between the Board and management to balance their authorities are applied.

Meanwhile, we also give importance to human resources management by developing our own recruitment procedure, and development and retention of management and employees which are most suitable to respond to the Company's business requirements.

2) Risk Assessment

PTTEP Group has implemented ISO31000 Risk Management Process which is applied throughout the organization, including strategic planning, investment and divestment, capital project management, and all business processes. Risks from internal and external factors impacting PTTEP Group's objectives are identified, while their impact and likelihood are assessed, mitigated by appropriate action plans and continuously monitored.

3) Control Activities

PTTEP has efficient control activities that mitigate risks to the acceptable levels which are appropriate for our business and environment. These control activities are implemented through regulations, policies, and working procedures which are reviewed and improved consistently. There is a continuous development of the process, including improving the general controls over technology to ensure that controls are associated to our objectives. We also encourage our employees to be aware of the importance of control activities as well as related laws and regulations compliance to minimise fraud risks as well as to prevent law violations.

4) Information and Communication

PTTEP provides accurate, complete, timely, accessible and sufficient reporting of financial and non-financial information to support effective decision making and the efficiency of internal control. Moreover, the Group has excelled at both the internal and external communication by establishing specific departments to effectively communicate to all stakeholders. We have also set up a special channel for communication to allow stakeholders to report any concerns or pressing issues confidentially.

5) Monitoring Activities

PTTEP continually monitors and evaluates whether controls are presented and followed every year at both organization and process levels to ensure that internal controls continue to be adequate for the current environment and changing risk factors. Where there are areas for improvement, action plans with responsible persons are established for timely resolution. In addition, the Internal Audit Department evaluates the internal control compliance regularly to ensure that operations are still in alignment with the Group's objectives, whereas the evaluation results are reported to the Audit Committee on a regular basis.

More details on the results of the 2014 internal control adequacy evaluation are disclosed in the "Internal Controls and Risk Management" section.

9.14 Risk Management

The Board and management recognize the importance of strong and effective risk management in pursuing PTTEP aspirations. Changes in business environment are inevitable and may expose the Company to certain business risks. Risk management is therefore considered the responsibility of all personnel. We established a Risk Management Policy that requires directors, management, employees, suppliers and contractors to manage risk thoroughly and systematically to assure our target achievement.

PTTEP has instituted a risk management framework that aligns with ISO31000, an international standards for risk management. Risk management practices are taken into account at various levels within the organization, including corporate, function group, asset, division, department, project, process and investment and divestment decision making process.

The Risk Management Department is responsible for ensuring the adequacy of the risk management system and its effectiveness across the organization. Moreover, they are responsible for systematically and effectively mitigating PTTEP's exposure to risks, as well as monitoring the results and periodically reporting them to management, the Risk Management Committee, and the Board. On the other hand, the Risk Management Department is also responsible for the cultivation of a positive risk management culture throughout the organization.

9.15 Remuneration of Auditor

9.15.1 Remuneration of Auditor

(1) Audit fee

For the year 2014, PTTEP and its subsidiaries, both domestic and overseas, had audit fees with the Office of the Auditor General and other auditing firms for a total of USD 1.5 million.

(2) Non-Audit fee*

For the year 2014, PTTEP had a non-audit services fee with the Office of the Auditor General for a total of USD 0.5 million. This fee was charged for the preparation of Letters of Comfort for Offering Memorandums for Subordinated Capital Debentures in aggregate principal amount of USD 1,000 million.

*Remarks: "Non-audit fee" - This terminology is commonly used by Securities and Exchange Commission of Thailand (SEC reporting requirement).

9.15.2 Summary of the Auditors' Report for the Past Three Years (2012-2014)

The Office of the Auditor General expressed an unqualified opinion in the Auditors' Report on the PTTEP consolidated financial statements for the past three years.

9.16 Other Good Corporate Governance Practices

PTTEP places importance on governing our business operations with CG&BE as well as best practices from international standards by integrating them with our existing practices while also taking into account the appropriateness and current business environment and the benefits for the Company, shareholders and stakeholders. Some of the practices are resulted from our continuous effort to surpass requirements of CG 2012 established by SET, such as follows:

1) For an election of a director, each candidate must receive a vote of more than half of the total number of shareholders attending the shareholder meeting and casting their votes (majority vote) even if the number of candidates is equal to the number of director positions required from the election at the time.

2) A director, who turns 70 years of age, is immediately disqualified to serve as a director of PTTEP.

3) A director's serving term cannot be more than three consecutive terms or nine years, without any exceptions.

4) The total number of independent directors must not be less than half of the total number of directors.

5) The right to attend a shareholder meeting must be carefully examined to ensure that granting of a proxy is conducted properly to not interfere with rights of shareholders who attend the meeting.

6) Performance appraisals of the Board and the Sub-Committees are conducted with integrity using the Performance Evaluation Form and the Board Performance Target. Appraisals include an individual self-appraisal, an appraisal of the Chairman, and an appraisal of the Board and each Sub-Committee. Consequently, results of the appraisals are translated into plans for further performance improvements of the directors.

7) In 2014, the Independence Directors Committee had four meetings to discuss and exchange opinions on significant and beneficial matters for the Company, shareholders, and minor shareholders. More details are disclosed in the "The Independent Directors Committee Report 2014" part.

8) Activities and knowledge regarding CG&BE are consistently being promoted and communicated to directors, management and employees through communication channels that are most effective and appropriate for each target audience. Meanwhile, activities have been developed to systematically gauge the understanding level, and a monitoring system has been put in place to improve the progress and results of the findings. More details are disclosed in the "Business Ethics" part.

PTTEP has also implemented the following practices.

1) PTTEP has always placed importance on independency of the Chairman by setting it as the first priority for the Chairman nomination. However, if there are other reasonable and appropriate factors, we will also consider other fundamental attributes such as business-related knowledge and expertise, working experience, and leadership characteristics as well as performance appraisal results. This is to ensure that the Chairman governs the Company with full independency. Currently, the Company's Chairman is an independent director. More details are disclosed in the "Independence of Chairman" part.

2) PTTEP's Articles of Association (AoA) stipulates that the number of PTTEP directors shall not be less than five but not greater than 15. As of December 31, 2014, the Company has 14 directors, while the search for another director is ongoing. This is in alignment with our AoA and the business environment of the petroleum exploration and production, which requires experts from numerous disciplines in order for directors to adequately and effectively monitor various areas of business operations. Currently, PTTEP has five Sub-Committees responsible for specific tasks as described in their respective regulations.

3) The Board comprises directors representing a mix of balanced skills in several fields which are beneficial for the petroleum development and production business. Moreover, the Nomination Committee also places importance on candidates with diverse skills, experiences, expertise, and other qualifications during the nomination process to ensure that the Board composition is complete and most suitable to PTTEP Group. In addition, we also have a policy against gender discrimination.

4) PTTEP determines that at least one member of the Audit Committee must possess adequate experience in or knowledge of finance and accounting to audit with reasonable assurance of the Company's financial statements. Currently, all members of the Audit Committee possess all the aforementioned qualification. More details are disclosed in the "Audit Committee" part under the "Management Structure" section.

5) According to the Budget Procedure Act B.E 2502, PTTEP, a state-owned entity, is required to assign the independent and reliable Office of the Auditor General of Thailand (OAG) to be the Company's external auditor.

6) Although PTTEP has free float ratio of less than 40 percent of the total paid up shares, the Company always places a great importance on protecting the rights of minority shareholders, by organizing several activities to periodically communicate information beneficial to minority shareholders as well as to gain acceptance from other external agencies. For example, we were recognized as an exemplary corporate in organizing the Annual General Meeting of Shareholders (AGM) for the year 2014 by successfully scoring 100 percent in the AGM Checklist Assessment conducted by the Thai Investors Association.

7) Due to the nonalignment with the PTTEP's AoA and the law that requires half of all directors to constitute a quorum of the Board meeting, PTTEP does not have a policy determining the minimum number of members constituting a quorum of the Board meeting to be at least two-third of all PTTEP directors. In 2014, the majority of PTTEP directors however attended all the Board meetings. The importance placed on this issue is clearly reflected by the Company's setting of the number of the Board meeting attendance to be one of the KPIs when evaluating the Board's performance in the Board Performance Target. Moreover, before casting a vote in each agenda, the Chairman also allows an opportunity for all directors to have extensive inquiries and discussions.

8) PTTEP does not have the Employee Stock Option Program (ESOP) for management. We however have established the Employee Joint Investment Program (EJIP) to allow management and employees to voluntarily purchase PTTEP stock every month throughout the five-year period, while the Company shall contribute an addition amount equal to the amount deducted from the payroll of eligible candidates on a monthly basis. All shares purchased each month are suspended from trading for three years from the date of acquiring. The objective of EJIP is to encourage management and employees to dedicate and be loyal to the organization as well as to create the sense of ownership in the long run.

9) PTTEP does not have a policy requiring directors and senior management to report to the Board on their PTTEP stock trading activities at least one day in advance due to the fluctuation of the share price in the market. The Company however has established a policy regarding prevention of the use of internal information to prevent directors, management and employees from making use of such information for personal or others' gains. All directors and

senior management are required to report to the Board on their PTTEP stock trading activities. Moreover, the Company also has a silent period that prohibits directors and senior executives from trading PTTEP stock during specified periods which are usually around those prior to disclosures of significant information to the public.

10) PTTEP does not implement the cumulative voting system as our AoA prescribes that a director is elected using the majority vote. However, the Company has provided other mechanisms to protect the rights of minority shareholders such as allowing them to propose a director candidate in advance for considering at the nomination process.

11) PTTEP places high importance on distributing the invitation letter of the AGM prior to the meeting date to provide shareholders with adequate time to appropriately review the agenda. To ensure that the Company's shareholders receive full benefits, such as rights to receive dividend payment, from the Company in a timely manner, the meeting is usually held in March every year. However, for the best interest of shareholders, the audit of PTTEP's financial statements relatively takes more time than other companies due to the complexity of having international operations across various countries. Currently, we are able to distribute the invitation letter 16 days prior to the date of the Meeting, while we can publish the letter in the Company's website at least 30 days in advance.

9.17 Awards and Recognitions for Good Corporate Governance

1) Two awards from the SET Awards 2014

- SET Award of Honor's Top Corporate Governance Report Awards: The Awards were presented to listed companies with outstanding CG Report for the minimum of three consecutive years, taking into account reports issued by listed companies regarding their practices which are in compliance with CG 2012 of SET. To date, we have received this Award ten times since 2003.

- Investor Relations Awards: The Awards were presented to listed companies with outstanding performance in the area of investor relations (IR), considering from the effort put in to demonstrate the importance of investor relations as well as the support and high level of involvement from the Board and management. Moreover, the number of IR-related activities as well as the completeness and timeliness of information disclosure was also taken into account. Currently, PTTEP has several channels of effective communication with our stakeholders. This is the second year for the Company to receive the Award.

2) CSR Recognition Awards 2014 from SET: The Awards were presented to listed companies in appreciation for their commitment to operate businesses with social responsibility.

3) An Outstanding Sustainability Report Award 2014 from SEC: This Award was in cooperation between SEC and the Thaipat Institute to encourage listed companies to publicize their Environmental, Social, and Governance (ESG) information which is useful for investors and stakeholders.

4) 2013 Thailand Quality Class Award from the Office of Thailand Quality Award, Thailand Productivity Institute

5) Best Public Company 2014 Resources Industry Award from Money and Banking Magazine: The Award was presented to listed companies in SET with excellent performance and efficient management. PTTEP has been recognized with the Award for seven consecutive years.

6) The Collective Action Coalition Certificate from the Collective Action against Corruption Commission (CACC): This certification was awarded to the company which CACC has evaluated to have complete and efficient policies and procedures regarding anti-corruption in four aspects. These are, namely, (1) policy formulation, (2) policy implementation plan, (3) monitoring procedures to ensure effective implementation, and (4) reporting process to the public including communication training plans for employees and other related stakeholders. PTTEP is one of the first blue chip companies in Thailand which has been certified from CACC out of more than 300 companies that have expressed their intentions to fight against corruption.

7) Best IR in Energy Sector 2014 for the second consecutive year and “Best IR by a CFO 2014” for the first time by IR Magazine: These Awards were presented to the companies which have demonstrated outstanding performance in IR activities in Southeast Asia, including timeliness, consistency, and transparency of information disclosure as well as variety and efficiency of available communication channels. The Awards’ criteria also included corporate governance, sustainability practices, and corporate communication to the investment community as well as arrangement of IR-related activities, and a strong support and involvement from the management. The Awards were based on the votes received from more than 400 buy-side and sell-side respondents from the investment community, covering international analysts and portfolio managers across Asia.

8) The Asset Platinum Corporate Awards from the Asset Magazine: These Awards were presented to the extraordinary companies which have continuously demonstrated excellent performance in five aspects of businesses, namely, finance, corporate governance, social responsibility, environmental responsibility and investor relations.

9) The Asian Corporate Director of the Year Award from Corporate Governance Asia Magazine: This Award recognized outstanding corporate directors from boards of public and private organizations in Asia, who have been leaders in leading their boards and executive management to growing of their companies. Moreover, PTTEP received the 10th Corporate Governance Asia Recognition Awards from the CG Asia Magazine. The Award was presented to those extraordinary listed companies which have continuously operated their businesses under the principles of good corporate governance.

10) Asia's Best CEO (Investor Relations) Award, Asia's Best CFO (Investor Relations) Award, Best Environmental Responsibility Award, Best Investor Relations Company Award: These Awards were presented to Chief Executive Officer (CEO) and Chief Financial Officer (CFO) who demonstrated excellence in creating shareholder values through upholding the highest standards of corporate governance and business ethics. As for the Best Environmental Responsibility Award, it was presented to PTTEP for our outstanding practices in environmental responsibility, while the Best Investor Relations Company Award was presented to the Company for our exceptional performance in investor relations.

11) The Best CEO Award and the Best CFO Award from the Investment Analysts Association: These Awards were presented to CEO and CFO of the listed companies which have demonstrated management excellence in disclosing information in a consistent, timely, insightful, accurate, and concise manner, as well as to those who possess high knowledge in their respective industries and those who have managed businesses with good corporate governance and business ethics.

12) The Best Strategic Corporate CSR and Best Senior Management IR Support in Thailand from Alpha Southeast Asia Magazine: The Awards were presented to PTTEP for receiving votes from more than 400 investors, fund managers, and analysts across Asia, Europe and USA.

13) The Global CSR Award 2014, Gold Level, in the category "Best Community Program Award" from the Pinnacle Group International Singapore: PTTEP's winning entry was the "Flare Gas Utilization for Local Agricultural Product Processing" Project which develops flare gas utilization facility to provide substitute fuel for local communities to use as cooking gas in agricultural product processing. This Project helps communities to alleviate poverty by raising their incomes.

9.18 Reports of the Sub-Committees

9.18.1 The Corporate Governance Committee Report

PTTEP places great importance on the adherence of the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) for our business operation and has therefore continuously improved it. The Board has assigned the Corporate Governance Committee, which consists of at least three independent directors, to govern and ensure that CG&BE are in compliance with across the organization.

During the year, the Committee held seven meetings and the majority of the incumbent members attended every meeting. The results of the meetings can be summarized as follows:

1) Assessed and reviewed CG&BE to be in compliance with the laws, international practices, leading companies' practices, and recommendations of other institutions. All results were submitted for the Board's approval.

2) Governed PTTEP to have an effective anti-corruption mechanism in place by assessing and reviewing the completeness and efficiency of related policies and procedures as well as by ensuring that the Company received the certification from CACC on July 4, 2014.

3) Promoted business operations of PTTEP Group and performance of the Board, management and employees to be in line with CG&BE by monitoring and providing recommendations on CG&BE-related activities to be organized to enhance knowledge and understanding of CG&BE, as well as on the complaints received through the CG Hotline channels on a quarterly basis. Moreover, the Committee also followed up on the management's implementation plan in response to the feedbacks provided on the CG Visit. The Committee also regularly participated in and emphasized on the significance of CG&BE to management and employees.

4) Established CG reporting guidelines to be in accordance with the principles of SET with the objective to incorporate the CG Report to be a part of the PTTEP Annual Report for all stakeholders.

5) Monitored and provided recommendations on the implementations to be in line with the Corporate Governance Report of Thai Listed Companies 2014 and reported the results to the Board for acknowledgment or consideration (as the case may be).

6) Reviewed and provided recommendations relating to PTTEP's procurement management before the management proposes the matter to the Board for approval. The Committee also reviewed and evaluated strategy, criteria, and consideration process relevant to the decision-making processes of procurement from projects across PTTEP Group as well as monitored and evaluated the results of our recommendations in order to help govern and support the procurement process to be effective and in compliance with CG&BE.

7) Provided recommendations on and monitored PTTEP's Corporate Social Responsibility (CSR) performance and work plan to further help CSR activities of the Company to create values to communities and societies in the long-run.

The Corporate Governance Committee reported minutes of all meetings to the Board on a regular basis. In 2014, the Committee abided by its assigned tasks, according to the Charter for the Corporate Governance Committee B.E. 2548 and its amendment with prudence, competence and independence. It properly provided straightforward opinions for optimal benefits of PTTEP, shareholders, and other stakeholders.

Admiral Tanarat Ubol

(Tanarat Ubol)

Chairman of the Corporate Governance Committee

9.18.2 The Audit Committee Report

The Audit Committee of PTTEP consists of three independent directors who have a considerable amount of knowledge, expertise and experience in economics, finance, and law. The Audit Committee is chaired by Mr. Ampon Kittiampon, with Mr. Achporn Charuchinda and Mr. Sethaput Suthiwart-Narueput as other members of the Committee. All members are knowledgeable and experienced in reviewing financial statements.

In 2014, the Audit Committee has performed its duties, as assigned by the Board, in accordance with PTTEP regulations, the Audit Committee Charter, and other relevant regulations of SET. During the year, the Committee conducted 10 meetings with management, the PTTEP's internal and external auditors. Duties performed during 2014 by the Audit Committee are summarized below.

1) Reviewing of financial reports

The Audit Committee reviewed PTTEP's quarterly and annual financial statements together with management and the external auditor, which is the Office of the Auditor General of Thailand (OAG). The Committee inquired, commented and provided recommendations to management on the financial statements to ensure that these statements were complete and accurate, in compliance with accounting standards, including the International Financial Reporting Standards (IFRS), as well as to ensure that these statements were sufficient and followed through with a timely disclosure of all significant matters.

In addition, the Audit Committee also provided recommendations on PTTEP Management Discussion and Analysis (MD&A) regarding clear information, analysis on business performance and potential risks on the Company's operation. The Committee also identified operational plans to cope with domestic and international environments.

2) Reviewing of the internal control system

The Audit Committee reviewed PTTEP's internal control and internal audit systems to ensure their adequacy, appropriateness and efficiency. The Committee also encouraged the Company to implement preventive controls such as providing recommendations to management on an improvement of the due diligence process carried out by the Investment Committee. This is to ensure that our operations are sufficiently effective to support the Company's ongoing expansion plan.

3) Reviewing of connected transactions or transactions with potential conflicts of interest

The Audit Committee reviewed connected transactions or transactions with a potential conflict of interests, to ensure their rationality and optimal benefits for PTTEP and our shareholders, especially minority shareholders. Although there are connected transactions with our major shareholders carried out during the year, the Committee remained impartial by also taking into account on benefits of our minority shareholders when considering such transactions. The Committee also reviewed the disclosure of such information to ensure accuracy and completeness.

4) Examining compliance of laws and related regulations

The Audit Committee reviewed the performance of PTTEP and our subsidiaries regarding the compliance with the securities and exchange laws, SET regulations, and other laws related to the business. The Committee acknowledged the compliance report relating to our business operations as reported by the Compliance Department as well as other compliance audit results as reported by the Internal Audit Department. The Committee also provided support to the Compliance Department through recommendations in an effort to increase the effectiveness of our compliance process.

5) Conducting oversight of internal auditing

The Audit Committee approved the annual audit plan of the Internal Audit Department which aligns with the key risks and direction of PTTEP. The Committee reviewed audit results for both in-house audits and joint venture audits, considered major audit issues, and regularly monitored management to follow up on action plans to resolve the issues which might have arisen from internal operations (for In-house audits) and external operators (for joint venture audits).

The Committee also considered a revision of the Audit Committee Charter, approved the Audit Charter, appraised the annual performance of the Chief of the Internal Audit Department, and endorsed the budget and workforce requirements of the Internal Audit Department.

6) Nominating of/Meeting with the External Auditor

The Audit Committee considered and nominated OAG to continue to serve as our external auditor and also decided upon the audit fees for the year 2014. During the year, the Committee had two meetings with OAG and the Internal Audit Department in the absence of PTTEP's management to acknowledge the approach and audit plan of OAG as well as other auditing problems or obstacles faced during the audits for future improvements.

7) Fulfilling other oversight roles

7.1) Anti-Corruption practices

In 2014, the Audit Committee performed an important role in the oversight of PTTEP Anti-Corruption Policy and procedure by reviewing and evaluating their completeness and effectiveness. In this regard, PTTEP has been certified as a member of Thailand's Private Sector Collective Action Coalition against the Corruption Council (CAC) on July 4, 2014.

7.2) Economic forecast review

The Audit Committee provided recommendations to management to consider the global and domestic economy which affect the risk level of overall investment and strategy of PTTEP to ensure the optimal benefits for the Company. Examples of such risks include foreign exchange rate, oil price volatility, political situation in Syria and Iraq (ISIS & ISIL), EBOLA outbreak, and natural disaster.

The Audit Committee performed its duties with prudence, while making practical recommendations and suggestions to promote PTTEP Good Corporate Governance for the protection and optimization of the interests of our shareholders and other stakeholders. The 2014 performance of the Audit Committee was assessed by completing a self-appraisal, and an assessment by the Board and related units. The Audit Committee received the "Very Good" grade for its performance.

Opinions of the Audit Committee regarding the results of its duties performed in 2014 are summarized as follows:

- PTTEP's accounting system and financial reports were accurate and reliable and were disclosed in a complete, sufficient and timely manner.
- PTTEP's internal control systems were adequate, appropriate, in compliance with related laws and regulations, and have been continuously improved to suit the Company's businesses at the present and in the future.
- OAG was independent and experienced in auditing PTTEP's financial reports to ensure accuracy and reliability.
- Based on reviews of PTTEP's connected transactions or transactions with potential conflict of interest, the Audit Committee regarded the Company's disclosure of such information as being accurate and complete. Conditions and prices related to the transactions were fair and appropriate, and approved by the management and the Board prior to their execution.

Ampon Kittiampon

(Mr. Ampon Kittampon)

Chairman of the Audit Committee

9.18.3 The Nominating Committee Report

PTTEP's Good Corporate Governance requires the Nominating Committee to consist of at least three directors where most of the Committee members are independent directors. They are obligated with responsibilities as specified in the Nominating Committee Charter during their three-year service term.

The current Nominating Committee's term extends from June 28, 2012 to June 27, 2015. As of December 31, 2014, the members of the Nominating Committee consisted of Mr. Nuttavudh Photisaro (Independent Director) as the Chairman, while Mr. Manas Jamveha (Director) and Colonel Nimit Suwannarat (Independent Director) serve as the two remaining members. In 2014, the Committee has performed our duties, as assigned by the Board of Directors in the Nominating Committee Charter with prudence, full competence, and independence. The duties and responsibilities of the Committee involved preparation of candidate lists when there is a vacancy due to retirement by rotation or other reasons, where this proposal is to be presented to Board of Directors or the annual general shareholders' meeting. Moreover, the Nominating Committee has also been responsible for considering a qualified director to be the Chairman or a member of each Sub-Committee. Other duties included the review of Board Performance Target and performance appraisal form of the Board, Chairman, Sub-Committees, President and Chief Executive Officer (CEO), as well as the revision of the Charter.

In 2014, the Nominating Committee has convened five times, where its members with vested interests were accordingly abstained on relevant agendas. The Corporate Secretary, who also acted as the secretary to the Committee, was present at every meeting where all results of the meetings were reported to the Board of Directors for acknowledgement.

PTTEP has disclosed its detailed principles and procedures for nomination of directors as well as the President and CEO in the annual report.

Nuttavudh Photisaro

(Mr. Nuttavudh Photisaro)

Chairman of the Nominating Committee

9.18.4 The Remuneration Committee Report

The Board appointed the Remuneration Committee which mainly consists of independent directors. The Remuneration Committee is chaired by an independent director. Its responsibility is to consider appropriateness of remuneration for the Board, Sub-committees, President and Chief Executive Officer, as well as the salary structure of senior executives. The underlying principles, procedures and structure are fair and reasonable.

The current Committee, whose term is from June 28, 2012 to June 27, 2015, consists of Mr. Achporn Charuchinda (Independent Director) as the Chairman, Admiral Tanarat Ubol (Independent Director) and Mr. Pailin Chuchottaworn as the members. Mr. Achporn Charuchinda replaced Mr. Athapol Yaisawang as the Chairman, while Admiral Tanarat Ubol replaced General Pornchai Kranlert since September 25, 2014.

In 2014, the Remuneration Committee has convened one time to perform its duties and to achieve its role and responsibility with prudence and independence, as designated by the Board in the Remuneration Committee Charter. All members of the Remuneration Committee attended the meeting, and results of all the meetings were report to the Board, which included the following issues.

1) Reviewing of remuneration for the Board and Sub-Committees

The remuneration was based, by 50 percent, on their performance and on a whole-board basis according to the 2014 Board's self-appraisal form and, by 50 percent, on their performance in comparison to key performance indicators according to the Board Performance Target set by the Nominating Committee since late 2012. Other factors taken into consideration included corporate performance results, remuneration of other comparable listed companies, duties and responsibilities required and the overall economic situation. The underlying principles or procedures and structure were fair and reasonable.

2) Reviewing of remuneration for President and Chief Executive Officer

The remuneration was based on fair and reasonable principles or procedures and structure regarding regard to duties and responsibilities of the President and Chief Executive Officer as well as the Company's annual performance.

The Remuneration Committee performed its role in a transparent, fair and reasonable manner. For the stakeholders' confidence, details of the remuneration of the Committee are disclosed in the annual report.

Achporn Charuchinda

(Mr. Achporn Charuchinda)

Chairman of the Remuneration Committee

9.18.5 The Risk Management Committee Report

The Risk Management Committee consists of five members, two of which are independent. Mr. Nuttachat Charuchinda is the Chairman of the Committee, while Mr. Chakkrit Parapuntakul, Mr. Chavalit Pichalai, Mr. Sethaput Suthiwart-Narueput, and Colonel Nimit Suwannarat are members of the Committee.

The Risk Management Committee members performed their duties and responsibilities as assigned by the Board, according to the Risk Management Charter. During 2014, the Committee held nine meetings which resulted in the followings.

1) Promoted and embedded the risk management culture through all employees and risk owners within the organization.

2) Considered risk factors that impacted corporate strategy and objective. PTTEP conducted extensive qualitative and quantitative evaluation of the Company's Corporate Risk Profile. The Risk Management Committee was able to provide constructive insight and direction on how to mitigate risks as well as to oversight over the mitigation progress. Key Risk Indicators (KRI) were established to provide early warning for corporate risks which could prevent the organization from achieving our goal with quarterly monitoring. Financial risk management and oil price risk management guidelines were set up and monitored closely from the beginning of the year in order to minimize the impact on the Company's net income.

In 2014 the Committee also focused on Safety Security Health and Environment (SSHE) especially due to the nature of our exploration and production, in which there are construction activities conducted both onshore and offshore to ensure production startup from Zawtika Project in the Republic of the Union of Myanmar where potential accidents may occur. The Company however was able to manage these risks and maintain our safety record in the top quartile among the E&P companies.

3) Evaluated and authorized appropriate measures to manage and mitigate critical risks to PTTEP at the strategic level, while providing oversight over new investments, mergers and acquisitions, extension of concession, entering into new commitment phases, divestment. Examples include new investment in Brazil, withdrawal from the Republic of Kenya, and additional investment in the Myanmar M11 Project.

4) Considered and screened of the Company's corporate strategic plan, five-year investment plan (2015 – 2019), 2015 annual budget, key performance indicators, and relevant risks associated to declining oil price at the end of the year. The Committee advised action to adjust work plan and budget, including preparation of provisional plan in response to low oil price conditions.

5) Considered and approved the amendment of the Risk Management Committee Charter in 2014, making it more suitable and responsive to the ongoing events.

6) Provided guideline and monitored the Business Continuity Management (BCM) process which is a part of the Committee's oversight responsibilities to effectively and efficiently manage risk to ensure that the Company is prepared in case of an emergency or crisis. An example of this is the Bangkok Shutdown at the beginning of 2014 when we were able to continue to conduct our business activities without any interruptions.

The Risk Management Committee reported our findings to the Board on a regular basis.

Security of Thailand's energy supply is another matter which the Committee has emphasized and considered as an important part of the Company's mission. An example of this would be the impacts of a decrease in gas production from the Yetagun Project. In this given situation, the Committee's advice was to compensate the shortfall by a short-term supply from other projects, while cooperating closely with PTT to ensure minimal impact to the country's energy supply.

In summary, it is our view that the Committee had performed our duties in 2014 prudently, competently, and independently with knowledge and capability consistent with good corporate governance, while providing candid views to all parties for the benefits of PTTEP, shareholders, and stakeholders.

Nuttachat Charuchinda

(Mr. Nuttachat Charuchinda)

Chairman of the Risk Management Committee

9.18.6 The Independent Directors Committee Report

The policy and qualification of the independent directors are stated in the Good Corporate Governance and Business Ethics of PTTEP Group and the Independent Committee Charter, which, in turn, defines the duties and responsibility of the Committee. Roles of the Committee are to oversee and make recommendations independently on the corporate management to ensure and protect the overall interests and benefits of the Company's major and minority shareholders. The Committee also reviews PTTEP's compliance as well as the independent directors' own definition to be appropriately and completely in line with the related laws as well as regularly updating the Charter.

The Independent Directors Committee consists of eight independent directors out of 14 directors from the Board, a selection ratio which is more stringent than the Securities and Exchange Commission's requirement. Below is the list of the current Committee's members.

- | | | |
|----|---------------------------------|-----------------|
| 1) | Mr. Prajya Phinyawat | Chairman |
| 2) | Admiral Tanarat Ubol | Deputy Chairman |
| 3) | Mr. Ampon Kittiampon | Member |
| 4) | Mr. Achporn Charuchinda | Member |
| 5) | Mr. Nuttavudh Photisaro | Member |
| 6) | Colonel Nimit Suwannarat | Member |
| 7) | Mr. Piti Tantakasem | Member |
| 8) | Mr. Sethaput Suthiwart-Narueput | Member |

In 2014, the Committee has convened four times to perform and fulfill its duties and to achieve its duties and responsibilities. All incumbent members attended the meetings, while those members with vested interests were accordingly abstained from relevant agendas in order to complete the assigned tasks with prudence, competence and independence. The Committee reported minutes of all meetings to the Board on a regular basis, and the results of the meetings can be summarized as follows:

- 1) Reviewed and revised the Independent Directors Committee Charter to be in line with the Good Corporate Governance principle and disclosed the performance of the Independent Committee in the annual report.

- 2) Reviewed the principle of the Independent Director Committee of PTTEP to be in line with rules, regulations, and international practices of leading companies, ensuring that it is completed and update.
- 3) Scheduled meetings of the Independent Director Committee for 2015.
- 4) Commented, recommended and followed up on important issues of PTTEP management in which the management further took actions accordingly and reported to the Board.
- 5) Provided recommendations with independence and made inquiries in the Board meetings, regarding particularly connected transactions between PTT and PTTEP to protect the interests and rights of the Company's minority shareholders. The Committee also ensured prudence of the meetings by not allowing any directors who had a conflict of interest to vote or participate in the meeting during the agenda. This was to allow the remaining directors to openly discuss the issue without interference as well as to make the decision independently for benefits of PTTEP, while protecting the rights of the Company's shareholders, especially the minority, and other stakeholders;
- 6) Provided opinions and views at the Board meetings, as well as requesting that all the minutes be recorded. Moreover, should a director be absent from a Board meeting and have a differing opinions on any of the resolutions, the director was allowed to afterward provide his or her opinions to the Chairman of the Independent Directors Committee.

The Independent Directors Committee has performed its duties by providing recommendations and views on significant matters which are beneficial to the Company, investors and minority shareholders with independence, transparency, and without any hidden interests in order to assist the Board to perform with highest efficiency and effectiveness.

Prajya Phinyawat

(Mr. Prajya Phinyawat)

Chairman of the Independent Directors Committee

10. Corporate Social Responsibility

10.1 Operational Policy towards Responsibility for the Society and the Stakeholders

PTTEP commits to the vision to become a leading Asian E&P company, driven by technology and green practices, creating sustainable values for all of the stakeholders.

The Company has developed the Sustainable Development Policy, also known as the G.R.O.W.T.H Policy, to be adopted across the entire organization. The purpose is to demonstrate the Company's definite objective and determination to overcome all of the challenges towards developing and becoming a sustainable organization (For the Sustainable Development Policy, see the Company's website).

The Company has also developed the Sustainable Development Guideline underlying various aspects which are important to sustainability of the organization, in an effort to establish understanding to ensure that all the functions are in line with one another. Harmony in respect to social responsibility among the divisions is also established by having them operate with policy accordingly to international standard policies such as ISO 26000, Safety, Security, Health, and Environment (SSHE) policy of the International Association of Oil & Gas Producers (IOGP), and the Universal Declaration of Human Rights (UDHR).

As for the Company's responsibility towards the stakeholders, PTTEP has designated each division to have its own separate responsibility and participation programs as they are involved with different groups of the stakeholders.

For details, see the PTTEP Sustainability Report 2014.

10.2 Operation and Reporting

PTTEP has adopted the Global Reporting Initiative (GRI) which is one of the world's most prevalent standards for sustainability reporting to provide information regarding the Company's economic, environmental, and social and governance performance. Information about the Company's capability to reduce greenhouse gas emission, for example, is included in the report. The high standard allows PTTEP to monitor its sustainability effectively and comparably to those of the Company's financial management. The report and its indices have also reflected and been incorporated into other parts of the Company's business. This ranges from business planning, corporate risk assessment, internal control process, internal auditing, monitoring and reporting of the Company's performance. In 2014, all of the indices have been on the targets.

PTTEP also has another report dedicating specifically to sustainability. The report is of a standard comparable to the GRI's sustainability reporting and the report required in auxiliary of the oil and gas industry. The Company's sustainability reporting also demonstrates our continuous effort in fulfilling the ten principles of the United Nations Global Compact (UNGC) as well as other respectable reporting standards of the oil and gas industry. The Company discloses the information regarding sustainability as it is vital for stakeholders to decide for themselves of the Company's future.

For details, see the PTTEP Sustainability Report 2014.

10.3 Impacts of Business Operation on Social Responsibility

None

10.4 Projects and Activities for Benefits of the Society and the Environment (After Process)

PTTEP believes that, for a business to be sustainable, the society and the environment in which it situates and operates must also be sustainable. Therefore, in addition to the general management of our business projects and their own sustainability, the Company also emphasizes on other types of projects and activities which lead to sustainable development of the society and the environment.

We learn from our experiences how to initiate new projects and organize activities effectively for further development. The Company has divided our projects and activities into four themes, namely, basic needs, education, environment, and culture & sports.

In 2014, the Company focuses on the Reforestation Restoration Project for Eco-learning at Sri Nakhon Khuean Khan Park in response to social and environmental issues in challenging the sustainable development. Meanwhile, the reforestations of 200,000-rai area are continuously implemented. The "PTTEP GREEN UP" Project (the Reforestation Employee Engagement Campaign) has also been promoted to create more social responsibility awareness of the employees, their family members, and stakeholders who were invited to participate in the project's activities.

For details, see the PTTEP Sustainability Report 2014.

11. Internal Controls and Risk Management

11.1 Board of Directors' Evaluation on PTTEP Group's Internal Controls

PTTEP consistently recognizes the importance of the risk management and internal control. The Management appoints the Internal Control Section to assess the adequacy and effectiveness of internal control, whereas the Board of Directors appoints the Audit Committee to provide oversight to ensure that the internal control supports the achievement of business operations, accurate and reliable reporting, and compliance according to laws and regulations.

At the Board of Director Meeting No. 3/2015/390 on February 26, 2015, in which the Audit Committee was also in attendance, the Board endorsed the Audit Committee's report on the adequacy of internal control system of the Company. The report states that PTTEP and its subsidiaries designed and followed the internal control system adequately in order to minimize key risks potentially harmful to the Company's operations, and once control deficiencies are detected, they will continuously be improved to suit the current and future businesses as well as to comply with related laws and regulations. The Audit Committee also provides the following suggestions.

- To place importance on the prevention of fraud by having internal controls in place in order to monitor and report fraud to management. In addition, further preventive measures should be developed to prevent inappropriate acts from reoccurring. Having these measures in place helps to create a corporate culture that openly communicates such acts without reluctance.
- To enhance use of information system to support internal controls. The system should be sufficiently flexible so that it can be readily improved and modified in case of a shortfall. The system should also be continuously developed to stay in line with changes of the work process.

In addition, the auditor of PTTEP's and its subsidiaries' 2014 financial statements from the Office of the Auditor General has assessed the effectiveness of the Company's internal control system, according to the auditing standards and the rule of State Audit Commission governing the formulation of internal control standard, B.E. 2544. The auditor identifies that the Company has designed, implemented, and maintained internal control system which effectively takes into account the business risks and closely follows the established objective of good internal control practice.

The assessment result of the internal control covers five key components according to the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

1. Control Environment

PTTEP Group has an efficient and adequate control environment which helps to promote and embed ethics into the Company's culture. The Company also has a clearly defined organizational structure and job responsibilities which can be summarized as follows:

- PTTEP Group operates its business under the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE). Written policy is formulated with an annual review for possible amendment and assessment of conformance to the policy. All management and staff are required to sign as evidence of acknowledgement and to act accordingly. Moreover, CG&BE is communicated to the directors, management, and employees on a regular basis through various training courses and activities; for example, CG&BE course for new management and employees, e-learning for all employees, CG&BE workshop for a number of business units, and etc.
- PTTEP Group has established a clear segregation of duties between the Board of Directors and the management. The Board's task is oversight and not involved with day-to-day operations which are the management's responsibility. In this manner, there is a balance between the role of oversight and the role of carrying out day-to-day tasks. The Board of Directors delegates their powers to the management through the group's regulations, appropriately ensuring flexibility and efficiency in the operation.
- The organization structure is appropriately designed with high flexibility and efficient collaboration and suitable for exploration and production business as well as Internal Control principle, e.g., segregation of duties, and check and balance. Meanwhile, reporting lines, authorities and responsibilities are also clearly defined.
- There are clear human resource management policies in place such as manpower planning, recruitment, and compensation. PTTEP Group also considers competency development as a high priority; the individual competency development plan (ICDP), succession, rotation and promotion plans are thoughtfully put in place as a result. The committee is established to ensure proper development and growth of staff which can effectively support and respond to PTTEP Group's business requirement. PTTEP also conducts employee engagement surveys in order to develop improvement plans to increase employee satisfaction and engagement.
- Management and staff understand and are aware of the importance of having an adequate and relevant internal control. In 2014, the Internal Control Section organized trainings for all staff levels as guided by COSO.

2. Risk Assessment

PTTEP Group promotes the importance of risk assessment. In the year 2014, we achieved full score in Dow Jones Sustainability Index (DJSI) World Oil and Gas Industry's in the area of Risk Management. The key contents are as follows:

- Risk Management Committee is appointed to be responsible for determining risk management policy and framework of the Company. This includes governing and supervising risk management to ensure successful achievement of activities both at the corporate-wide and at the project level. The Committee convened 9 times in 2014 and the results of the meetings were reported to the Board of Directors.

- Risk management policy, standard and guideline are put in place, emphasizing that risk management is the responsibility of the directors, management, and all employees, including PTTEP Group's contractors, which must follow to achieve the Company's business objectives.

- Risk management is applied throughout the organization including 1) Strategic Planning and Management which assesses risk profiles at every corporate level, i.e., corporate, function groups, divisions, departments, and assets/projects, 2) Investment and Divestment decision making, 3) Capital Project Management, and 4) Business process management. The Company assesses the risks from both external and internal factors as well as evaluates the impact and likelihood of those risks. Mitigation plans are developed and then executed to reduce the level of risk through different measures, e.g., establishing of the Operational Risk Committee which specifically manages technical and safety risks. The Operational Risk Committee also provides support to different projects in order to enhance efficiency of their operations. In 2014, the Operational Risk Committee convened 10 times. PTTEP Group also assesses and closely monitors the Key Risk Indicator (KRI) which is thoughtfully designed to provide an early warning of risks that potentially might prevent the Company from achieving its business objectives.

- SAP GRC is implemented to systematically keep track and records of risk management as well as to monitor risks and mitigation plans.

- Risk management has been communicated consistently through several channels and activities such as establishment of "Stay Smile" booklet which is used to communicate with all staff through user-friendly animation the concepts of Risk Management, Business Continuity Management (BCM), and Internal Control. To further supplement this, floor-visit and workshops are also arranged to all business units to provide guidance on how to utilize the risk management tools effectively and efficiently.

Details of risk management are disclosed in the "Risk Factors" part.

3. Control Activities

The objective of control activities is to ensure that PTTEP Group's businesses are systematically and efficiently operated as well as that risks can be appropriately managed. PTTEP Group's control activities as follows:

- PTTEP Group has an explicit and extensive set of written regulations and policies as well as how to effectively operate them, namely, CG&BE, Human Resources Management Regulation, Budgeting, Finance and Accounting Regulation, General Procurement Regulation, Procurement for Exploration and Production Regulation and Reporting, Whistleblowing Regulation and Investment Project Management Regulation. In addition, there are charters that specifically govern all of the five committees, namely, the Audit Committee, the Remuneration Committee, the Nominating Committee, the Risk Management Committee, and the Corporate Governance Committee. These regulations and charters are the frameworks that define the scope and authority of directors and management.
- The Cost Efficiency Committee is appointed to consider initiatives for cost efficiency purpose.
- The Investment Committee's roles and responsibilities are reviewed to ensure that investment and divestment processes such as due diligence activities lend themselves to a more efficient investment decision.
- The Procurement Committee's authorities and responsibilities are revised according to the Procurement for Exploration and Production Regulation to enhance the decision-making process.
- PTTEP Group continuously develops and reviews business processes such as Land, Building and Movable Asset Management Procedure, Reference Price Guideline, and Invoice Payment Management System to ensure that current processes are efficient and that all necessary controls are put in place, thereby keeping acceptable risk level all in check. PTTEP also develops the Segregation of Duties (SoD) guideline to improve the access rights of SAP.
- PTTEP Group ensures that we strictly follow all laws and regulations through various activities such as training of new laws, launching of e-learning program on anti-corruption to all employees, and updating the Legislation Database. The activities also include monitoring and providing suggestions to prevent non-compliance cases.

- IT Steering Committee is appointed to further efficiency and effectiveness in the management of information technology and align IT roadmap with corporate strategy. In addition, PTTEP has developed general controls over technology consisting of infrastructure and security management such as classifying confidential data types in order to limit access rights, data transferring and data registration.

- Delegation of Authority and Signatures (DAS) is reviewed and updated. The measure clearly specifies the management's authority and authorized budget approval amount to support flexible day-to-day business operations, while ensuring appropriate segregation of authority according to the internal control guideline.

- PTTEP Group emphasizes importance of preventing conflict of interests. Transactions of major shareholders, directors, management or related persons have to be verified by the Audit Committee. Directors, management and employees shall not be involved in any activities potentially leading to a conflict of interest and shall treat the Group's interests with priority and transparency.

- PTTEP appropriately manages subsidiaries and associated companies by appointing both management and employees to also jointly work the parts in these entities. On the other hand, procedures for managing and governing international assets are established by corporate functions, whereas, for joint ventures, there are units specifically assigned with responsibility to manage and audit each project.

4. Information and Communication

PTTEP has set up an efficient and effective information and communication channels for both internal and external communication as follows:

- PTTEP provides the Board of Directors with complete and ample information in advance with clearly outlined objectives of the presentation in order to allow the Board to study and understand ahead of the decisions.

- Business Ethics regulations specify the use and protection of the Company's information and assets. In addition, the Document Control Policy is established to ensure that the documents are properly managed and categorised. Confidential information is considered to be intended for the PTTEP Group's internal use only and solely for the duties and responsibilities assigned.

- Effective and efficient internal and external communication channels are firmly put in place. Employees receive information via intranet, email, and through meetings in order to ensure that they can effectively coordinate their work closely among themselves to achieve all assigned tasks. For external communication, PTTEP has business units, e.g., Investor Relations, Corporate Communication, Corporate Governance and Shareholders' Rights to disclose to all stakeholders of accurate, complete, sufficient, and timely information.

- PTTEP provides accurate and truthful facts about energy via "Energy Fact" to both employees and public.

- PTTEP has established special communication channel for employees or external individuals to discretely report violation of laws, regulations, rules and other wrongdoings. This channel is established with an explicit written document within the Reporting and Whistleblowing Regulation.

5. Monitoring Activities

PTTEP monitors and evaluates internal control activities on a yearly basis as follows:

- Internal control assessments at organizational level are performed based on the Securities and Exchange Commission's guidelines.

- Control Self-Assessment (CSA) according to the State Audit Commission's guideline is conducted. PTTEP uses CSA Questionnaire as a tool to assess the adequacy and effectiveness of internal control. In 2014, CSA was performed for the stock management process to ensure that current control activities are suitable and adequate under the acceptable risk level. The improvement plans are also developed to resolve all possible concerns found.

- The Audit Committee assigned the Internal Audit Department to audit and suggest improvement required in order to ensure the adequacy and effectiveness of internal control system.

11.2 Head of the Internal Audit Department and Head of the Compliance Department

11.2.1 Roles and Responsibilities of Head of the Internal Audit Department

PTTEP has established the Internal Audit Department which has the functional/direct reporting line to the Audit Committee. Key Roles, Responsibilities and Scopes of Work of the Internal Audit Department include:

(1) Objective Assurance

The auditors provide a reasonable level of assurance to evaluate and improve the effectiveness of risk management, internal control, and governance process.

(2) Joint Venture Audits

The auditors conduct audits on the Operators for projects that PTTEP has invested in to ensure that they comply with the Joint Venture Agreements and other related contractual arrangements and that the expenditures charged are fair, equitable and reasonably incurred for the benefit of all partners.

(3) Consulting Services

The auditors pre-determine all scopes of service with requestors before starting the engagement. Consulting engagements are designed to improve the efficiency and effectiveness of existing processes or propose additional recommendations on governance, risk management, and internal control. Such recommendations may also include sets of advice on design, which are aimed at improving control processes.

(4) Fraud Investigation

The auditors should be alert to deceptive schemes with potential for frauds or schemes that are likely to lead to other illegal actions. It is also important that the auditor identifies control weaknesses that could potentially create opportunities for frauds. The Head of the Internal Audit Department is responsible for undertaking the investigation of any reported or suspected frauds, following the Reporting and Whistleblowing Regulation B.E. 2556. No Investigation Committee member is to possess any conflict of interest with regard to the report under investigation. It should be well noted, however, that actions regarding the prevention, detection, further investigation, and prosecution of fraud offenders are clearly set forth as falling under the responsibility of management.

(5) Special Audit Requests

Special audit requests are not included in the annual audit plan. The Internal Audit Department performs special audits as requested by the Company's management and/or Audit Committee to prevent and mitigate risks which may occur.

Referring to the Audit Committee Charter B.E. 2542 (Combined Charter), the Audit Committee has the duty to determine an internal audit unit's independence as well as approve the nomination, transfer, and reward or punishment of the Head of the Internal Audit.

Ms. Chaveeporn Chamsang is appointed as Vice President of the Internal Audit Department, having already functioned in this position from October 1, 2013 until the present. The Audit Committee deems that this Head of the Internal Audit Department is qualified under the aforementioned title as is demonstrated by her educational background, necessary knowledge, skills, and work experience. She has also remained up-to-date in terms of professional knowledge and expertise, primarily through extensive training on internal auditing methodologies and internal auditor competency development. Such stringent attention to this position head and the regular support from the entire team highlights the importance the Company places on an efficient and effective internal audit department and excellent achievements of a superb Audit Committee.

More details of the Head of the Internal Audit Department are disclosed in the “Details of Head of the Internal Audit Department and Head of the Compliance Department” part.

11.2.2 Roles and Responsibilities of Head of the Compliance Department

PTTEP has established the Compliance Department which has a direct reporting line to Senior Vice President, Legal Division and the President and Chief Executive Officer. The key responsibilities are to encourage the PTTEP Group to fully comply with applicable laws and external regulations and support management in managing compliance risk efficiently through various compliance programs such as developing and maintaining of the Compliance Checklist, providing communication and training program, monitoring compliance performance, conducting compliance risk assessment, providing advice upon the new issuance or amendment of the PTTEP Group internal regulations, and coordinating with regulators.

More details of the Head of the Compliance Department are disclosed in the “Details of Head of the Internal Audit Department and Head of the Compliance Department” part.

12. Connected Transactions

12.1 Connected Transactions between Related Companies

Connected transactions of PTTEP and/or its subsidiaries with other entities that may result in conflicts of interest in the fiscal year ending December 31, 2014 are as follows:

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTT Plc. (PTT)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 65.29% of the Company's registered and paid-up capital. ▪ Co-director is Mr. Pailin Chuchottaworn ▪ Mr. Nuttachat Charuchinda, PTT's executive serves as the Company's director. 	Petroleum product sales: crude oil; natural gas; liquefied petroleum gas; and condensate <ul style="list-style-type: none"> ▪ Total income ▪ Accounts receivable 	6,405.35 613.88	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations. ▪ The condition and price setting for these specified other income follows normal business operations at the arm's length basis conditions for non-related persons or operations.
		Other income includes: <ul style="list-style-type: none"> ▪ Income from design, equipment procurement, construction, and natural gas pipeline test from central processing platform of South Bongkot field to PTT's third gas transmission pipeline for PTT. ▪ Income from infrastructure services to support the petroleum development such as warehouse, helicopter, and accommodation for PTT personnel at Arthit and Bongkot Projects ▪ Income from the jetty and warehouse charges at Songkhla base. ▪ Income from maintenance of natural gas meters 		

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
		<ul style="list-style-type: none"> ▪ Income from charges to PTT for working area on platform of Arthit Project according to the Arthit Project's natural gas purchase/sale contract. <ul style="list-style-type: none"> ▪ Total income 8.53 ▪ Accounts receivable 10.79 Sharing cost for IPA Exhibition in Indonesia <ul style="list-style-type: none"> ▪ Total income - ▪ Accounts receivable 0.01 		
		Accounts receivable from construction of gas transmission pipelines	30.10	<ul style="list-style-type: none"> ▪ Such amount arises mostly from additional scope of work on gas-pipeline construction. The actual cost of the additional work is under negotiation with PTT. The condition and price setting for construction of gas transmission pipelines follows normal business operations at the arm's length basis conditions for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
		Petroleum product purchase, other related expenses, and expense for PTT personnel seconded to PTTEP. <ul style="list-style-type: none"> ▪ Expense for the purchase of petroleum products, related equipment, related services and others ▪ Personnel expense ▪ Oil Spill Response Limited (OSRL) membership fee for year 2014 ▪ Laboratory rent ▪ Accounts payable 	77.83 1.17 0.01 0.04 0.52	<ul style="list-style-type: none"> ▪ The condition and price setting for the purchase of petroleum product, related equipment, related services, and others follows normal business operations at the arm's length basis conditions for non-related persons or operations. ▪ Personnel expense rates follow the actual rates PTT pays for employees seconded to the Company.
		The deferred payment which is the Company's obligation according to the Arthit Project's natural gas purchase/sale contract.	1.76	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
Star Petroleum Refining Plc. (SPRC)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 36% of SPRC's registered and paid-up capital. 	Crude oil sales <ul style="list-style-type: none"> ▪ Total income ▪ Accounts receivable 	137.28 9.32	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
Energy Complex Co., Ltd. (Energy Complex)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 50% of Energy Complex's registered and paid-up capital. ▪ PTTEP, Energy Complex's major shareholder, holds 50% of Energy Complex's registered and paid-up capital. ▪ The Company's executives who serves as Energy Complex's directors are: (1) Ms. Penchun Jarikasem, (2) Mr. Thiti Mekavichai (3) Ms. Kesara Limmeechokchai (4) Mr. Kitinan Manlekha 	The Company has signed a three-year lease with Energy Complex to rent the 47,000 square meters building for office, storage and multipurpose areas at the Energy Complex Center (EnCo). The Company is eligible to extend its lease period for another three years. <ul style="list-style-type: none"> ▪ Total lease and service paying amount 17.19 ▪ Accounts payable 3.62 		<ul style="list-style-type: none"> ▪ The leasing rate is referred to the rate appraised by independent evaluators, based on the market rate of office building lease.
		The Company signed a loan contract with Energy Complex under the following conditions: <ul style="list-style-type: none"> ▪ Contract period of 13 years and six months ▪ Expiration date on October 2, 2022 ▪ Reference interest rate follows a loan contract between Energy Complex and Krung Thai Bank Plc. dated April 2, 2009 (contract amendment is included.). The interest rate is FDR+2% per year for the period of December 31, 2014. ▪ Accrued loans 17.60 ▪ Interest receivable 0.66 		<ul style="list-style-type: none"> ▪ The mentioned contract follows the conditions of the loan contract signed by Energy Complex and Krung Thai Bank Plc., dated April 2, 2009 (contract amendment is included.) with the financial support of all Energy Complex's shareholders proportionately.
		Income from the Company's personnel seconded to Energy Complex <ul style="list-style-type: none"> ▪ Total income - ▪ Accounts receivable 0.01 		<ul style="list-style-type: none"> ▪ Salary rates based on the actual rates the Company pays for our employees seconded to Energy Complex.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTT ICT Solutions Co., Ltd. (PTT ICT)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 20% of PTT ICT's registered and paid-up capital. ▪ PTT Global Chemical Plc. (PTTGC) and Thai Oil Plc. (TOP), in which PTT is their major shareholder, hold 40%, and 20% of PTT ICT's shares, respectively. ▪ Mr. Thiti Mekavichai, the Company's executive, serves as PTT ICT's director. 	The Company has signed a contract with PTT ICT for IT services and communications. <ul style="list-style-type: none"> ▪ Total expenses 17.54 ▪ Accounts payable 0.98 		<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
		Income from the Company's personnel seconded to PTT ICT <ul style="list-style-type: none"> ▪ Total income 0.47 ▪ Accounts receivable 0.67 		<ul style="list-style-type: none"> ▪ Salary rates based on the actual rates the Company pays for our employees seconded to PTT ICT.
PTT Energy Resources Co., Ltd.	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 100% of PTT Energy Resources' registered and paid-up capital. ▪ Mr. Chatchawal Eimsiri, the Company's executive, serves as PTT Energy Resources' director. 	Income from procurement of drivers for executives based on contracts between PTT Energy Resources and PTTEP Services Co., Ltd. (the Company's subsidiary). <ul style="list-style-type: none"> ▪ Total income 0.02 ▪ Accounts receivable - ▪ Accounts payable - 		<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
		Support staff expenses <ul style="list-style-type: none"> ▪ Total expenses 0.04 		
IRPC Plc. (IRPC)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 38.51% of IRPC's registered and paid-up capital. ▪ Co-director is Mr. Pailin Chuchottaworn 	Expense for IT services from IRPC for real time analyst meetings. <ul style="list-style-type: none"> ▪ Total expenses 0.01 ▪ Accounts payable - 		<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length conditions for non-related persons and operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
Thai Airways International Plc. (THAI)	<ul style="list-style-type: none"> ▪ Co-directors is Mr. Ampon Kittiampon (as of June 30, 2014) 	Expense for air ticket purchases <ul style="list-style-type: none"> ▪ Total expenses ▪ Accounts payable 	2.00 0.12	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
PTT Global Chemical Plc. (PTTGC)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 48.89% of PTTGC's registered and paid-up capital. ▪ Co-director is Mr. Pailin Chuchottaworn (as of September 22, 2014) 	Income from procurement of drivers for executives based on contract between PTTGC and PTTEP Services Ltd. (the Company's subsidiary). <ul style="list-style-type: none"> ▪ Total income ▪ Accounts receivable 	0.02 -	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
PTT Maintenance and Engineering Co., Ltd. (PTT Maintenance)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 40% of PTT Maintenance's registered and paid-up capital. ▪ PTTGC, in which PTT is its major shareholder, holds 60% of PTT Maintenance's shares. 	The Company and its subsidiaries signed the contracts with PTT Maintenance for the following services: <ul style="list-style-type: none"> ▪ Rail tank wagons maintenance and repair ▪ General maintenance, equipment inspection and other services ▪ Training contract of MESC Implementation for Stock Inventory (an inventory management system) ▪ Total expenses ▪ Accounts payable 	2.27 -	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
PTT Energy Solutions Co., Ltd. (PTT Energy)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 40% of PTT Energy's registered and paid-up capital. ▪ PTTGC, TOP and IRPC, in which PTT is their major shareholder, hold 20% each in PTT Energy. 	Expense for meeting and seminar arrangement, consultant fee for personnel training and work system <ul style="list-style-type: none"> ▪ Total expenses ▪ Accounts payable 	0.10 -	<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
Sport Services Alliance Co., Ltd. (Sport Services)	<ul style="list-style-type: none"> ▪ Business Services Alliance Co., Ltd., in which PTT is its major shareholder, is Sport Services' major shareholder holding 100%. 	Expense for sponsoring PTT Rayong Football Club <ul style="list-style-type: none"> ▪ Total expenses 0.72 ▪ Accounts payable - 		<ul style="list-style-type: none"> ▪ Support of PTT Rayong Football Club is the activity to support youths and people in Rayong through football as Sport Services is the owner and sponsor of PTT Rayong Football Club.
Dhipaya Insurance Plc. (TIP)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 13.33% of TIP's registered and paid-up capital. 	Expense for the Company's assets insurance, and its employees' health and life insurance <ul style="list-style-type: none"> ▪ Total expenses 21.54 ▪ Accounts payable 1.42 		<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
Business Services Alliance Co., Ltd. (Business Services)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds more than 10% of Business Services' registered and paid-up capital. 	Expense for temporary, support-role staff for the i-Prompt project with contract ending on June 30, 2013 <ul style="list-style-type: none"> ▪ Total expenses 0.02 ▪ Accounts payable - 		<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.
PTT International Trading Pte. Ltd. (PTT International Trading)	<ul style="list-style-type: none"> ▪ PTT, the Company's major shareholder, holds 100% of PTT International Trading's registered and paid-up capital. 	Expense for fuel hedging contracts <ul style="list-style-type: none"> ▪ Total expenses - ▪ Total income 30.27 ▪ Accounts payable - ▪ Accounts receivable 15.33 		<ul style="list-style-type: none"> ▪ Condition and price setting follows normal business operations at the arm's length basis conditions for non-related persons or operations.

12.2 Preconditions and Reasons for Connected Transactions

PTTEP's Audit Committee reviewed the connected transactions which were recorded during the fiscal year ending December 31, 2014 as summarized above and considered them to be indispensable, fair and justifiable in terms of conditions and price, and/or within the arm's length basis. The transactions were also approved by the management or the PTTEP's Board of Directors ("the Board") prior to execution.

12.3 Measures and Procedure of Connected Transactions

The Board reviews the transactions potentially leading to conflicts of interest, or those which are connected or related, under proper ethical standards, however only after they are initially screened and examined by the Company's Audit Committee. The transactions are particularly of those falling within the criteria as set forth by the Stock Exchange of Thailand, the Capital Market Supervisory Board, and the Securities and Exchange Commission. The Board's responsibility also includes, when deemed appropriate, public disclosure of accurate and correct information of the transactions which might be questionable. The Company meanwhile has conducted a clear set of policies regarding conflict of interest for our directors and employees to follow and act accordingly, as well as a reporting procedure in presence of the conflict.

There are two types of approval procedures for connected transactions.

(1) Transactions requiring an approval from the Board prior to execution, such as those involve buying/selling contracts of gas, crude oil and condensate, and trade financing

(2) Transactions which can be executed by the Company's standard procurement regulations and, if within the value pre-approved by the Board, an authorization from the management such as procurement of fuel and petroleum products, lease of office buildings, and use of helicopter service

Shall any of the directors, employees, or related persons have a vested interest in a transaction that the Company is involved in, he or she will not be allowed to take part in making of any of the decisions or approvals related to the transaction. The transaction, in this case, also remains to be treated under the arm's length basis, fair and justifiable in terms of both price and conditions.

12.4 Policy for and Future Possibility of Connected Transactions

12.4.1 Policy for Connected Transactions

PTTEP treats connected transactions as normal business transactions without any intentions to transfer of benefits between or among the Company and related companies, or persons. The Company strictly adheres to securities and exchange laws and regulations, including those imposed by the Capital Market Supervisory Board, the Stock Exchange of Thailand, or other related supervisory agencies, regarding connected transactions to ensure that, with reasonable business terms and conditions, and use of the market reference prices for instance, the Company's shareholders and stakeholders will continued to be treated equally and in their interests, according to the Company's Good Corporate Governance Policy.

12.4.2 Future Possibility of Connected Transactions Potentially Leading to Conflicts of Interest

PTTEP will continue to have connected transactions with related entities in the future. Most of the transactions include normal business, office building-leasing, and supporting business transactions, which can be summarized as follows:-

(1) Sales of petroleum products and purchase of fuel: Since the transactions are a normal part of the Company's business and are executed under conditions and requirements as stated in the contracts, they will continue due to their necessity to the operations.

(2) Lease of office buildings: Since leasing of office buildings is reasonable and necessary for the Company's business operations, the transactions will be continued.

(3) Hiring of information and technology services: Since it remains reasonable and necessary for the Company to be supported with information and technology services to operate our business, the transactions will continue.

13. Significant Financial Information

Since January 1, 2011, PTTEP has determined the USD to be our functional currency in accordance with Thai Accounting Standard No. 21 (revised 2009) "The Effects of Changes in Foreign Exchange Rates". However, in submission of our financial statements to the Stock Exchange of Thailand and the Department of Business Development, the Company is also required to convert the financial statements from USD to the presentation currency, which is THB.

Summary of Financial Information

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
STATEMENTS OF FINANCIAL POSITION

	As at January 1, 2013 (Beginning) (Restated)		As at December 31, 2013 (Restated)		As at December 31, 2014	
	Thousand (USD)	%	Thousand (USD)	%	Thousand (USD)	%
Assets						
Current Assets						
Cash and cash equivalents	2,291,919	11.7	2,357,038	10.9	3,935,915	16.9
Investments in trading securities	-	-	143	0.0	176	0.0
Account receivable - parent company	870,244	4.4	894,253	4.1	643,989	2.8
Trade accounts receivable	170,372	0.9	152,140	0.7	154,366	0.7
Other accounts receivable	166,799	0.8	142,625	0.7	116,540	0.5
Inventories	19,311	0.1	45,387	0.2	31,114	0.1
Materials and supplies, net	304,395	1.6	327,807	1.5	365,073	1.6
Other current assets	208,205	1.1	186,194	0.9	338,776	1.5
Total Current Assets	4,031,245	20.5	4,105,587	19.0	5,585,949	24.0
Non-current Assets						
Investments in available-for-sales securities	1,248	0.0	1,660	0.0	900	0.0
Investments in associates	31,198	0.2	36,842	0.2	39,097	0.2
Long-term loans to related parties	18,935	0.1	17,676	0.1	17,595	0.1
Property, plant and equipment, net	10,970,970	55.9	12,671,865	58.7	11,507,423	49.4
Goodwill	901,240	4.6	992,293	4.6	1,126,774	4.8
Intangible assets, net	3,238,674	16.5	3,279,097	15.2	4,525,102	19.4
Deferred income tax assets	381,009	1.9	354,943	1.6	280,581	1.2
Other non-current assets	62,525	0.3	112,450	0.5	207,050	0.9
Total Non-current Assets	15,605,799	79.5	17,466,826	81.0	17,704,522	76.0
Total Assets	19,637,044	100.0	21,572,413	100.0	23,290,471	100.0

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED AND SUBSIDIARIES
 STATEMENTS OF FINANCIAL POSITION (cont'd)

	As at January 1, 2013 (Beginning) (Restated)		As at December 31, 2013 (Restated)		As at December 31, 2014	
	Thousand (USD)	%	Thousand (USD)	%	Thousand (USD)	%
Liabilities and Shareholders' Equity						
Current Liabilities						
Trade accounts payable	114,198	0.6	131,916	0.6	130,223	0.6
Current portion of long-term debts	163,547	0.8	356,523	1.7	749,216	3.2
Working capital to co-venturers	13,719	0.1	25,073	0.1	10,621	0.0
Accrued expenses	946,553	4.8	873,623	4.0	927,310	4.0
Accrued interests payable	35,633	0.2	49,505	0.2	57,676	0.2
Income tax payable	921,173	4.7	972,249	4.5	865,714	3.7
Financial derivative liabilities	2,446	0.0	35,870	0.2	213	0.0
Short-term provision	32,999	0.2	48,197	0.2	54,914	0.2
Other current liabilities	144,708	0.7	139,596	0.6	83,876	0.4
Total Current Liabilities	2,374,976	12.1	2,632,552	12.2	2,879,763	12.4
Non-current Liabilities						
Debentures	2,517,710	12.8	2,608,763	12.1	2,504,875	10.8
Long-term loans from financial institution	1,091,705	5.6	1,057,696	4.9	974,625	4.2
Deferred income tax liabilities	1,502,145	7.6	1,639,495	7.6	1,499,847	6.4
Employee benefit obligations	100,210	0.5	103,801	0.5	110,896	0.5
Provision for decommissioning costs	1,070,744	5.5	1,188,900	5.5	2,166,219	9.3
Provision for remuneration for the renewal of petroleum production	167,450	0.9	530,471	2.5	492,511	2.1
Financial derivative liabilities	44,810	0.2	34,129	0.2	55,799	0.2
Deferred income	35,636	0.2	28,751	0.1	31,817	0.1
Other non-current liabilities	31,067	0.2	29,035	0.1	26,135	0.1
Total Non-current Liabilities	6,561,477	33.4	7,221,041	33.5	7,862,724	33.8
Total Liabilities	8,936,453	45.5	9,853,593	45.7	10,742,487	46.1
Shareholders' Equity						
Share capital						
Issued and paid-up share capital	150,684	0.8	150,684	0.7	150,684	0.6
Share premium	3,438,921	17.5	3,439,037	15.9	3,439,037	14.8
Subordinated capital debentures	156,570	0.8	156,570	0.7	1,152,103	4.9
Retained earnings						
Appropriated						
Legal reserve	15,048	0.1	15,048	0.1	15,048	0.1
Reserve for expansion	431,231	2.2	431,231	2.0	431,231	1.9
Unappropriated	6,493,055	33.1	7,547,030	35.0	7,462,227	32.0
Other components of Shareholders' Equity	15,082	0.1	(20,780)	(0.1)	(102,346)	(0.4)
Total Shareholders' Equity	10,700,591	54.5	11,718,820	54.3	12,547,984	53.9
Total Liabilities and Shareholders' Equity	19,637,044	100.0	21,572,413	100.0	23,290,471	100.0
Book value per share (USD)	2.70		2.95		3.16	
Issued and fully paid-up capital at the end of year (Thousand share)	3,969,985		3,969,985		3,969,985	

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED
 AND SUBSIDIARIES
 STATEMENTS OF INCOME
 FOR THE YEARS ENDED DECEMBER 31,

	2012		2013 (Restated)		2014	
	Thousand (US Dollar)	%	Thousand (US Dollar)	%	Thousand (US Dollar)	%
Revenues	-	-	-	-	-	-
Sales	6,689,555	95.3	7,171,896	96.3	7,496,158	93.5
Revenue from pipeline transportation	150,684	2.1	150,675	2.0	137,925	1.7
Interest income	15,874	0.2	33,065	0.4	22,571	0.3
Gain on financial derivatives	-	-	-	-	197,018	2.5
Other income	164,557	2.3	89,263	1.2	163,825	2.0
Total Revenues	7,020,670	100.0	7,444,899	100.0	8,017,498	100.0
Expenses	-	-	-	-	-	-
Operating expenses	705,654	10.1	827,377	11.1	856,507	10.7
Exploration expenses	213,036	3.0	172,020	2.3	332,917	4.2
Administrative expenses	312,223	4.4	332,662	4.5	358,034	4.5
Petroleum royalties and remuneration	788,219	11.2	816,741	11.0	785,772	9.8
Depreciation, depletion and amortization	1,373,836	19.6	1,637,400	22.0	2,563,256	32.0
Loss on foreign exchange	23,964	0.3	89,550	1.2	49,050	0.6
Loss from Montara incident	538	0.0	-	-	-	-
Loss on financial derivative	12,257	0.2	5,440	0.1	-	-
Management's remuneration	4,714	0.1	6,185	0.1	6,059	0.1
Impairment loss on assets	204,167	2.9	-	-	996,790	12.4
Other expenses	-	-	-	-	41,125	0.5
Finance costs	187,010	2.7	200,765	2.7	259,435	3.2
Total Expenses	3,825,619	54.5	4,088,140	54.9	6,248,945	77.9
Share of gain (loss) from associates	4,657	0.1	6,157	0.1	3,467	0.0
Profit before income taxes	3,199,708	45.5	3,362,916	45.1	1,772,019	22.1
Income taxes expenses	(1,354,189)	(19.3)	(1,516,270)	(20.4)	(1,094,560)	(13.7)
Profit for the year	1,845,519	26.2	1,846,646	24.7	677,459	8.4
Basic earnings per share (US Dollar)	0.55		0.46		0.16	
Diluted earnings per share (US Dollar)	0.55		0.46		0.16	
Weighted average number of outstanding ordinary shares	3,346,624		3,969,985		3,969,985	

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED
 AND SUBSIDIARIES
 STATEMENTS OF CASH FLOWS
 FOR THE YEARS ENDED DECEMBER 31,

	2012	2013 (Restated)	2014
	Thousand (US Dollar)	Thousand (US Dollar)	Thousand (US Dollar)
Cash flows from operating activities			
Profit before income taxes	3,199,709	3,362,915	1,772,019
Adjustment to reconcile profit before income tax to net cash provided by (used in) operating activities			
Share of gain from associates	(4,657)	(6,157)	(3,467)
Depreciation, depletion and amortization	1,373,836	1,637,400	2,563,256
Impairment loss on assets	204,167	-	996,790
Amortization of prepaid expenses	15,538	6,953	7,940
Amortization of exploration expenses	94,680	71,438	266,423
(Gain)Loss on disposal of assets	2,324	7,834	(1,723)
Income recognized from deferred income	(735)	(6,884)	(1,037)
(Gain)Loss on financial derivatives	12,257	11,322	(24,267)
(Gain) from restructuring of the ownership interest in KKD Project	-	-	(32,136)
Employee benefit obligations	15,619	12,596	11,893
Other income	-	-	(11,384)
Loss (Gain) on foreign exchange	6,096	26,440	28,958
Interest income less than interest expenses	156,458	161,221	229,683
	5,075,291	5,285,078	5,802,948
Change in operating assets and liabilities	(1,620,485)	(1,545,232)	(1,483,439)
Net cash provided by operating activities	3,454,805	3,739,846	4,319,509
Cash flows from investing activities			
Cash received from restructuring of the ownership interests in KKD project	-	-	388,488
Cash received from long-term loans to related parties	184	-	-
Cash payment from purchase of business	(1,883,985)	(240,945)	(812,833)
Loss from investments in related parties	(141)	-	-
Dividends received from associates	523	513	1,213
Interest received from loans	853	801	659
Increase in property, plant and equipment	(2,805,793)	(2,633,409)	(2,051,490)
Increase in intangible assets	(47,119)	(32,847)	(532,001)
Net cash used in investing activities	(4,735,478)	(2,905,887)	(3,005,964)

PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIMITED
 AND SUBSIDIARIES
 STATEMENTS OF CASH FLOWS (cont'd)
 FOR THE YEARS ENDED DECEMBER 31,

	2012	2013 (Restated)	2014
	Thousand (US Dollar)	Thousand (US Dollar)	Thousand (US Dollar)
Cash flows from financing activities			
Decrease in short-term loans with maturity date within 3 months from financial institution	(5,337)	-	-
Proceeds from short-term loans with maturity date within 1 year from financial institution	1,502,770	-	-
Payments of short-term loans with maturity date within 1 year from financial institution	(1,849,946)	-	-
Payments of short-term loans	-	(62,000)	-
Proceeds from issuance of debentures	500,000	500,000	601,456
Payments of debentures	(779,225)	(175,605)	(360,086)
Proceeds from long-term loans from financial institution	478,118	-	-
Interest paid for loans	(173,185)	(164,333)	(182,548)
Net cash payment for financial derivative contract	-	-	(29,414)
Cash payments for financial costs	(20,709)	(9,778)	(735)
Proceeds from issuance of subordinated capital debentures	157,138	-	1,000,000
Interest paid for subordinated capital debentures	(4,758)	(9,393)	(33,399)
Cash payments for financial costs from issuance of subordinated capital debentures	(567)	-	(4,468)
Proceeds from issuance of common stock	3,011,635	-	-
Cash payments for transaction cost of capital	(21,161)	-	-
Dividends paid	(587,634)	(783,293)	(735,572)
Net cash provided by (used in) financing activities	2,207,139	(704,402)	255,234
Net increase (decrease) in cash and cash equivalents	926,467	129,557	1,568,779
Cash and cash equivalents at the beginning of the year	1,350,530	2,291,919	2,357,038
	2,276,997	2,421,476	3,925,817
Adjustment for the effect of exchange rate changes	14,923	(64,438)	10,098
Cash and cash equivalents at the end of the year	2,291,920	2,357,038	3,935,915

Summary significant financial ratio table

		Financial Ratios		
		2012	2013	2014
Liquidity ratio				
Current Ratio	(Times)	1.70	1.56	1.94
Quick Ratio	(Times)	1.40	1.29	1.64
Cash Flow from Operations to Current Liabilities Ratio	(Times)	1.25	1.49	1.57
Account Receivable Turnover	(Times)	8.17	7.02	8.28
Collection Period	(Days)	45	52	44
Profitability Ratio				
Net Profit Margin	(%)	26.29	24.80	8.45
Return on Equity	(%)	21.70	16.47	5.58
Efficiency Ratio				
Return on Assets	(%)	10.93	8.96	3.02
Return on Fixed Assets	(%)	26.12	23.10	20.26
Assets Turnover	(Times)	0.42	0.36	0.36
Financial Policy Ratio				
Debt to Equity Ratio	(Times)	0.35	0.34	0.34
Times Interest Earned	(Times)	30.49	31.97	40.90
Dividend Ratio	(%)	38	40	40
Data per Share				
Book Value per Share	(USD)	2.70	2.95	3.16
Net Profit per Share	(USD)	0.55	0.46	0.16
Dividend per Share	(THB)	5.80	6.00	4.50
Growth Rate				
Total Asset	(%)	38.96	9.86	7.96
Total Liabilities	(%)	14.28	10.26	9.02
Sales	(%)	22.94	7.05	4.25
Net Profit	(%)	25.70	0.06	(63.31)

14. Management Discussion and Analysis of Operating Results

14.1 Executive Summary

During the first half of the year, crude oil traded in a narrow price range averaging USD 105 per barrel. Crude oil prices peaked at USD 111 per barrel in June due to the concerns over violence in the Republic of Iraq (Iraq) and the State of Libya (Libya), but began a rapid decline during the third quarter as a result of increased shale oil production in the United States of America and lower than expected economic growth figures in the Europe, the People's Republic of China (China) and Japan. Moreover, OPEC's decision not to decrease production spawned concerns of oversupply leading to increased downward pressure on prices. During the fourth quarter, oil prices reached a five-year low, and averaged USD 74 per barrel, resulting in the full year average Dubai crude oil price of USD 96.64 per barrel, lower than the previous year's average of USD 105.4 per barrel.

Thailand's economy in 2014 is expected to have grown by 0.8% due to political events during the beginning of the year. As the political situation eased in the middle of the year, the economy began a gradual and continuous recovery, and domestic consumption increased respectively. The Ministry of Energy estimated domestic energy demand from January to November 2014 to have averaged 2.05 Million Barrels of Oil Equivalent per Day (MMBOED); a 1.93% increase over the same period last year.

The weak oil price environment during the second half of 2014 had a slight impact on PTTEP's core performance. This is because natural gas volume, which represents a majority of the Company's product, is subject to pricing formula that is only 30 - 50% indexed to the oil price and is adjusted on a three-month to one-year basis based on past oil prices; the impact from the recent decrease in oil prices has therefore a relatively subdued impact on PTTEP's 2014 natural gas prices. In respect of crude oil and condensate, PTTEP has hedged, to a certain extent, its liquid product prices which are directly affected by oil price volatility. Nonetheless, as a result of the lower oil price outlook and in compliance with international accounting standards, PTTEP has conducted re-assessments on the asset values based on revised price projections. As a result, per the accounting standards, during the fourth quarter of 2014, PTTEP recognized non-cash impairment charges amounting to USD 997 million.

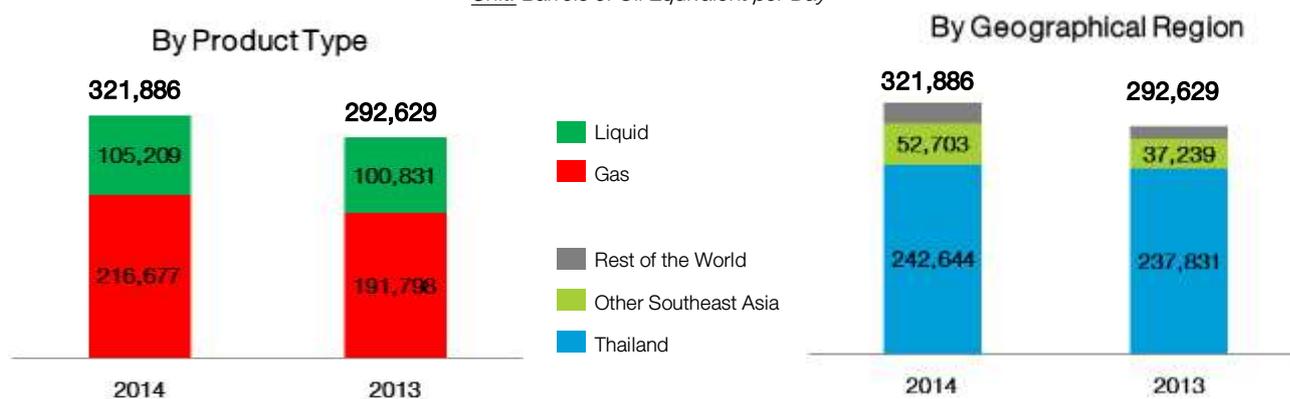
The result of the business for the year ended 2014, PTTEP and its subsidiaries had a net income of USD 677 million, a decrease of USD 1,170 million or 63% when compared to the net income for the year ended 2013 of USD 1,847 million. The decrease was primarily due to the recognition of impairment loss of assets in PTTEP Australasia Project and Mariana Oil Sands Project and the increases of depreciation, depletion and amortization expenses and exploration expenses. However, the Group recorded a decrease in income tax expenses and an increase in sales revenues as a result of increase in average sales volume to 321,886 barrels of oil equivalent per day (BOED) (2013: 292,629 BOED), while the average petroleum sales price decreased to USD 63.38 per barrels of oil equivalent (BOE) (2013: 65.58 per BOE).

(Unit : Million USD)	2014	2013 (Restated)	% Inc. (Dec.) YTD
Total Revenue	8,017	7,445	8
Sales Revenue	7,496	7,172	5
EBITDA	5,295	5,168	2
Profit for the period	677	1,847	(63)
Diluted earnings per share (USD)	0.16	0.46	(65)
Profit from normal operation	1,538	2,114	(27)
Gain (loss) from non-recurring items	(861)	(267)	>(100)

14.2 Financial Performance

Average Sales Volume

Unit: Barrels of Oil Equivalent per Day



14.2.1 Summary of Operating Results segregated by segments

Average selling price and Dubai crude oil price (Unit : USD)	2014	2013 (Restated)	% Inc. (Dec.) YTD
Average selling price (/BOE)	63.38	65.58	(3)
Average Dubai crude (/BBL)	96.60	105.52	(8)

Net income (loss) (Unit : Million USD)	2014	2013 (Restated)	% Inc. (Dec.) YTD
Exploration and production	471	2,080	(77)
Thailand	1,498	1,872	(20)
Overseas	(1,027)	208	>(100)
- Other Southeast Asia	289	276	5
- Australia	(599)	20	>(100)
- America	(657)	(37)	>(100)
- Africa	(82)	(58)	(41)
- Middle East	22	7	>100
Pipeline transportation	298	229	30
Head office and others	(92)	(462)	80
Total	677	1,847	(63)

14.2.2 Year to Year Comparison of the Results of Operations

1) Overall Results of Operation

For the results of operation for year ended 2014, PTTEP and its subsidiaries had a net income of USD 677 million (earning of USD 0.16 per share-diluted), a decrease of USD 1,170 million or 63% when compared with the net income for the year ended 2013 of USD 1,847 million (earning of USD 0.46 per share-diluted). The decrease was primarily due to the recognition of impairment losses of assets in PTTEP Australasia Project, and Mariana Oil Sands Project of USD 997 million as well as the increment in depreciation expenses of USD 926 million due to the higher completed assets and production volume of PTTEP Australasia Project which began its offload crude oil sales in August 2013 and had recognized full year sales in 2014. In addition, the depreciation expenses were increased from the commencement of domestic gas sales in March 2014, and export gas sales in August 2014 from Zawtika Project and from the higher completed assets and production volume of Contract 4 Project. Moreover, there was an increase in the exploration expenses of USD 161 million due to the exploratory well write-off expense in PTTEP Australasia, Kenya L10 A and L28/48 projects. However, a decrement in income tax expenses of USD 421 million were primarily from lower petroleum income taxes as a result of lower net petroleum income and from a reduction in income tax expenses affected by the functional currency as a result of the less depreciation of THB against USD.

However, the revenue from sales were increased by the amount of USD 324 million due to an increment in average sales volume of 321,886 BOED (2013: 292,629 BOED) primarily from full year sales in 2014 of PTTEP Australasia (began its first oil sales in August 2013) and from Zawtika Project which commenced its domestic gas sales in March 2014 and export gas sales in August 2014. The revenue from sales also increased from acquiring additional 15% in participating interests of Contract 4 Project, while the average petroleum sales price decreased to USD 63.38 per Barrels of Oil Equivalent (BOE) (2013: 65.58 per BOE).

For the year ended 2014, the Group reported loss from non-recurring items in the amount of USD 861 million, an increase in loss of USD 594 million when compared with the year ended 2013 that reported losses from non-recurring items in the amount of USD 267 million. The increase in loss from non-recurring items were primarily due to the recognition of impairment losses of assets in PTTEP Australasia Project, and Mariana Oil Sands Project of USD 997 million while the Group had recognized a gain on financial derivatives from oil price hedging of USD 197 million due to the market price as of December 31, 2014 gone below the price hedging level. In addition, income tax expenses affected by the functional currency for the year ended 2014 decreased when compared to the year ended 2013 due to less depreciation of THB against USD.

2) Results of Operation by Segments

Net income for the year ended 2014 decreased in the amount of USD 1,170 million or 63% to net income of USD 677 million when compared with the net income for the year ended of 2013 of USD 1,847 million. The decrease in net income was primarily due to the decrease in net income from the exploration and production segment of USD 1,609 million or 77%, while the head office and others segments had a decrease in net loss of USD 370 million or 80%.

2.1) Exploration and Production Segment

2.1.1) Thailand

Net income for the year ended 2014 decreased in the amount of USD 374 million or 20% to net income of USD 1,498 million when compared with the net income for the year ended 2013 of USD 1,872 million. The decrease in net income primarily due to an increase in depreciation, depletion and amortization of Contract 4 Project, which were in lined with the increases in production volume and completed assets. In addition, the decrease in net income resulted from decrease in sales revenue due to the reduction in oil price. However, the Group's income tax expenses were decreased due to lower petroleum income taxes and lower income tax expenses affected by the functional currency, as a result of the less depreciation of THB against USD.

2.1.2) Overseas

The Group reported net loss for the year ended 2014 of USD 1,027 million, a decrease of net profit of USD 1,235 million or a decrease over 100% when compared to the net profit for the year ended 2013 of USD 208 million. The decrease in net income was primarily due to an increase in net loss from Australia segment and America.

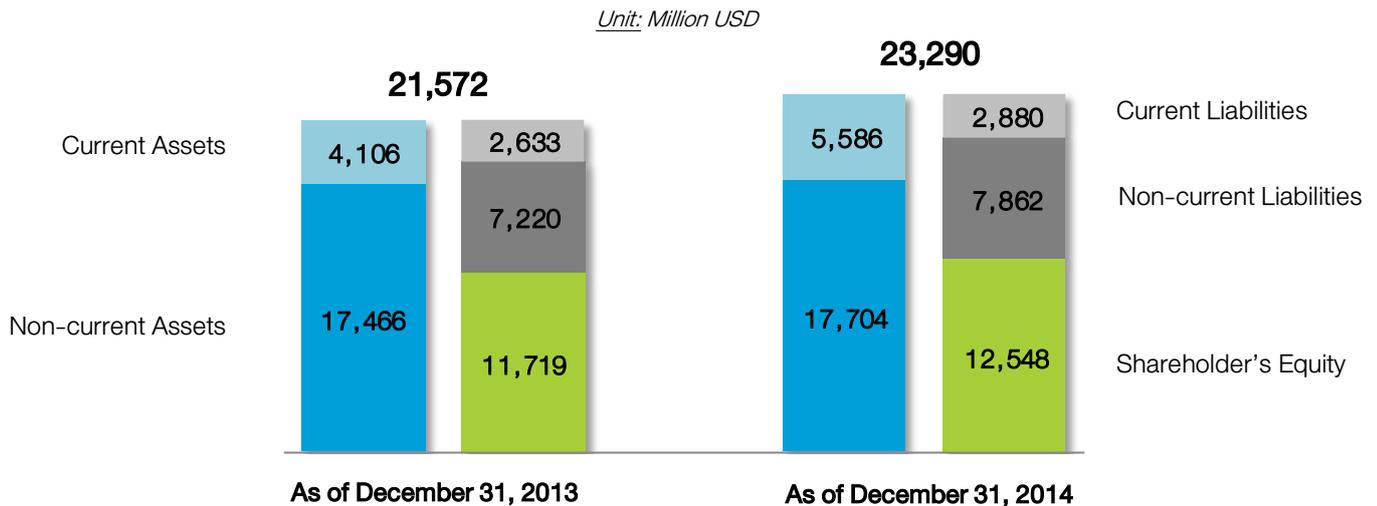
Australia reported a net loss for the year ended 2014 of USD 599 million, a decrease of income amount of USD 619 million when compared with the net income for the year ended 2013 of USD 20 million. Although the sales revenue of PTTEP Australasia Project was recognized full year in 2014 (began its offload crude oil sales in August 2013), resulted in higher sales revenue compared to year ended 2013, its depreciation, depletion and amortization was also much higher from the additional completed asset and higher production volume. Furthermore, PTTEP Australasia had recognized a loss on impairment of assets as a result of the decrease in the crude oil price. The operating expense also increased mainly due to the increase in production volume and the excess cost incurred from drilling H5 development well.

The America reported a net loss for the year ended 2014 of USD 657 million, an increase in net loss of USD 620 million or increased over 100% when compared with the net loss for the year ended 2013 of USD 37 million. This was primarily due to the recognition of impairment loss of assets due to a decrease in crude oil price which resulted in the revision of the production plan.

2.2) Head office and Other Segments

Head office and other segments reported a net loss for the year ended 2014 of USD 92 million, a decrease in net loss of USD 370 million or 80% when compared with the net loss for the year ended 2013 of USD 462 million. The decrease in net loss was primarily resulted from the recognition of gains of USD 197 million on financial derivatives from oil price hedging due to the market price as of December 31, 2014 gone below the price hedging level. In addition, the decrease of net loss was resulted from the decrement in loss from foreign exchange as well as the reduction of the income tax expenses affected by the functional currency for the year ended 2014 compared to the year ended 2013 due to less depreciation of THB against USD.

14.2.3 Financial Position



1) Assets

As at December 31, 2014, PTTEP and its subsidiaries had total assets in the amount of USD 23,290 million (equivalent to THB 767,725 million), an increase of USD 1,718 million when compared with the total assets as of December 31, 2013 of USD 21,572 million (equivalent to THB 707,868 million), primarily due to;

1.1) Increases of USD 1,480 million in current assets which primarily comprise of cash and cash equivalent, account receivable – parent company, and materials and supplies, were primarily from an increase in cash and cash equivalent of USD 1,579 million, while account receivable – parent company decreased of USD 250 million.

1.2) Increases of USD 238 million in non-current assets which primarily comprise of exploration and production assets in joint venture projects that are recognized as part of the property, plant and equipment – net, intangible assets – net, goodwill and deferred tax assets, were from an acquisition of shares of Hess Corporation's subsidiaries and additional investment in production phase projects such as Arthit, Zawtika, and Bongkot projects. However, the Group has recognized impairment loss on assets for PTTEP Australasia and Mariana Oil Sands projects.

2) Liabilities

As at December 31, 2014, PTTEP and its subsidiaries had total liabilities of USD 10,742 million (equivalent to THB 323,332 million) which include interest bearing debt of USD 4,229 million, an increase of USD 889 million when compared with total liabilities as at December 31, 2013 of USD 9,853 million (equivalent to THB 323,332 million), primarily due to;

2.1) Increases of USD 247 million in current liabilities which primarily comprise of current portion of long-term debts, accrued expenses and income tax payable, mainly came from;

2.1.1) The current portion of long-term debts increased from a reclassification of USD debenture in the amount of USD 700 million and long-term loan from a financial institution of USD 50 million which will be due within 1 year from non-current liabilities to current liabilities coupled with the payment of THB debenture of THB 11,700 million (equivalent to USD 360 million).

2.1.2) Decreased in income tax payable resulted from lower petroleum income tax for the year 2014.

2.1.3) Decreased in other current liabilities, primarily from the decrease in other accounts payable of the joint venture projects.

2.2) Decreases of USD 642 million in non-current liabilities which primarily comprise of debentures and loans from financial institution, deferred tax liabilities, and provision for decommissioning costs, primarily due to;

2.2.1) Increased in provision for decommissioning costs due to higher estimated decommissioning cost and additional production facilities and wells. The amount was offset by;

2.2.2) Decreased in deferred tax liabilities, primarily from the decrease in deferred tax liability of Canada Oil Sands KKD Project (renamed as Mariana Oil Sands Project) as a result of entering into the PURA to restructure the ownership interests in the Canada Oil Sands KKD Project. However, the deferred tax liability was increased due to the acquisition of share of Hess Corporation's subsidiaries.

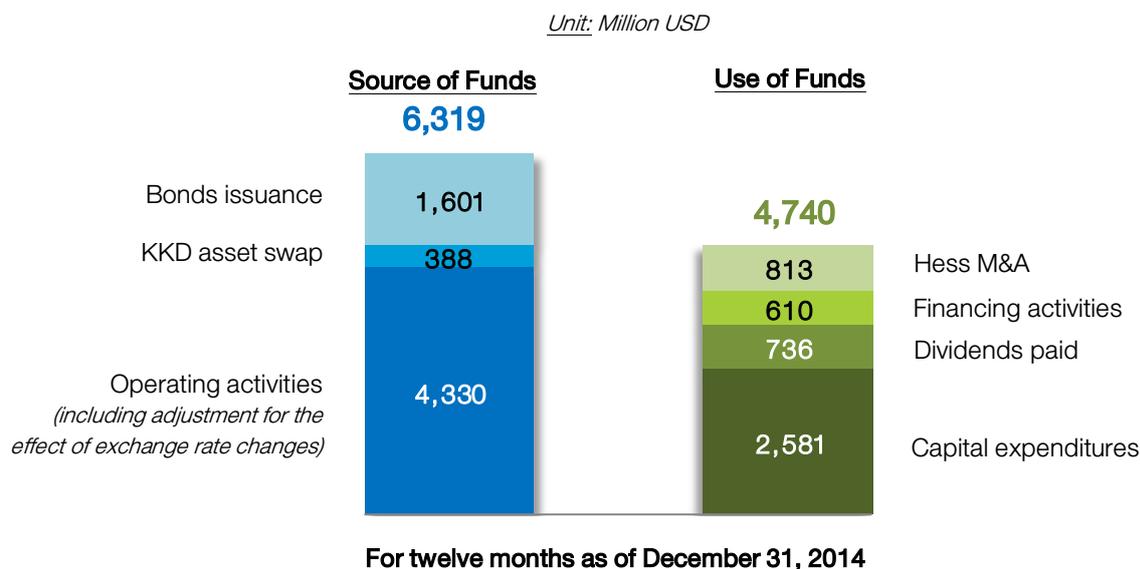
2.2.3) Decreased in debentures and long-term loans from financial institutions from the reclassification of USD debenture in the amount of USD 700 million and long term loan from financial institution of USD 50 million which will be due within 1 year from non-current liabilities to be presented as current liabilities under the current portion of long-term debts, net offset with the issuance of unsecured and unsubordinated debentures of THB 19,600 million or approximately USD 600 million.

Interest bearing debts as of December 31, 2014 amounted to USD 4,229 million, carrying an average cost of debt of 4.14% per annum, with an average loan life of 7.05 years. In terms of currency mix, 90% of PTTEP's interests bearing debts were denominated in USD while 10% were denominated in Canadian Dollar. The currency mix of PTTEP's debt is in line with PTTEP's asset and revenue structures, and is mainly in the USD currency, with only a relatively small portion is in the Canadian Dollar currency to support operations in the Mariana Oil Sands Project in Canada. The proportion between fixed and floating interest rate debt was 77:23.

3) Shareholders' Equity

As at December 31, 2014, PTTEP and its subsidiaries had total shareholders' equity in the amount of USD 12,548 million (equivalent to THB 413,620 million). The amount primarily comprises of share capital and share premium, subordinated capital debentures, retained earnings and other components of shareholders' equity. The amount was increased of USD 829 million when compared with the shareholders' equity as at December 31, 2013 of USD 11,719 million (equivalent to THB 384,536 million). The increases were primarily due to in the second quarter of 2014, the Group has issued the subordinated capital debentures in the amount of USD 1,000 million and an increase in the retained earnings from the net income for the year 2014 of USD 677 million which offset with the dividend payment for the second half of 2013 and first half of 2014 operations of USD 736 million.

14.2.4 Cash Flows



1) As at December 31, 2014, PTTEP and its subsidiaries had cash and cash equivalent of USD 3,936 million, an increase of USD 1,579 million when compared to cash and cash equivalent as at December 31, 2013 of USD 2,357 million. Source of cash receipts of USD 6,319 million primarily came from;

1.1) Net cash received from operating activities as a result of net positive cash flows from revenue from sales, offset with cash payments for expenditures and income tax expenses.

1.2) Net cash received from the restructuring of the ownership interest in Canada Oil Sands KKD Project (renamed as Mariana Oil Sands Project)

1.3) Cash received from the issuance of subordinated capital debenture and THB debenture.

2) Source of cash payments made of USD 4,740 million primarily due to;

2.1) Increase in net cash used in investment activities for the exploration and production assets and intangible assets, primarily from an investment in Zawtika, Arthit and Bongkot projects.

2.2) Dividend payments for the six months period for the second half of 2013 and six months period for the first half of 2014.

2.3) Cash used in financing activities primarily due to the repayment of THB debenture and interest.

2.4) Cash payment for the acquisition of share of Hess Corporation's subsidiaries.

14.2.5 Key Financial Ratios

	2014	2013
Profitability Ratios		
EBITDA to revenue from sales	69	71
Return on equity	6	16
Net profit margin	8	25
Leverage Ratios		
Debt to equity	0.34	0.34
Debt to EBITDA	0.80	0.78

Remark:

EBITDA to revenue from sales = Profit before deduction of interest, tax, and depreciation to revenue from sales including revenue from pipeline transportation

Net profit margin = Net profit to total revenue

Return on equity = Net profit to weighted average shareholders' equity

Debt to equity = Interest Bearing Debt to total shareholders' equity

Debt to EBITDA = Interest Bearing Debt to profit before deduction of interest, tax, and depreciation

14.3 Operational Highlights

As of the end of 2014, PTTEP's domestic and international operations altogether sum to 43 projects in 11 countries. The following are key project highlights.

14.3.1 Projects in Thailand

PTTEP has 17 projects in Thailand, the majority of which are projects in the *producing phase*, and are located in the Gulf of Thailand and onshore. Production operations were continuously carried out over the course of the year to fulfill Thailand's energy needs. The company also expanded its domestic production capacity through its acquisition of Hess Corporation's 15% and 35% stakes in the Contract 4 and Sinphuhorm projects, respectively. The Contract 4 Project is located in the Gulf of Thailand while the Sinphuhorm Project is located onshore in Northeastern Thailand. The acquisitions were completed in April 2014.

With regards to projects in the *exploration phase*, key activities during 2014 include the drilling of the NKW-N01 exploration well in Project B6/27. The drilling made no commercial discovery, and the project currently continues to study the petroleum geology.

14.3.2 Projects in Southeast Asia

PTTEP has 15 projects in this region which are located in the Union of the Republic of Myanmar (Myanmar), the Socialist Republic of Vietnam (Vietnam) and the Republic of Indonesia (Indonesia).

Key highlights of projects in the *producing phase* within this region include the **Zawtika Project**, which, in March 2014, began delivering natural gas to the Myanma Oil and Gas Enterprise (MOGE) for domestic use in Myanmar; and in August 2014, began delivering natural gas to PTT Plc. for use in Thailand. Since then, the project, which is located offshore in the Gulf of Moattama, was able to maintain the planned production rate of approximately 310 million standard cubic feet per day (MMSCFD) (approximately 47,950 Barrels of Oil equivalent per Day, BOED), and is now in the process of constructing additional wellhead platforms to maintain the production plateau. Additionally, during the third quarter of 2014, a drilling campaign for additional 10 appraisal wells was launched with an objective to prove up additional petroleum reserves and support long term production. The drilling of these wells is expected to complete within 2015.

The **Vietnam 16-1 Project**, located offshore in the southeast of Vietnam, successfully appraised the H5 area situated in the south of the Te Glac Trang Field (TGT) and is preparing to install a production platform to support production from this area, with first production expected during 2015. Once comes onstream, the field will help at sustaining the overall production level from the project. In 2014, the project produced crude oil at an average rate of 34,000 Barrels per Day (BPD), and natural gas at an average rate of 22 MMSCFD (approximately 5,500 BOED).

For projects in the *exploration phase*, important highlights include the drilling campaign for six additional appraisal wells in the **Myanmar M3 Project** which commenced during the third quarter of 2014 and expect to complete in the first half of 2015. The project is located offshore in the Gulf of Moattama.

The exploration campaign of the **PSC G and EP 2 Project**, which is located onshore in the Central Myanmar Basin, is currently studying the geological structures and drilling the first of four planned exploration wells.

The **MOGE 3 Project** is another onshore project located in the Central Myanmar Basin. PTTEP holds an 85% interest and is the operator of this project. Production Sharing Contract of MOGE 3 was signed in August 2014 between PTTEP South Asia Limited (PTTEP SA, a subsidiary of PTTEP) and MOGE. The project is carrying out the Environmental Impact Assessment (EIA) which it expects to complete in the first quarter of 2015.

14.3.3 Project in Australasia

PTTEP has 1 project in this region which is located in the Commonwealth of Australia (Australia) and comprises 15 concession permits.

Highlights of fields in the *producing phase* include the **Montara Field** which produced at an average rate of 18,000 BPD during 2014. Since the onset of the Montara Incident through to the end of 2014, PTTEP has received total compensation claims amounting to USD 244 million from the insurers. In relation to the claims submitted by the Government of Indonesia seeking compensation for the oil spill from the Montara incident, PTTEP is ready to continue discussions with the Government of Indonesia to determine the impact (if any) using scientific evidence.

For fields in the *exploration phase*, notable activities during 2014 include the drilling of the Maple-East exploration well in the **Cash Maple Field**, which was completed without commercial discoveries. The project is currently undergoing geological and geophysical review, engineering study as well as commercial assessment to determine development concepts for the gas field.

14.3.4 Projects in the American Continent

PTTEP has 3 projects in this region located in Canada and the Federal Republic of Brazil (Brazil), all of which are in the *exploration phase*. The following are significant activities related to PTTEP in 2014 in this region.

The **Mariana Oil Sands Project** (formerly known as the Canada Oil Sands KKD Project), in May 2014, PTTEP completed the asset swap transaction as stipulated in the Partnership Units Redemption Agreement (PURA) with Statoil Canada Limited (SCL) resulting in PTTEP Canada Limited (PTTEP CA) having 100% ownership of the Thornbury, Hangingstone, and South Leismer fields, and receiving USD 419 million in cash. The project is currently proceeding with the Winter Delineation Campaign (WDC), studying development plans and carrying out Pre-FEED activities for Thornbury Phase 1.

In Brazil, during April 2014, PTTEP Brazil Investments in Oil and Gas Exploration and Production Limitada (PTTEP BL, a subsidiary of PTTEP) farmed-in to the **Barreirinhas AP1 Project** to hold a 25% interest. The project comprises four exploration blocks called BAR-M-215, BAR-M-217, BAR-M-252 and BAR-M-254 located in the Barreirinhas Basin, offshore to the east of Brazil. The Brazilian government approved the transaction in August 2014, and the project is currently undertaking the EIA and making preparations for 3D seismic acquisition which is expected to begin in the second quarter of 2015.

Also in Brazil, PTTEP BL acquired a 20% stake in the **BM-ES-23 Project** in the Espirito Santo basin, offshore to the east of Brazil. The Brazilian government approved the acquisition in November 2014. During 2014, the project drilled two exploration wells, one of which discovered oil. Two more exploration wells are planned for 2015.

14.3.5 Projects in Africa and the Middle East

PTTEP has 7 projects in this region, located in the Sultanate of Oman (Oman), the People's Democratic Republic of Algeria (Algeria), the Republic of Mozambique (Mozambique) and the Republic of Kenya (Kenya).

Significant activities for projects in the *development phase* include construction of production facilities and pipeline systems in the **Algeria 433a and 416b Project** which is located onshore northeast of Algeria. Production is expected to begin in the second half of 2015 with a capacity of 20,000 BPD.

Notable activities for projects in the *exploration phase* include the Second Drilling Campaign of the **Algeria Hassi Bir Rekaiz Project** located onshore, in the eastern part of Algeria. In 2014, the project carried out 2D and 3D seismic acquisition and plans to follow up with the 5 well exploration and appraisal drilling campaign. The drilling began in the third quarter of 2014.

The **Mozambique Rovuma Offshore Area 1 Project**, which is also in the exploration phase, is a large gas project located offshore Mozambique. In 2014, the project completed drilling five of six planned exploration and appraisal wells, and successfully discovered an additional gas field from the Tubarao Tigre-1 well. In the fourth quarter of 2014, the project began drilling the Tubarao Tigre-2 appraisal well with completion expected during the first quarter of 2015. The project continues to advance its LNG Engineering and Construction Development activities with first production and sales of LNG expected in 2019.

The **Mozambique Rovuma Onshore Project** is located onshore in the north of Mozambique. During 2014, the project finished drilling the Tembo-1 well, which is one of two planned exploration wells in 2014. Drilling results for Tembo-1 are being evaluated, while the second exploration well called Kifaru-1 was spud at the end of 2014 with completion expected during the first quarter of 2015.

The **Kenya L10A Project**, located offshore Kenya, completed the Sunbird-1 exploration well which showed no commercial discoveries. Post-well result will be used to evaluate remaining geological potential in the area.

The **Kenya L5, L7, L11A, L11B and L12 Project** is carrying out geological and geophysics studies to identify and select an exploration prospect with a plan to drill in 2015.

14.3.6 Portfolio Management

PTTEP continues to undertake portfolio management activities to achieve an optimal balance between project value-added and risk management, as well as to ensure that the Company's long term strategic objectives can be achieved. PTTEP consistently studies and analyses pertinent investment factors in addition to the impact of investments, to keep abreast of the constant changes in the social, economic, and political landscape, and to incorporate these variables into investment considerations and decisions. The Company also reviews its list of target countries for expanding its investments (Focused Countries) by grouping the countries according to petroleum potential and suitability with the Company's strategic directions and goals. The analysis covers factors such as geography, government-share, operational and political risks, as well as PTTEP's competitive advantage.

The following are key portfolio management activities undertaken by PTTEP in 2014:

1) The restructuring of ownership in the **Mariana Oil Sands Project** (formerly known as Canada Oil Sands KKD Project) to give PTTEP the flexibility to adjust its portfolio and the timing of its capital expenditures, based on the current market situations, to achieve optimal investment returns.

2) The acquisition of Hess Corporation's subsidiaries which own interests in natural gas projects onshore and offshore Thailand (aforementioned) representing a strategic fit to PTTEP's growth strategy of adding producing assets that contribute immediate revenue stream, accretion of volume growth and reserves and enhance the Company's position in Thailand.

3) The signing of the Production Sharing Contract for the **Myanmar MOGE 3 Project** to build upon PTTEP's position and expand its investments in the Union of the Republic of Myanmar.

4) The farm-in to the **Barreirinhas AP1 and BM-ES-23 projects** which represent PTTEP's first steps into Brazil, a highly prospective hydrocarbon region.

However, in 2014, PTTEP has relinquished its rights to the **L21/48 concession Block** in Thailand, the **Indonesia Sagari Project**, the **New Zealand Great South Project**, and the **L10B Block in the Kenya Project**. Also relinquished during 2014, but awaiting official approval from the Australian Government, Indonesian Government and Thai Department of Mineral Fuels are the rights to the **AC/P4 Field of the PTTEP AA Project**, the **Indonesia Semai II Project**, the **Indonesia Sadang Project**, as well as the **A4/48 and A5/48 projects** in Thailand.

14.4 Sustainable Development

PTTEP's strategic direction and long-term goals for sustainable growth are founded on the core philosophy that addresses the following three areas: business, society and environment. 2014 marks the first year in which PTTEP became a listed member in the Dow Jones Sustainability Index (DJSI) under the World Index of Oil and Gas Sector. DJSI is a family of indices evaluating the performance of sustainable development in leading global companies. Additionally, during 2014, PTTEP also received a certificate acknowledging the company as a member of Thailand's Private Sector Collective Action Coalition against Corruption (CAC). Of more than 360 companies who have expressed their intent to join the CAC project, PTTEP was amongst one of 78 companies to have been certified as having anti-corruption processes and measures in place.

PTTEP's sustainable development operations during 2014 can be summarized from the perspective of the three areas which make up our core philosophy, as follows:

14.4.1) Business

PTTEP's business management adopts the principles of sustainability that encompass three strategic objectives, namely, expanding production base (Big), extending reserves life (Long), and maintaining investment returns (Strong). PTTEP's operations and portfolio management were carried out in accordance to the strategic objectives as outlined in the "Operational Highlights" section. Moreover, the Company continuously monitors and manages its capital structure to ensure that adequate levels of liquidity are in place to allow it to take advantage of business opportunities that may arise under today's volatile market conditions.

PTTEP is committed to technology development for petroleum exploration and production as well as cultivation of knowledge management culture within the Company. The following are some notable activities in this area:

1) The Company established the PTTEP Technology Center with the objective of researching and developing technologies for petroleum exploration and production to create value for the business. A Technology Development Steering committee was also established to oversee the development of various technologies.

2) Cooperation with universities and research institutions locally and internationally such as:

- Cooperation with KJT Enterprises in the United States to enhance Electromagnetic Imaging to achieve better visualizations of subsurface geology which can lead to more accurate analysis and identification of petroleum system;

- Cooperation with Hitachi Zosen, a Japanese Engineering firm, on the development of CO₂-to-Methane conversion technologies which are aimed at reducing CO₂ emissions while maximizing its benefits;

- Cooperation with Kasetsart University's Faculty of Engineering on the development of Remotely Operated Vehicles (ROV) and Autonomous Underwater Vehicle (AUV) to increase local capabilities in technological innovation and reduce dependency on expensive foreign technology.

14.4.2) Social

PTTEP is dedicated to carrying out its business operations with responsibility to society, and recognizes its stakeholders in areas where it operates. In 2014, PTTEP engaged in the following noteworthy CSR activities:

1) The PTTEP Teenergy Camp to create awareness amongst youths nationwide of the importance of conserving the Khao Yai National Park and to instill a sense of environmental awareness. PTTEP realizes the importance of the roles that local communities play in environmental conservation.

2) Dissemination of local curricula for elementary and high schools such as a local curriculum about tigers for schools surrounding the Huai Kha Kaeng forest, and a curriculum about the conservation of Irrawaddy Dolphins for 14 schools surrounding the upper Songkhla Lake area.

3) PTTEP GREEN UP activities to promote management and employee participation in social and environmental responsibilities activities. In 2014, a total of 2,436 management and employees joined the campaign.

4) Learning Centers in cooperation with local fishing communities and the Institute of Aquaculture in Songkhla to promote the breeding and nursing of crab species back into the ecosystem.

5) Scholarship programs in areas where PTTEP operates such as Suphanburi, Phitsanulok, and Kampaeng Phet. In 2014, PTTEP granted over 1,000 scholarships.

6) Education, Health & Hygiene, and Social Development projects for the communities and societies in the Union of the Republic of Myanmar such as, providing continuous scholarship grants up to undergraduate studies, parasite free schools, classroom buildings, potable water, hygienic toilets, and communal electricity infrastructure.

7) Social Development projects in Indonesia such as the pre-school center for child development project (SIOLA), the health center project (PTTEP LKC DD) and scholarship grants projects (PTTEP-Beastudi Etos).

14.4.3) Environment

PTTEP has an environmental management system which encompasses a project's entire life cycle, and is a subset of PTTEP's Safety, Security, Health and Environment Management System (SSHE MS). In 2014, PTTEP had a Lost Time Injury Frequency (LTIF) score of 0.22, and a Total Recordable Incident Rates (TRIR) score of 1.30. The Company performs better than average on both safety performance indicators, in comparison to the members in the International Association of Oil and Gas Producers (IOGP).

Moreover, PTTEP aims to become a Low carbon footprint organization, and has set a goal to reduce its greenhouse gas (GHG) emissions by not less than 20% in the year 2020 versus its 2012 base year figure. In 2014, PTTEP reduced its greenhouse gas (GHG) emissions by 5.1% below its 2012 levels. Notable activities in this area during 2014 include the following:

1) Reforestation Campaign to plant 200,000 trees of forest between 2013 and 2020, carried out together with the Department of Forestry, the Department of National Parks, and the Department of Marine and Coastal Resources.

2) Reforestation project to promote the study of ecological systems in the Si Nakhon Khuean Khan park in Bang Ka Chao, Samut Prakarn. The reforestation will create a learning center about natural ecosystems and also create a green area in the heart of the city, following the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn. The project also includes renovating and maintaining nature trails and facilities including learning center classrooms for visitors.

3) Participation in Thailand's Voluntary Emission Reduction Program (T-VER) in the field of Sustainable Forestry, to support the voluntary participation in the carbon market initiative in Thailand, and encourage carbon dioxide emissions reduction, increased oxygen production and air pollution absorption.

In addition, PTTEP has also engaged in other environmental activities such as the signing of a Memorandum of Understanding with the Training Department of the Southeast Asian Fisheries Development Center, King Mongkut's University of Technology North Bangkok, Kasetsart University's Research and Development Institute, and the Institute of Marine Science of Burapha University, to develop ROV for environmental survey and research of marine life and habitat. This joint cooperation marks the first time that technology is being developed for environmental purposes in Thailand.

14.5 Business Outlook for 2015

Based on the operating plans, PTTEP expects sales volume in 2015 to grow approximately 6% year-on-year (yoy), primarily from realizing a full year's volume of natural gas sales from the Zawtika Project which began production during 2014, as well as realizing a full year's volume from the acquisition of Hess Thailand which was completed during the first half of 2014, and also from the expected start-up of oil production from the Algeria 433A & 416B Project during the second half of 2015.

The price of crude oil is an important driver to PTTEP's operating performance, and PTTEP expects price volatility in crude oil markets to continue in 2015. During the first half of the year crude oil prices could continue to face downward pressure from market oversupply of approximately 1.5 – 2.0 million BPD with no suggestion of OPEC reducing their crude oil production. This environment is expected to result in low crude oil prices during the first half of the year.

During the second half of the year, however, the industry could see positive factors on prices stemming from crude oil supply which is expected to grow at a slower pace as oil producers reduce their investments to cope with changes in the oil price and global crude oil demand which is also expected to pick up as the global economy recovers. The IMF forecasts that world GDP growth in 2015 will be 3.5%, which is higher than the expected 3.3% growth rate in 2014. Moreover, the reduction in oil prices will increase the buying power of consumers; and the combined effects are expected to result in a slight increase of future demand. There are, nonetheless, other factors to monitor that may have an impact of crude oil prices during 2015, such as geopolitics and unrest in Africa, particularly the violence in Libya. Additionally, if the outcome of nuclear negotiations between Iran and the G6 is successful, Iran may once again export crude oil to the world markets.

The Thai economy in 2015 is expected to gradually recover, but the rate of recovery risks being lower than previous estimates due to public and private spending power. Household debt and exports are both affected by the slow recovery of the Eurozone, Japan and Asia. Tourism is expected to be the engine of growth in 2015. However, there is also a possibility that the government will accelerate its fiscal disbursements while private household consumption and private sector investment could recover supported by lower energy prices. These factors may drive economic growth to 4.0% and subsequently result in increased energy demand versus 2014.

The continuous decline of crude oil prices in 2015 will continue to impact PTTEP's performance. Although PTTEP's main product is natural gas, PTTEP's natural gas prices are expected to begin reflecting the impact of the oil price decline since late 2014, albeit to a lesser magnitude. With respect to PTTEP's crude oil and condensate products, the Company maintains its risk management policy to hedge the oil price volatility using derivatives referenced to Brent crude oil prices.

The Company continuously monitors global economic conditions, events and factors which may impact crude oil prices, and undertakes preparations to cope with volatility through efficient financial management. As a result, PTTEP has created a robust capital structure with low gearing and high liquidity which is reflected in its cash on hand of approximately USD 4 billion at the end of 2014. In addition, PTTEP simulates scenarios with crude oil prices at various levels to generate mitigation plans which will be implemented if such scenarios pan out. PTTEP has adjusted its strategic and operating plans to allow for flexibility in business operations and investments by prioritizing its expenditures as follows:

- Producing projects will continue to produce, and their production rates will be maintained in order to avoid negative impacts to domestic petroleum demand;
- Projects in the development phase will be reassessed, and their investment plans will be adjusted accordingly to allow for flexibility in coping with the oil price environment;
- High risk exploration projects and those without commitments will be deferred as necessary.

Last but not least, PTTEP has a roadmap called “SAVE...to be SAFE” aimed at achieving cost efficiencies in both the short run and long run. An integral part of our plan is to promote a culture of cost consciousness where resources are sensibly consumed.

Information Certification

The Company has reviewed this annual form 56-1 with caution and certified that the information disclosed herewith is complete, accurate, and truthful and does not cause any misunderstanding and omit any significant information required for disclosure. Moreover, the Company also certifies that:

(1) The Financial Statement and other financial details that are summarized in this form represent complete, accurate and significant information regarding the performance and the cash flow of the Company and its subsidiaries.

(2) The Company maintains an effective disclosure system that will assure the Company discloses complete, accurate and significant information of the Company and its subsidiaries. Moreover, the Company also ensures the compliance of the system.

(3) The Company maintains an effective internal control system and for ensuring compliance. The Company has disclosed its internal control assessment as of December 31, 2014 to the external auditor and the Audit Committee. The assessment included weaknesses of the system and significant changes of the internal control as well as any wrongdoing that may affect the financial statements reporting process of the Company and its subsidiaries.

Therefore, as evidence that these documents constitute the entire set that the Company has certified; the Company has authorized Mrs. Pranot Tirasai to initial all pages. If any page is without an initial of Mrs. Pranot Tirasai, the Company does not certify that the information on such page is the true copy.

<u>Name</u>	<u>Position</u>	<u>Signature</u>
Mr. Tevin Vongvanich	The President and Chief Executive Officer, Authorized Director who can sign to bind the Company	<u>Tevin Vongvanich</u>
Authorized Person: Mrs. Pranot Tirasai	Corporate Secretary	<u>Pranot Tirasai</u>

Attachment 1: Information of the Board of Directors, Management and Corporate Secretary of the Company
1. Board of Directors

As of December 31, 2014, the Board of Directors of PTTEP consisted of 14 directors. Details of the 14 current directors and 8 directors, who retired during the year 2014, are shown in the table below.

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
1) Mr. Prajya Phinyawat - Chairman - Chairman of the Independent Directors Committee Starting Date of the Position March 28, 2012	63	Education <ul style="list-style-type: none"> ● Ph.D. Civil Engineering, University of Texas at Austin, U.S.A. ● M.S. Civil Engineering, Stanford University, U.S.A. ● B.E. Civil Engineering, Chulalongkorn University, Thailand Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● Chairman Forum: "Clean Business: What is the Chairman Role?" 1/2014 	0.00038% (15,000 shares)	None	Other listed companies 2011 – Apr 2014 ● Director ● PTT Global Chemical Plc. 2004 – 2013 ● Director ● Thai Lube Base Plc. 2005 – 2013 ● Director ● Bangkok Polyethylene Plc. 2009 – 2011 ● Director ● Thailoil Plc. 2008 – 2011 ● Chief Operating Officer, Downstream Petroleum Business Group and Senior Executive Vice President, Oil Business Unit ● PTT Plc.		

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● Role of the Chairman Program (RCP) 35/2014 ● Director Certification Program (DCP) 14/2002 			2007 – 2011 2006 – 2011 2005 – 2011	<ul style="list-style-type: none"> ● Director ● Director ● Director 	<ul style="list-style-type: none"> ● PTT Aromatics and Refining Plc. ● IRPC Plc. ● PTT Chemical Plc.
		Other Trainings			Other companies		
		<ul style="list-style-type: none"> ● The Joint State - Private Sector Course (Class 15), National Defence College ● Capital Market Academy Leadership Program (Class 7), Capital Market Academy ● Energy Literacy for a Sustainable Future Program (Class 1/2012), Thailand Energy Academy 			2011 – Present 2006 – 2012 2004 – 2012	<ul style="list-style-type: none"> ● Chairman ● Director ● Chairman 	<ul style="list-style-type: none"> ● PTT Asahi Chemical Co., Ltd. ● Thai Paraxylene Co., Ltd. ● PTT Polyethylene Co., Ltd.
					Other organizations		
					None		

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
2) Mr. Pailin Chuchottaworn - Vice Chairman - Member of the Remuneration Committee	58	Education <ul style="list-style-type: none"> ● Ph.D. of Engineering (Chemical Engineering), Tokyo Institution of Technology, Japan ● Master of Engineering (Chemical Engineering), Tokyo Institution of Technology, Japan ● Bachelor of Engineering (Chemical Engineering) (Hons.), Chulalongkorn University, Thailand 	None	None	Other listed companies		
Starting Date of the Position December 1, 2011		Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● Director Certification Program (DCP) 51/2004 ● Director Accreditation Program (DAP) 24/2004 ● Finance for Non-Finance Director Program (FND) 14/2004 			Sep 2014 - Present 2013 – Aug 2014 2011 – Present 2009 – 2013 Jun – Sep 2011 2009 – 2011	<ul style="list-style-type: none"> ● Chairman ● Director ● President and Chief Executive Officer ● Director ● Chief Operations Officer, Upstream Petroleum and Gas Business Group, Acting Chief Executive Officer ● Senior Executive Vice President, PTT, working as Chief Executive Officer 	<ul style="list-style-type: none"> ● IRPC Plc. ● PTT Global Chemical Plc. ● PTT Plc. ● IRPC Plc. ● IRPC Plc. ● IRPC Plc.

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● PTT Executive Leadership Program, GE Crotonville, U.S.A. ● NIDA Executive Leadership Program 2007, Wharton University of Pennsylvania, U.S.A. ● Industrial Liaison Program (ILP), Massachusetts Institute of Technology, U.S.A. ● Top Executive Program in Commerce and Trade (TEPCoT) Class 1, University of Thai Chamber of Commerce ● Capital Market Academy Leadership Program (Class 8), Capital Market Academy ● The Joint State - Private Sector Course (Class 22), National Defence College 			Other companies		
					May – Sep 2011 2006 – 2011 Jun – Sep 2011 2009 – 2011 2008 – 2009 2008 – 2009	<ul style="list-style-type: none"> ● Chairman ● Director ● Chairman ● Director ● Senior Executive Vice President, Petrochemicals & Refining Business Unit, PTT, working as President ● Senior Executive Vice President Petrochemicals & Refining Business Unit, Petrochemicals & Refining Business Unit, PTT, working as President 	<ul style="list-style-type: none"> ● PTT Asahi Chemical Co., Ltd. ● PTT Asahi Chemical Co., Ltd. ● PTT Polymer Marketing Co., Ltd. ● PTT Polymer Marketing Co., Ltd. ● PTT Polymer Marketing Co., Ltd. ● PTT Asahi Chemical Co., Ltd.

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● The 7th "Corporate Governance for Director and Top Executives of State Enterprises and Public Organizations", Year 2011, King Prajadhipok's Institute ● Energy Literacy for a Sustainable Future (Class 1/2012), Thailand Energy Academy 			Other organizations		
					Sep 2014 - Present	● Advisor	● Alternative Energy Institution of Thailand Foundation
					Aug 2014 - Present	● Director	● Social Coordination Support Committee, Princess Maha Chakri Award Foundation
					2013 – Present	● Advisor	● Thailand Industrial Biomedical Engineering Consortium (TIBEC) Committee, Ministry of Science and Technology
					2012 - Present	● Honory Board Member	● University Council, Mahidol University
					2011 - Present	● Director	● Thai Listed Companies Association
					2011 - Present	● Vice Chairman	● Chulalongkorn University Alumni Association
					2010 - Present	● Advisor	● Thai – Japanese Association
					2010 - Present	● Advisor	● Faculty of Engineering Alumni Association of Chulalongkorn University
					2010 - Present	● Director	● Businessmen for Thai Environment, Thailand Environment Institute

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
3) Mr. Chakkrit Parapuntakul - Director - Member of the Risk Management Committee	55	Education <ul style="list-style-type: none"> ● M.B.A., Angelo State University, Texas, U.S.A. ● Bachelor of Accounting, Thammasat University, Thailand 	None	None	Other listed companies		
		Training of Thai Institute of Directors Association			Jul 2014 - Present	<ul style="list-style-type: none"> ● Director and Member of the Board of Executive Directors ● Chairman of the Risk Management Committee 	<ul style="list-style-type: none"> ● Krungthai Bank Plc.
		<ul style="list-style-type: none"> ● Audit Committee Program (ACP) 5/2005 ● Director Accreditation Program (DAP) 8/2004 			2012 – Present	<ul style="list-style-type: none"> ● Chairman of the Board of Directors 	<ul style="list-style-type: none"> ● ASEAN Potash Mining Plc.
		Other Trainings			2008 – Nov 2014	<ul style="list-style-type: none"> ● Advisor to the Audit Committee 	<ul style="list-style-type: none"> ● Eastern Water Resource Development and Management Plc.
Starting Date of the Position January 1, 2011					Other companies		
					2013 – Jun 2014	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● Thai Smile Airways Co., Ltd.
					2010 – 2011	<ul style="list-style-type: none"> ● Chairman 	<ul style="list-style-type: none"> ● Thailand Post Co., Ltd.
					Other organizations		
					2012 - Present	<ul style="list-style-type: none"> ● Deputy Permanent Secretary 	<ul style="list-style-type: none"> ● The Ministry of Finance
					2009 – 2012	<ul style="list-style-type: none"> ● Director General 	<ul style="list-style-type: none"> ● Public Debt Management Office
					2008 – 2009	<ul style="list-style-type: none"> ● Deputy Director General 	<ul style="list-style-type: none"> ● Public Debt Management Office

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● The Civil Service Executive Program for Senior Civil Servants (Class 46), Office of the Civil Service Commission ● The Joint State - Private Sector Course (Class 52), National Defence College ● Executive Development Program (EDP) (Class 66), Kellogg School of Management, Chicago, U.S.A. ● Training Course on Administrative Justice for Executives (Class 5), Institute for Administrative Justice, The Administrative Court 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
4) Mr. Ampon Kittiampon - Independent Director - Chairman of the Audit Committee	59	Education <ul style="list-style-type: none"> ● Ph.D. Applied Economics, Clemson University, South Carolina, U.S.A. ● M.S. Economics, Northeastern University, Boston, U.S.A. ● B.A. Social Sciences, Kasetsart University, Thailand 	None	None	Other listed companies		
Starting Date of the Position					Mar - Jul 2014	<ul style="list-style-type: none"> ● Independent Director 	<ul style="list-style-type: none"> ● Thai Airways International Plc.
March 30, 2011					2009 – Mar 2014	<ul style="list-style-type: none"> ● Chairman 	<ul style="list-style-type: none"> ● Thai Airways International Plc.
					2005 – 2011	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● PTT Aromatics and Refining Plc.
					2005 – 2011	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● PTT Plc.
		Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● Director Certification Program (DCP) 80/2006 			Other companies		
		Other Trainings <ul style="list-style-type: none"> ● Chief Information Officer (CIO) (Class 3), The Office of the Civil Service Commission (OCSC) and National Science and Technology Development Agency ● The National Defence Course (Class 45), National Defence College 			2013 – Jul 2014	<ul style="list-style-type: none"> ● Chairman 	<ul style="list-style-type: none"> ● Thai Smile Airways Co., Ltd.
					Other organizations		
					Jul 2014 – Present	<ul style="list-style-type: none"> ● Member 	<ul style="list-style-type: none"> ● The National Legislative Assembly
					2013 – Present	<ul style="list-style-type: none"> ● Chairman 	<ul style="list-style-type: none"> ● The Bank of Thailand
					2013 – Present	<ul style="list-style-type: none"> ● Board Member 	<ul style="list-style-type: none"> ● The National Economic and Social Development Board
					2013 – Present	<ul style="list-style-type: none"> ● Honorary Board Member 	<ul style="list-style-type: none"> ● National Science and Technology Development Agency
					2012 – Present	<ul style="list-style-type: none"> ● Committee 	<ul style="list-style-type: none"> ● The Council of Chulalongkorn University

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● Innovation for Economic Development (IFED), Harvard Kennedy School, U.S.A. ● Senior Executive Program on Industrial Business Development and Investment (Class 1), Institute of Business and Industrial Development 			2012 – Present <ul style="list-style-type: none"> ● Chairman of the Board of Directors 	<ul style="list-style-type: none"> ● Highland Research and Development Institute (Public Organization) 	
					2012 – Present <ul style="list-style-type: none"> ● Board Member 	<ul style="list-style-type: none"> ● Property Management Office, Chulalongkorn University 	
					2011 – Present <ul style="list-style-type: none"> ● The Expert Judicial Administration Commissioner 	<ul style="list-style-type: none"> ● Office of the Judiciary 	
					2011 – Present <ul style="list-style-type: none"> ● Honorary Committee 	<ul style="list-style-type: none"> ● The Council of Walailak University 	
					2011 – Present and 2004 – 2010 <ul style="list-style-type: none"> ● Civil Service Commissioner 	<ul style="list-style-type: none"> ● The Office of the Civil Service Commission 	
					2010 – Present <ul style="list-style-type: none"> ● President 	<ul style="list-style-type: none"> ● Research and Development Institute of Sufficiency Economy Philosophy Foundation 	
					2010 – Present <ul style="list-style-type: none"> ● Board Member 	<ul style="list-style-type: none"> ● His Royal Highness Crown Prince Maha Vajiralongkorn Scholarship Foundation 	

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
					2010 – Present	<ul style="list-style-type: none"> ● Secretary General to the Cabinet 	<ul style="list-style-type: none"> ● The Cabinet
					2008 - Present	<ul style="list-style-type: none"> ● Chairman 	<ul style="list-style-type: none"> ● State Resources Preparation
					2006 – Present	<ul style="list-style-type: none"> ● Member 	<ul style="list-style-type: none"> ● Office of the Council of State
					2004 – 2013	<ul style="list-style-type: none"> ● Member 	<ul style="list-style-type: none"> ● Monetary Policy Committee Bank of Thailand
					2005 – 2010	<ul style="list-style-type: none"> ● Committee Thailand Board of Investment 	<ul style="list-style-type: none"> ● Thailand Board of Investment
					2004 – 2013	<ul style="list-style-type: none"> ● Board Member 	<ul style="list-style-type: none"> ● The Bank of Thailand
					2004 – 2010	<ul style="list-style-type: none"> ● Secretary General 	<ul style="list-style-type: none"> ● The Office of the National Economic and Social Development Board

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
5) Mr. Manas Jamveha - Director - Member of the Nominating Committee	58	Education <ul style="list-style-type: none"> ● Master of Business Administration, Sukhothai Thammathirat Open University, Thailand ● Master of Political Sciences, Thammasat University, Thailand ● Bachelor of Laws, Thammasat University, Thailand 	None	None	Other listed companies		
Starting Date of the Position		Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● The Role of Chairman Program (RCP) 32/2013 ● Audit Committee Program (ACP) 41/2012 ● Directors Certification Program (DCP) 71/2008 			2006 - 2009	● Director	● MFC Asset Management Plc.
January 1, 2012					Other companies		
					2010 - 2011	● Director	● Dhanarak Asset Development Co., Ltd.
					2009 - 2010	● Director	● Thailand Post Co., Ltd.
					Other organizations		
					2013 - Present	● Director	● Bank for Agriculture and Agricultural Co-Operatives
					2012 – Present	● Comptroller General	● Comptroller General's Department
					2009 - Present	● Director	● Metropolitan Waterworks Authority
					2011 - 2013	● Director	● Islamic Bank of Thailand
					2011 – 2012	● Deputy Permanent Secretary	● The Ministry of Finance
					2010 – 2011	● Inspector General	● The Ministry of Finance
					2009 – 2010	● Chairman	● The Government Lottery Office, Ministry of Finance

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● The Program for Senior Executives on Justice Administration (Class 11), Office of the Judiciary ● The Civil Service Executive Program for Senior Civil Servants (Class 46), Office of the Civil Service Commission ● Executive Development Program, Kellogg School of Management, Northwestern University, U.S.A. ● Middle Management Professional, Revenue, Canada 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
6) Mr. Achporn Charuchinda - Independent Director - Chairman of the Remuneration Committee - Member of the Corporate Governance Committee - Member of the Audit Committee	61	Education <ul style="list-style-type: none"> L.L.B., Faculty of Law, Thammasat University, Thailand Thai Barrister-at-Law, Institute of Legal Education of the Thai Bar Association 	None	Uncle of Mr. Nuttachat Charuchinda	Other listed companies		
					2012 – Present	<ul style="list-style-type: none"> Member of the Legal Committee 	<ul style="list-style-type: none"> Thai Airways International Plc.
					2008 – 2010	<ul style="list-style-type: none"> Executive Director 	<ul style="list-style-type: none"> Siam City Bank Plc.
		Other companies					
					2013 – Present	<ul style="list-style-type: none"> Director 	<ul style="list-style-type: none"> Thai Smile Airways Co., Ltd.
		Other organizations					
					2013 – Present	<ul style="list-style-type: none"> Board Member 	<ul style="list-style-type: none"> The Bank of Thailand
	2013 – Present	<ul style="list-style-type: none"> Chairman of the Securities and Exchange Commission Board 	<ul style="list-style-type: none"> The Securities and Exchange Commission Board 				
Starting Date of the Position		<ul style="list-style-type: none"> Law Drafting Certificate, India The National Defence Course (Class 46), National Defence College 			2012 – Jul 2014	<ul style="list-style-type: none"> Member of the Board of Directors 	<ul style="list-style-type: none"> The Metropolitan Waterworks Authority
January 1, 2013					2011 – 2013	<ul style="list-style-type: none"> Member of the National Energy Policy Council 	<ul style="list-style-type: none"> Energy Policy and Planning Office, The Ministry of Energy

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
					2011 – Present	<ul style="list-style-type: none"> Member of the Office of the Civil Service and Educational Personnel Commission 	<ul style="list-style-type: none"> The Office of the Civil Service and Educational Personnel Commission, The Ministry of Education
					2011 – Present	<ul style="list-style-type: none"> Member of the Institutions Policy Committee 	<ul style="list-style-type: none"> The Bank of Thailand
					2003 – Present	<ul style="list-style-type: none"> Member of the Council of State 	<ul style="list-style-type: none"> The Office of the Council of State
					2011 – 2013	<ul style="list-style-type: none"> Member of the National Water and Flood Management Committee 	<ul style="list-style-type: none"> The Office of the National Water and Flood Management Policy

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
					2010 – 2013	<ul style="list-style-type: none"> Member of the Decentralization to Local Government Organization Committee 	<ul style="list-style-type: none"> The Office of the Permanent Secretary, The Prime Minister's Office
					2010 – 2013	<ul style="list-style-type: none"> Board Member 	<ul style="list-style-type: none"> The Energy Conservation Promotion Fund
					2010 – 2013	<ul style="list-style-type: none"> Member of the Administrative Courts Officials Commission 	<ul style="list-style-type: none"> The Office of the Administrative Courts
					2010 – 2013	<ul style="list-style-type: none"> Member 	<ul style="list-style-type: none"> The Government Pension Fund
					2010 – 2013	<ul style="list-style-type: none"> Secretary - General of the Office of the Council of state 	<ul style="list-style-type: none"> The Office of the Council of State

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
					2007 – 2013	<ul style="list-style-type: none"> Chairman of the Audit Committee for the Financial Institutions Development Fund 	<ul style="list-style-type: none"> The Bank of Thailand
					2007 – 2013	<ul style="list-style-type: none"> Member of the Financial Institutions Development Fund 	<ul style="list-style-type: none"> The Bank of Thailand

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
7) Mr. Nuttachat Charuchinda - Director - Chairman of the Remuneration Committee	59	Education <ul style="list-style-type: none"> ● Master of Business Administration, Thammasat University, Thailand ● Bachelor of Engineering in Civil Engineering, Chiang Mai University, Thailand 	None	Nephew of Mr. Achporn Charuchinda	Other listed companies		
Starting Date of the Position November 1, 2013		Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● Director Certification Program (DCP) 129/2010 			2013 – Present	<ul style="list-style-type: none"> ● Chief Operating Officer, Upstream Petroleum Business Group 	<ul style="list-style-type: none"> ● PTT Plc.
					2012 – Present	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● Thairoil Plc.
					2011 – 2013	<ul style="list-style-type: none"> ● Chief Operating Officer, Downstream Petroleum Business Group 	<ul style="list-style-type: none"> ● PTT Plc.
					2010 – 2011	<ul style="list-style-type: none"> ● Senior Executive Vice President, Corporate Strategy 	<ul style="list-style-type: none"> ● PTT Plc.
					Jul – Dec 2009	<ul style="list-style-type: none"> ● Executive Vice President, International Trading Business Unit 	<ul style="list-style-type: none"> ● PTT Plc.

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship	Working experience in the past five years		
					Period	Position	Function/Company/
8) Admiral Tanarat Ubol - Vice Chairman of the Independent Directors Committee - Chairman of the Corporate Governance Committee - Member of the Remuneration Committee Starting Date of the Position September 1, 2014	60	Education <ul style="list-style-type: none"> ● Master of Public and Private Management, National Institute of Development Administration (NIDA), Thailand ● Bachelor of Science in Electrical Engineering, The National Defense Academy of Japan 	None	None	Other listed companies		
		None					
		Other companies					
		Oct2014-Present			● Chairman	● Bangkok Dock Co., Ltd.	
		Other organizations					
		Oct2014-Present			● Chairman	● Frigate Squadron Project	
		Oct2014-Present			● Chief of Staff	● Royal Thai Navy	
		2013-Oct 2014			● Chairman	● Royal Thai Navy Transport Helicopter Procurement Project	
		2013-Oct 2014			● Chairman	● HTMS Naresuan Frigate Squadron Improvement Project	
		2012 - 2013			● Senior Advisor	● Royal Thai Navy	
2011 - 2012	● Assistant Chief of Staff for Operations	● Royal Thai Navy					
2009 - 2010	● Director General	● Naval War College					
<ul style="list-style-type: none"> ● Maritime Joint Force Commander Course (Admiral Level), Hawaii, U.S.A. ● Advanced Security for Senior Executive, APCSS, Hawaii, U.S.A. ● National Institute for Defense Studies (Japan) ● National Institute for Defence College (Class 51) 							

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
9) Mr. Chavalit Pichalai - Director - Member of the Risk Management Committee	59	Education <ul style="list-style-type: none"> ● Master of Public Administration, Carleton University, Canada ● Master of Economics Program in Development Economics, National Institute of Development Administration (NIDA), Thailand ● Bachelor of Arts in Economics, Thammasat University, Thailand 	None	None	Other listed companies		
		Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● Director Certification Program (DCP) 192/2014 			Mar 2014 – Present	<ul style="list-style-type: none"> ● Independent Director and Audit Committee Member 	<ul style="list-style-type: none"> ● Ratchaburi Electricity Generating Holding Plc.
Starting Date of the Position September 1, 2014		Other Trainings <ul style="list-style-type: none"> ● The Civil Service Executive Program for Senior Civil Servants (Visionary Leadership; Class 39), Office of the Civil Service Commission 			Other companies		
					None		
					Other organizations		
					Jul 2014 – Present	<ul style="list-style-type: none"> ● Director-General 	<ul style="list-style-type: none"> ● Energy Policy and Planning Office, Ministry of Energy
					Mar 2014 – Present	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● National Research Council of Thailand; Committee Member of Physical Science and Mathematics Academic Discipline
					2013 - Present	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● Energy Vocabulary (Nuclear) Dictionary Publication, The Royal Institute
					2009 - Present	<ul style="list-style-type: none"> ● Director 	<ul style="list-style-type: none"> ● The Sirindhorn International Environmental Park

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● The Joint State - Private Sector Course (Class 2008), National Defence College ● The Columbia Senior Executive Programme (CSEP 131), Columbia University, U.S.A. ● Chief Information officer (CIO), National Electronics and Computer Technology Center (NECTEC) 			2012 – Jul 2014 2011 – 2012 2006 – 2011	<ul style="list-style-type: none"> ● Inspector-General ● Deputy Director General ● Deputy Director General 	<ul style="list-style-type: none"> ● Ministry of Energy ● Department of Mineral Fuels, Ministry of Energy ● Energy Policy and Planning Office, Ministry of Energy

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
10) Mr. Nuttavudh Photisaro - Independent Director - Chairman of the Nominating Committee - Member of the Corporate Governance Committee	57	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> M.B.A. (Management of Information System), University of Dallas, Texas, U.S.A. 			None		
		<ul style="list-style-type: none"> B.A. in Political Science, Chulalongkom University, Thailand 			Other companies		
		Training of Thai Institute of Directors Association			2013 – Jul 2014	● Director	● Thailand Post Co., Ltd.
		<ul style="list-style-type: none"> How to Develop a Risk Management Plan (HRP) 6/2014 			Other organizations		
Starting Date of the Position September 1, 2014		Other Trainings			2012 – Present	● Deputy Permanent Secretary	● Ministry of Foreign Affairs
		<ul style="list-style-type: none"> Foreign Affairs Executive Programme (Class 1), Ministry of Foreign Affairs 			2012 – Present	● Director	● Young Ambassadors of Virtue Foundation
		<ul style="list-style-type: none"> Training Course on Administrative Justice for Executives (Class 1), Institute for Administrative Justice, The Administrative Court 			2012 – Present	● Director	● Thai Foundation
					2011 – 2012	● Ambassador	● Royal Thai Embassy, Tel-Aviv, Israel
					2009 – 2010	● Minister	● Department of Protocol

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● Energy Literacy for a Sustainable Future (Class 1), Thailand Energy Academy ● National Defence Course for the Public, Private and Political Sectors (Class 6), National Defense College (Class 55) ● The Programme for Senior Executives on Justice Administration (Class 18), Office of the Judiciary 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
11) Mr. Sethaput Suthiwart-Narueput - Independent Director - Member of the Audit Committee - Member of the Risk Management Committee	49	Education <ul style="list-style-type: none"> ● Ph.D. Economics, Yale University, U.S.A. ● M.Phil. Economics, Yale University, U.S.A. ● B.A. (Highest Honors) Economics, Swarthmore College, U.S.A. 	None	None	Other listed companies		
		2011 – 2012 2009 – 2011			<ul style="list-style-type: none"> ● Director ● Executive Vice President and Chief Economist 	<ul style="list-style-type: none"> ● TMB Bank Plc. ● Siam Commercial Bank (SCB) Plc. 	
		Other companies					
		2011 – Present			<ul style="list-style-type: none"> ● Managing Partner 	<ul style="list-style-type: none"> ● The Advisor Co., Ltd. 	
		Other organizations					
Starting Date of the Position September 1, 2014	Training of Thai Institute of Directors Association <ul style="list-style-type: none"> ● Director Accreditation Program (DAP) 94/2012 	Nov 2014 - Present 2012 – Present 2000 – Present	<ul style="list-style-type: none"> ● Member ● Executive Chairman ● Advisor on Academic Affairs and Visiting Professor of Economics 	<ul style="list-style-type: none"> ● Monetary Policy Committee, Bank of Thailand ● Thailand Future Foundation ● Sasin Graduate Institute of Business Administration 			
Other Trainings							
None							

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
12) Colonel Nimit Suwannarat - Independent Director - Member of the Nominating Committee - Member of the Risk management Committee	43	Education <ul style="list-style-type: none"> ● Master of Science in Electrical Engineering (Communications and Signal Processing), University of Minnesota, Minnesota, U.S.A. ● Bachelor of Science in Electrical Engineering, Virginia Military Institute, Virginia, U.S.A. 	None	None	Other listed companies		
		None					
		Other companies					
		None					
		Other organizations					
Starting Date of the Position		Training of Thai Institute of Directors Association			2010 – Present	<ul style="list-style-type: none"> ● Executive Officer of the 1st Field Artillery Regiment, King's Guard 	<ul style="list-style-type: none"> ● Royal Thai Army
September 1, 2014		None			2009 – 2010	<ul style="list-style-type: none"> ● Chief of Staff of the 1st Field Artillery Regiment, King's Guard 	<ul style="list-style-type: none"> ● Royal Thai Army
		Other Trainings					
		<ul style="list-style-type: none"> ● Public Key Infrastructure (Certification Authority, Digital Signature) Course, Ottawa, Canada ● Electronic Commerce Course, Florida, U.S.A. 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● Computer Emergency Response Team, Carnegie Mellon, Pennsylvania, U.S.A. ● National Crisis Management Course, APCSS, Hawaii, U.S.A. ● Command and General Staff College (Class 83), Royal Thai Army ● Joint Staff Course, Joint Staff College ● Intermediate Certificate Course in Political Leadership in the New Era (Class 2), King Prajadhipok's Institute 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
13) Mr. Piti Tantakasem - Independent Director - Member of the Corporate Governance Committee	44	Education <ul style="list-style-type: none"> ● Ph.D. in Strategic Management (Joint Program: University of Nebraska, U.S.A. and Bangkok University) ● Master of Business Administration, University of North Carolina at Chapel Hill, U.S.A. ● Bachelor of Engineering (Industrial Engineering), Chulalongkorn University, Thailand 	None	None	Other listed companies		
		Training of Thai Institute of Directors Association None Other Trainings <ul style="list-style-type: none"> ● Financial Derivatives, EuroMoney Training ● Chartered Financial Analyst, CFA Institute 			2008 – Present	● Chief Wholesale Banking Officer	● TMB Bank Plc.
Starting Date of the Position October 1, 2014					Other companies		
					2011 – Present	● Director	● TRIS Corporation Ltd.
					2011 – Present	● Director	● TRIS Rating Co., Ltd.
					2009 – Present	● Director	● National ITMX Co., Ltd.
					1996 – Present	● Director	● Tiyana Co., Ltd.
					Other organizations		
					Jun 2014 - Present	● Project Sub-Committee	● Thailand Board of Investment (BOI)

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> Executive Education: Building Leading Customer-Centric Organization 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
14) Mr. Tevin Vongvanich - Director - President and Chief Executive Officer	56	Education	0.00300% (118,977 shares)	None	Other listed companies		
		<ul style="list-style-type: none"> ● M.Sc. (Petroleum Engineering), University of Houston, U.S.A. ● M.Sc. (Chemical Engineering), Rice University, U.S.A. ● B.E. (Chemical Engineering), Chulalongkorn University, Thailand 			Sep 2014 – Present 2010 – 2012 2009 – 2012 2009 – 2011 2009 – 2011 2009 – 2010 2007 – 2010	<ul style="list-style-type: none"> ● Chairman and Independent Director ● Director ● Chief Financial Officer ● Director ● Director ● Director ● Director 	<ul style="list-style-type: none"> ● MCOT Plc. ● Thairoil Plc. ● PTT Plc. ● PTT Chemical Plc. ● PTT Aromatics and Refining Plc. ● Bangkok Aviation Fuel Services Plc. ● Bangchak Petroleum Plc.
Starting Date of the Position		Training of Thai Institute of Directors Association			Other companies		
November 30, 2009		<ul style="list-style-type: none"> ● Role of the Compensation Committee (RCC) 12/2011 ● Financial Statements for Directors Program (FSD) 6/2009 ● Director Certification Program (DCP) 21/2002 			2009 – 2011 2008 – 2011	<ul style="list-style-type: none"> ● Chairman ● Director 	<ul style="list-style-type: none"> ● PTT ICT Solutions Co., Ltd. ● PTT International Co., Ltd.
					Other organizations		
					Nov 2014 - Present Jun 2014 – Present	<ul style="list-style-type: none"> ● Honorary Advisor ● Advisor 	<ul style="list-style-type: none"> ● Energy Committee, The National Legislative Assembly ● The Board of Investment of Thailand

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<p>Other Trainings</p> <ul style="list-style-type: none"> ● Senior Executive Program (S.E.P. 7), Sasin Graduate Institution of Business Administration of Chulalongkorn University ● Program for Global Leadership (PGL), Harvard Business School, U.S.A. ● Advanced Certificate Course in Politics and Governance in Democratic System for Executives (Class 10), Political and Governance College, King Prajadhipok's Institute ● Capital Market Academy Leadership Program (Class 6), Capital Market Academy 			<p>2013 – Present</p> <ul style="list-style-type: none"> ● Honorary board member <p>Jul 2014 – Present</p> <ul style="list-style-type: none"> ● Chairman <p>Jul 2014 – Present</p> <ul style="list-style-type: none"> ● Board of Trustees 	<ul style="list-style-type: none"> ● National Science and Technology Development Agency ● TMA Center for Competitiveness Thailand Management Association ● Thailand Management Association 	

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● The Joint State – Private Sector Course (Class 2552), National Defence College ● Energy Literacy for a Sustainable Future Program (Class 3), Thailand Energy Academy 					

Retired Directors

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
1) Mr. Norkun Sitthiphong	61	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Ph.D. (Mechanical Engineering), Oregon State University, U.S.A. ● M.Sc. (Mechanical Engineering), Oregon State University, U.S.A. ● B. Eng. (Mechanical Engineering), Chulalongkorn University, Thailand 			2012 – Present	● Chairman	● Thairoil Plc.
		Training of Thai Institute of Directors Association			2011 – 2013	● Chairman	● PTT Plc.
		<ul style="list-style-type: none"> ● Role of the Chairman Program (RCP) 21/2009 			2011 – 2012	● Director	● Thairoil Plc.
		Other Trainings			2010 – 2011	● Director	● PTT Plc.
		<ul style="list-style-type: none"> ● The Program for Senior Executives on Justice Administration (Class 16), Office of the Judiciary 			2009 – 2011	● Chairman	● PTT Aromatics and Refining Plc.
					2009 – 2011	● Chairman	● IRPC Plc.
	2008 – 2010	● Chairman	● PTT Plc.				
				Other companies			
				None			
				Other organizations			
				2010 – 2013	● Permanent Secretary	● Ministry of Energy	
				2008 – 2013	● Director	● Nuclear Power Program Development Office	
				2003 – 2010	● Deputy Permanent Secretary	● Ministry of Energy	

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● Capital Market Academy Leadership Program (Class 4), Capital Market Academy ● The Joint State – Private Sector Course (Class 47), The National Defence College 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
2) Mr. Suthep Liumsrijareern	60	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Post-Graduate Diploma, Hydraulic Engineering, International Institute of Hydraulic Engineering, Delft, The Netherlands 			2011 – Aug 2014	● Independent Director	● PTT Global Chemical Plc.
		<ul style="list-style-type: none"> ● Bachelor of Science (Civil Engineering), Chiang Mai University, Thailand 			2013 – Jun 2014	● Director	● PTT Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> ● Director Accreditation Program (DAP), Class 96/2012 ● Audit Committee Program (ACP), Class 39/2012 ● Monitoring the System of Internal Control and Risk Management (MIR), Class 12/2012 			None		
					Other organizations		
				Jun 2014 – Present	● Advisor to the Prime Minister	● The Prime Minister's Office	
				2013 – Jun 2014	● Permanent Secretary	● Ministry of Energy	
				2011 – 2013	● Director General	● Energy Policy and Planning Office (EPPO), Ministry of Energy	
				2009 – 2011	● Deputy Director General	● Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy	
				2007 – 2009	● Director	● Bureau of Alternative Energy Development, Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy	

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● Energy Executive Program (Class 1), Ministry of Energy ● Joint Staff Program (Class 43), National Defence Studies Institute, Supreme Command Headquarters ● Civil Service Executive Program 1 (Class 44), Civil Service Training Institute (CSTI), Office of the Civil Service Commission (OCSC) ● The National Defence Course (Class 51), National Defence Studies Institute, National Defence College of Thailand ● Energy Literacy for a Sustainable Future (Class 2), Thailand Energy Academy 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
3) Mr. Viraphol Jirapraditkul	59	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Master of Economics in Energy Economics, University of Calgary, Canada 			2012 – 2013	● Board Member	● National Power Supply Plc.
		<ul style="list-style-type: none"> ● Master of Economics in Development Economics, National Institute of Development Administration (NIDA), Thailand 			Other companies		
		<ul style="list-style-type: none"> ● B.A. (Economics), Thammasat University, Thailand 			2013 – Jul 2014	● Board Member	● Thai Petroleum Pipeline Co., Ltd.
		Training of Thai Institute of Directors Association			Other organizations		
		<ul style="list-style-type: none"> ● Role of the Nomination and Governance Committee (RNG) 1/2011 			Jul 2014 - Present	● Commissioner	● Energy Regulatory Commission
		<ul style="list-style-type: none"> ● Director Certification Program (DCP) 116/2009 			7-16 Jul 2014	● Director General	● Department of Alternative Energy Development and Efficiency, Ministry of Energy
	2013 – Jul 2014	● Chief Inspector General	● The Ministry of Energy				
	2008 – Present	● Board Member	● Ramkhamhaeng University Council				
	2011 – 2013	● Director General	● Department of Energy Business				
	2007 – 2011	● Board Member	● The Energy Fund Administration Institute (Public Organization)				
	2007 – 2011	● Board Member	● Electrical and Electronics Institute				

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● The Civil Service Executive Program (Class 1), Office of the Civil Service Commission ● National Defense College (Class of Year 2007) ● Program for Chief Information Officer, Office of the Civil Service Commission and National Electronics and Computer Technology Center ● Training Course on Administrative Justice for Executives (Class 3), Institute for Administrative Justice, The Administrative Court ● Energy Literacy for a Sustainable Future Program (Class 3), Thailand Energy Academy 			2006 – 2011	● Director General	● Energy Policy and Planning Office, Ministry of Energy

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
4) General Pornchai Kranlert	63	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Master of Public Administration, National Institute of Development Administration, Thailand ● Bachelor of Political Science, Ramkhamhaeng University, Thailand 			None		
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> ● Role of the Compensation Committee Program (RCC) 17/2013 ● Role of the Nomination and Governance Committee (RNG) Program 3/2012 ● Director Certification Program (DCP) 161/2012 ● Director Accreditation Program (DAP) 61/2007 			2012 – Present	● Director	● Mah Boon Krong 888, Co., Ltd
					2012 – Present	● Director	● Mah Boon Krong Dairy Goats, Co., Ltd
					2012 – Present	● Director	● Mah Boon Krong Food Co., Ltd
					2011 – Present	● Director	● APT Bearing Parking Co., Ltd
2011 – Present	● Director	● APT Bearing Mall Co., Ltd					
Other organizations							
2007 – 2011	● Special Advisor	● Office of the Permanent Secretary for Defence					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● The National Defence Course (Class 44), National Defence College ● Capital Market Academy Leadership Program (Class 8), Capital Market Academy ● Thai Intelligent Investors (Class 1), Thai Investors Academy 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
5) General Warawat Indradat	65	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Master of Business Administration, The Civil Military MBA Program, Kasetsart University, Thailand ● The Royal Thai Army Command and General Staff College (Class 62) , Thailand ● Bachelor of Science (Army), Chulachomklao Royal Military Academy (Class 21), Thailand ● Command and General Staff Officer Course Kansas, U.S.A. 			2012 – 2013	● Member of the Corporate Governance Committee	● PTT Plc.
					2011 – 2013	● Independent Director	● PTT Plc.
		Training of Thai Institute of Directors Association			Other companies		
				2010 – Present	● Executive Chairman	● U Place Apartment, Co., Ltd.	
				2009 – Present	● Executive Chairman	● Sai Panadda (1997), Co., Ltd.	
				Other organizations			
		<ul style="list-style-type: none"> ● Director Certification Program (DCP) 162/2012 ● Role of the Compensation Program (RCC) 18/2014 			2012 – Present	● Advisor to the Executive Board of the Royal Thai Army Radio and Television	● Royal Thai Army Radio and Television Station Channel 5, Royal Thai Armed Forces Headquarters

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● Advanced Security Management Program (Class 3), National Defence College ● Public Director Institute (PDI) (Class 9), Public Director Institute ● Energy Literacy for a Sustainable Future Program (Class 2), Thailand Energy Academy ● Defense Resource Management Course, Naval Post-graduate School, California, U.S.A. 			2011 – Present <ul style="list-style-type: none"> ● Executive Director 	<ul style="list-style-type: none"> ● Royal Thai Armed Forces Headquarters 	
					2008 – 2009 <ul style="list-style-type: none"> ● Senior Expert 	<ul style="list-style-type: none"> ● The Royal Thai Army 	

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years			
					Period	Position	Function/Company/ Type of Business	
6) Mr. Athapol Yaisawang	64	Education	None	None	Other listed companies			
		<ul style="list-style-type: none"> ● LL.D. (honoris causa), Ramkhamhaeng University, Thailand ● LL.M., Thammasat University, Thailand ● Barrister at Law, Institute of Legal Education of the Thai Bar Association ● LL.B. (Hons), Thammasat University, Thailand 			2013 – Jun 2014	● Independent Director	● Thai Airways International Plc.	
					2013 – Jun 2014	● Independent Director and Chairman of the Audit Committee	● PTT Plc.	
					Other companies			
					None			
					Other organizations			
						Jun 2014 - Present	● Advisor	● Office of The Attorney General
					Training of Thai Institute of Directors Association	2013 – Jun 2014	● Attorney General	● Office of The Attorney General
					None	2009 - 2013	● Deputy Attorney General	● Office of The Attorney General
					Other Trainings	2009 - 2012	● Director	● Mass Rapid Transit Authority of Thailand
	<ul style="list-style-type: none"> ● The Civil Service Executive Program for Senior Civil Servants (Class 24), The 1st Curriculum, Office of the Civil Service Commission 	2009 - 2012	● Director	● Government Saving Bank				
		2008 - 2011	● Director	● Expressway Authority of Thailand				
		2007 - 2009	● Chief Inspector General	● Office of The Attorney General				

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● The Joint State - Private Sector Course (Class 17), National National Defence College ● Capital Market Academy Leadership Program (Class 13), ● Advanced Certificate Course in Politics and Governance in Democratic System for Executives (Class 13), Political and Governance College, King Prajadhipok's Institute ● Rule of Law for Democracy (RLD) Program (Class 1), Constitutional College, Constitutional Education Institute, Office of the Constitutional Court 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
7) Mr. Maitree Srinarawat	65	Education	None	None	Other listed companies		
		<ul style="list-style-type: none"> ● Ph.D. in Civil Engineering (Transportation), University of Texas at Austin, Texas, U.S.A. ● M. Eng. in Civil Engineering (Transportation), Texas A&M University, Texas, U.S.A. ● B.Eng. in Civil Engineering, Chulalongkorn University, Thailand 			Jan – Feb 2008	● Director	● Airports of Thailand Plc.
		Training of Thai Institute of Directors Association			Other companies		
		<ul style="list-style-type: none"> ● The 2nd National Director Conference 2013 “Board Leadership Evolution” ● Successful Formulation & Executive of Strategy (SFE) Program 9/2013 ● Director Certification Program (DCP) 94/2007 			None		
					Other organizations		
					2012 – Present	● Member	● The Steering Committee for Set up an Aerospace Industrial Estate and Aerospace Repair Hub at Nakorn Ratchasima Airport
	2012 – Present	● Member	● The Joint Steering Committee for Rail Development (Sino-Thai)				
	2012 – Present	● Honorary Member	● The Steering Committee for the Selection of the Civil Servant to Appoint as an Executive, Higher Level and Director, Higher Level, The Ministry of Transport				
	2012 – Present	● Honorary Commissioner The Civil Service Sub-Commission	● The Ministry of Transport				

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● The Joint State - Private Sector Course (Class 3), National Defence College ● Foreign Trade Logistics Conference, Republic of Turkey ● The Ministerial Conference on Global Environment and Energy in Transport, Tokyo, Japan ● Infrastructure in a Market Economy, Harvard Kennedy School, U.S.A. 			2012 – Present <ul style="list-style-type: none"> ● Member of the Sub-commissioner 	<ul style="list-style-type: none"> ● The Bureaucracy Development Sub-commission with Respect to the Transfer of Government Economic Mission 	
					2011 – Present <ul style="list-style-type: none"> ● Member of the Sub-committee 	<ul style="list-style-type: none"> ● The Steering Committee for the Conference on the bureaucracy Regarding Review and Restructuring Government and the Economy 	
					2008 – 2009 <ul style="list-style-type: none"> ● Deputy Permanent Secretary 	<ul style="list-style-type: none"> ● The Ministry of Transport 	

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years				
					Period	Position	Function/Company/ Type of Business		
8) Mrs. Varanuj Hongsaprabhas	66	Education	None	None	Other listed companies				
		<ul style="list-style-type: none"> ● M.S. (Financial Management), North Carolina State University, U.S.A. ● B.A. (Economics), North Carolina State University, U.S.A. 			2010 – 2011	● Director	● TOT Plc.		
		Training of Thai Institute of Directors Association			Other companies				
		<ul style="list-style-type: none"> ● Risk Management Committee Program (RMP) 1/2013 ● How to Develop a Risk Management Plan Program (HRP) 4/2013 ● IOD National Director Conference 2012 ● Board Performance Review Course (BPR) 1/2012 ● The Board's Role in Mergers and Acquisition (M&A) Program 2/2012 			2009 – 2010	● Director	● ACT Mobile Co., Ltd		
					Other organizations				
					2006 – 2009	● Director	● Port Authority of Thailand		

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		<ul style="list-style-type: none"> ● Monitoring the System of Internal Control and Risk Management Program (MIR) 13/2012 ● Monitoring Fraud Risk Management Program (MFM) 8/2012 ● Role of the Nomination and Governance Committee Program (RNG) 2/2011 ● Role of the Chairman Program (RCP) 23/2011 ● Audit Committee Program (ACP) 22/2008 ● Director Certification Program (DCP) 84/2007 					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/Company/ Type of Business
		Other Trainings <ul style="list-style-type: none"> ● Corporate Governance Program for Director and Senior Management of State Enterprises and Public Organizations 10/2013, Public Director Institute ● The National Defence Course (Class 2546), National Defence College ● Towards High Potential Leaders Civil Service Training Institute 					

Criminal offense record during the past 10 years

- | | |
|---|----|
| 1) Being adjudged of convicting a crime or being on trial for convicting a crime | No |
| 2) Being adjudged bankrupt or a receiver is appointed | No |
| 3) Being a management in the country or partnership which is adjudged bankrupt or a receiver is appointed | No |

Remarks: The name and number(s) of the authorized directors who may sign to bind the Company from 9 October 2014 are

- Mr. Manas Jamveha
- Mr. Pailin Chuchottaworn
- Mr. Nuttachat Charuchinda, and
- Mr. Chavalit Pichalai

Two of the above four directors can sign jointly and affix the Company's seal or Mr. Tevin Vongvanich, the President and Chief Executive Officer, can singly sign.

2. Management

As of January 1, 2015, PTTEP management team had 16 personnel as defined by the Capital Market Supervisory Board. Details are shown below.

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
1) Mr. Tevin Vongvanich President and Chief Executive Officer	Please see part 1 for details						
2) Mr. Somporn Vongvuthipomchai Executive Vice President, Strategy and Business Development Group	56	Ph.D. (Petroleum Engineering), University of Tulsa, U.S.A.	0.00471% (187,039 shares)	None	2015 - Present	• Executive Vice President, Strategy and Business Development Group	PTTEP
					2010 - 2014	• Executive Vice President, International Asset Group	PTTEP
					2006 - 2010	• Senior Vice President, International Asset Group	PTTEP
3) Mr. Chatchawal Eimsiri Executive Vice President, attached to President and Chief Executive Officer	55	M.Sc. (Operation Research), London School of Economics and Political Science, University of London, United Kingdom IOD: DCP 91 (2007)	0.00044% (17,484 shares)	None	2014 - Present	• Executive Vice President, Attached to President and Chief Executive Officer	PTTEP
					2011 - 2014	• Executive Vice President, Attached to President and Chief Executive Officer (Seconded to PTT)	PTT
					2000 - 2011	• Senior Vice President, Finance and Accounting Division	PTTEP

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
4) Ms. Penchun Jarikasem Executive Vice President, Finance and Accounting Group	59	M.Sc. (Business Administration), Thammasart University IOD: DCP 113 (2009)	0.00058% (23,076 shares)	None	2011 - Present	<ul style="list-style-type: none"> Executive Vice President, Finance and Accounting Group 	PTTEP
					2006 - 2011	<ul style="list-style-type: none"> Executive Vice President, Corporate Finance 	PTT
5) Mr. Phongsthorn Thavisin Executive Vice President, Technology and Sustainability Development Group	55	B.Sc. (Petroleum and Natural Gas Engineering), The Pennsylvania State University, U.S.A.	0.00043% (16,902 shares)	None	2015 - Present	<ul style="list-style-type: none"> Executive Vice President, Technology and Sustainability Development Group 	PTTEP
					2012 - 2014	<ul style="list-style-type: none"> Executive Vice President, Engineering and Development Group 	PTTEP
					2010 - 2012	<ul style="list-style-type: none"> Senior Vice President, Engineering and Construction Division 	PTTEP
					2009 - 2010	<ul style="list-style-type: none"> Vice President, Production Development Division 	PTTEP

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
6) Mr. Thiti Mekavichai Executive Vice President, Human Resources and Business Services Group	53	B.Sc. (Geography), Srinakarinvirot (Prasarnmitr) University	0.00070% (27,796 shares)	None	2012-Present	<ul style="list-style-type: none"> Executive Vice President, Human Resources and Business Services Group 	PTTEP
					2011-2012	<ul style="list-style-type: none"> Senior Vice President, Human Resources Division 	PTTEP
7) Mr. Pairoj Rangponsumrit Executive Vice President, Production Asset Group	59	M.Sc. (Mathematics), Mahidol University	0.00319% (126,721 shares)	None	2015 - Present	<ul style="list-style-type: none"> Executive Vice President, Production Asset Group 	PTTEP
					2013 - 2014	<ul style="list-style-type: none"> Executive Vice President, Domestic Asset Group 	PTTEP
					2011 - 2013	<ul style="list-style-type: none"> Senior Vice President, S1 Asset 	PTTEP
					2010 - 2011	<ul style="list-style-type: none"> Senior Vice President, Bongkot Asset 	PTTEP
					2008 - 2010	<ul style="list-style-type: none"> Vice President, Arthit Asset 	PTTEP

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
8) Mr. Nawee Anantraksakul Executive Vice President, Geosciences and Exploration Group	59	M.Sc. (Geology), Chulalongkorn University	0.00043% (16,877 shares)	None	2014 - Present	• Executive Vice President, Geosciences and Exploration Group	PTTEP
					2013 – 2014	• Quality Assurance Champion	PTTEP
					2011 – 2013	• Senior Vice President, Bongkot Asset	PTTEP
					2009 - 2011	• Senior Vice President, Arthit Asset	PTTEP
9) Mr. Kanit Sangwongwanich Executive Vice President, Engineering and Development Group	57	B.Sc. (Petroleum Engineering), University of Wyoming, U.S.A.	0.00201% (79,752 shares)	None	2015 - Present	• Executive Vice President, Engineering and Development Group	PTTEP
					2014	• Executive Vice President, Operations Support Group	PTTEP
					2013 – 2014	• Senior Vice President Well Technology Division	PTTEP
					2009 - 2012	• Senior Vice President, seconded as General Manager, Carigali-PTTEPI Operating Company SDN. BHD. (CPOC), Malaysia	PTTEP

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
10) Mr. Kitisak Nualchanchai Executive Vice President, Operations Support Group	58	M.PA (Public Administration), National Institute of Development Administration	0.00094% (37,277 shares)	None	2015 - Present	• Executive Vice President, Operations Support Group	PTTEP
					2013 - 2014	• Senior Vice President, Bongkot Asset	PTTEP
					2011 - 2013	• Senior Vice President, Safety, Security, Health and Environment Division	PTTEP
11) Mr. Yongyos Krongphanich Senior Vice President, Finance Division, and Acting Senior Vice President, Accounting Division	54	M.Sc. (Accounting), Thammasart University	0.00166% (66,049 shares)	None	2014 - Present	• Senior Vice President, Finance Division	PTTEP
					2014 - Present	• Acting Senior Vice President, Accounting Division	PTTEP
					2013 - 2014	• Senior Vice President, Finance and Strategic Information Technology Division	PTTEP
					2011 - 2012	• Senior Vice President, Accounting Division	PTTEP
					2010 - 2011	• Vice President, Joint Venture Myanmar Asset	PTTEP
2009 - 2010	• Senior Manager, Joint Venture Projects	PTTEP					

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
12) Ms. Jaroonsri Wankertphon Vice President, Accounting Policy and Solution Department, and Acting Vice President, Managerial Accounting Department	49	M.Sc. (Financial Accounting), Thammasart University	0.00110% (43,662 shares)	None	2014 - Present	<ul style="list-style-type: none"> Vice President, Accounting Policy and Solution Department 	PTTEP
					2014 - Present	<ul style="list-style-type: none"> Acting Vice President, Managerial Accounting Department 	PTTEP
					2013	<ul style="list-style-type: none"> Vice President, Managerial Accounting Department 	PTTEP
					2010 - 2013	<ul style="list-style-type: none"> Vice President, Corporate Accounting Department 	PTTEP
13) Ms. Chanamas Sasnanand Vice President, Capital and Investor Relations Department	45	M.Sc. (Business Administration), University of South Carolina, U.S.A.	0.00044% (17,572 shares)	None	2014 - Present	<ul style="list-style-type: none"> Vice President, Capital and Investor Relations Department 	PTTEP
					2010 - 2014	<ul style="list-style-type: none"> Vice President, Finance Department 	PTTEP
					2010	<ul style="list-style-type: none"> Acting Manager, Finance Department 	PTTEP
					2007 - 2010	<ul style="list-style-type: none"> Assistance Manager, Investor Relations 	PTTEP

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
14) Ms. Porntip Jansuksri Vice President, Treasury Department	52	M.Sc. (Business Administration), Kasetsart University	0.00022% (8,712 shares)	None	2014 - Present	• Vice President, Treasury Department	PTTEP
					2013	• Vice President, Financial Accounting Department	PTTEP
					2011 – 2013	• Vice President, Project Accounting Department	PTTEP
					2010 - 2011	• Senior Analyst, Finance and Accounting	PTTEP
15) Ms. Sirirat Sararattanakul Vice President, Financial Accounting Department	53	M.Sc. (Accounting), Thammasart University	0.00483% (191,555 shares)	None	2014 - Present	• Vice President, Financial Accounting Department	PTTEP
					2008 - 2013	• Vice President, Office Facility Management Department	PTTEP
16) Mrs. Thanyaporn Vangvasu Vice President, Tax Department	56	B.BA (Accounting), Assumption University	0.00307% (121,868 shares)	None	2009 - Present	• Vice President, Tax Department	PTTEP
					1995 - 2009	• Senior Analyst, Tax	PTTEP

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
Management Retiring During 2014							
1) Mr. Asdakorn Limpiti Executive Vice President, Strategy and Business Development Group, and Acting Executive Vice President, Technology and Sustainability Development Group	60	M.S.E. (Chemical Engineering), University of Michigan, U.S.A. IOD: DCP 75 (2006)	0.00138% (54,896 shares)	None	2010 - 2014 2014 2005 - 2010	<ul style="list-style-type: none"> Executive Vice President, Strategy and Business Development Group Acting Executive Vice President, Technology and Sustainability Development Group Senior Vice President, Strategy and Capability Development Division 	PTTEP PTTEP PTTEP

3. Corporate Secretary

Name/Position	Age (year)	Education/Training	% of Shareholding	Family Relationship with Management	Working experience in the past five years		
					Period	Position	Function/ Company/ Type of Business
Mrs. Pranot Tirasai Senior Vice President, Corporate Secretary Division	56	LL.B (Laws), Thammasart University IOD: CSP (2014) DCP 185 (2014)	0.00297% (117,847 shares)	None	2013 – Present	• Senior Vice President, Corporate Secretary Division	PTTEP
					2010 – 2013	• Senior Vice President, Legal Division	PTTEP
					2000 – 2010	• Vice President, Legal Department	PTTEP.

3.1 Roles and Responsibilities of Corporate Secretary

The Corporate Secretary must perform roles with fiduciary duties by having responsibility, and duties of care and loyalty, in accordance to Section 89/15 and 89/16 of the Securities and Exchange Act (Volume 4) B.E. 2551 which came into effect on August 31, 2008. The Corporate Secretary must also strictly comply with relevant laws and regulations, along with the Company's objectives and Articles of Association (AoA) as well as resolutions from the Board's and shareholders' meetings. Responsibilities of Corporate Secretary required by law are as follows:

- 1) Preparing and safeguarding the Company's documents, namely,
 - directors registry
 - agenda, minutes of the Board meetings, and Annual Reports
 - notice and minutes of the Shareholders' meetings
- 2) Safeguarding the Conflicts of Interests Report submitted by the directors and management as well as sending a copy of the report to Chairman of the Board and the Audit Committee within seven working days after receiving the report to be in compliance with Section 89/14
- 3) Performing other duties as required by the Capital Market Supervisory Board.

Moreover, the Corporate Secretary is responsible for the following duties as required by the Board of the Company. These duties are as follows:

- Overseeing and advising the Board to ensure that the directors perform roles in compliance with relevant applicable laws, rules and regulations as well as the Company's objectives, AoA, resolutions from the Board's and shareholders' meetings
- Organizing meetings of the Board, sub-committees, and shareholders
- Arranging orientation for and providing advices to new directors
- Recommending necessary and appropriate training programs to directors
- Monitoring the Company's business operations of each function to ensure alignment with directions set by the Board and shareholders and within the conditions set forth by external regulatory bodies overseeing listed companies
- Governing of subsidiaries, including preparing and safeguarding of their important documents
- Promoting and educating the directors, management, and employees about the Good Corporate Governance and Business Ethics of PTTEP Group, which is regularly being revised to be in compliance with related laws and in line with international practices of leading organizations
- Ensuring all shareholders of the Company are being treated fairly, ethically and lawfully as well as promoting good relationship with minority shareholders
- Acting as a Case Coordinator, which is responsible for managing reports submitted through the Case Management System of the company performing other duties as appointed by the Company.
- Performing other duties as appointed by the Company

Attachment 2: Directors of Subsidiaries and Associated Companies

1. Subsidiary: As of December 31, 2014, there were 61 subsidiaries.

No.	Name		Subsidiaries													
			PTTEPI	PTTEPS	PTTEP Services	Orange	PTTEP G7	PTTEPO	PTTEP MEA	PTTEP AG	PTTEP OM	PTTEPH	ATL	PTTEP KV	PTTEP SV	PTTEP HV
1.	Mr. Kanit	Sangwongwanich	/					/								
2.	Mr. Prapat	Soponpongpipat	/									/				
3.	Mr. Vinit	Harnsamuit		/												
4.	Mr. Kittisak	Hiranyapraphip		/												
5.	Mr. Prasert	Nutmagul			/											
6.	Mrs. Yupawadee	Valayapetre			/											
7.	Mr. Vuthiphon	Thuampoomngam				/										
8.	Mr. Yongyos	Krongphanich				/					/					
9.	Mr. Korakote	Pojanasomboon				/	/									
10.	Mrs. Chanamas	Sasnanand					/									
11.	Ms. Suchitra	Suwansinpan						/			/					
12.	Mr. Owas	Chinoroje							/	/						
13.	Mr. Preecha	Peomwattanachai							/						/	
14.	Mr. Phongsthorn	Thavisin								/						
15.	Mr. Wanchai	Mahasuwannachai									/					
16.	Mr. Terapol	Phoonsiri									/					
17.	Mr. Waranon	Laprabang										/				
18.	Mr. Piya	Wichitchanya											/	/		
19.	Mr. Surachai	Tanasomboonkit											/		/	
20.	Mr. Somporn	Vongvuthipornchai														/

Remarks 1. / : Director

X : Chairman

No.	Name		Subsidiaries														
			PTTEP HL	PTTEP IR	PTTEP SA	PTTEP IH	PTTEP ID	PTTEP AI	PTTEP NZ	PTTEP SVPC	JV Marine	JV Shore Base	PTTEP NL	PTTEPR	PTTEP SMD	PTTEP SS	
1.	Mr. Wanchai	Mahasuwannachai	/														
2.	Mr. Komson	Tachapanich	/														
3.	Mr. Waranon	Laprabang		/	/		/				/						
4.	Mr. Khajohn	Bhasavanija		/													
5.	Mr. Nopasit	Chaiwanakupt			/												
6.	Ms. Suchitra	Suwansinpan				/											
7.	Mr. Anun	Chonchawalit				/						/	/				
8.	Mr. Titi	Thongjen					/								/	/	
9.	Mrs. Pranot	Tirasai						/									
10.	Mr. Owas	Chinoroje						/									
11.	Mr. Preecha	Peomwattanachai							/								
12.	Mr. Surachai	Tanasomboonkit								/							
13.	Mr. Korakote	Pojanasomboon								/	/						
14.	Mr. Pairoj	Rangponsumrit									/						
15.	Mr. Theerasak	Tancharoenlarp										/					
16.	Mrs. Chanamas	Sasnanand											/				
17.	Mr. Nawee	Anantraksakul													/	/	
18.	Mrs. Thanyapom	Vangvasu													/		

Remarks 1. / : Director

X : Chairman

No.	Name		Subsidiaries														
			PTTEP SD	PTTEP ML	PTTEP SM	SHL	PTTEP FH	PTTEP HK	PTTEP NC	PTTEP NH	PTTEP BI	PTTEP CA	PTTEP CIF	PTTEP SP	COVE	CEKL	
1.	Ms. Jaroonsri	Wankertphon	/														
2.	Mr. Titi	Thongjen	/	/	/												
3.	Mr. Wanchai	Mahasuwannachai		/	/												
4.	Mr. Vinit	Harnsamuit				/											
5.	Mrs. Chanamas	Sasanand				/		/									
6.	Mr. Somporn	Vongvuthipornchai					/										
7.	Mr. Asdakorn	Limpiti					/										
8.	Mr. Phongsthorn	Thavisin					/										
9.	Mr. Yongyos	Krongphanich						/		/							
10.	Mr. Nirandom	Rojanasomsith							/			/	/				
11.	Mrs. Elenora	Jongsma							/	/	/						
12.	Orangefield (Netherlands) B.V.								/	/	/						
13.	Mr. Anun	Chonchawalit									/				/	/	
14.	Mr. Kanok	Intharawijitr									/						
15.	Mrs. Thanyapom	Vangvasu										/					
16.	Ms. Penchun	Jarikasem											/				
17.	Mr. R. William	Thornton										/	/				
18.	Mr. Korakote	Pojanasomboon												/			
19.	Mr. Supakorn	Krisadasima												/			
20.	Mr. Direk	Wangudomsuk													/	/	

Remarks 1. / : Director

X : Chairman

No.	Name		Subsidiaries													
			CEEAL	CEMROL	CEMROFL	CMTL	CMEL	PTTEP AU	PTTEP AP	PTTEP AO	PTTEP AIF	PTTEP AB	PTTEP AA	PTTEP AT	PTTEP AAF	PTTEP AAP
1.	Mr. Direk	Wangudomsuk	/	/	/											
2.	Mrs. Eleni	Theodorou Argyrou	/	/	/											
3.	Mr. Anun	Chonchawalit				/	/									
4.	Mr. Somporn	Vongvuthipornchai						X	X	X		X	X	X	X	X
5.	Mr. Chalermkiat	Tongtaow						/	/	/	/	/	/	/	/	/
6.	Mr. Theerasak	Tancharoenlarp						/	/	/	/	/	/	/	/	/
7.	Mr. Montri	Rawanchaikul						/	/	/	/	/	/	/	/	/
8.	Ms. Penchun	Jarikasem									X					

No.	Name		Subsidiaries													
			PTTEP AAT	PTTEP AAO	PTTEP AAA	PTTEP AAS	PTTEP BL									
1.	Mr. Somporn	Vongvuthipornchai	X	X	X	X										
2.	Mr. Chalermkiat	Tongtaow	/	/	/	/										
3.	Mr. Theerasak	Tancharoenlarp	/	/	/	/										
4.	Mr. Montri	Rawanchaikul	/	/	/	/										
5.	Mr. Ricardo	Salomão					/									

Remarks 1. / : Director

X : Chairman

2. Details of Head of the Compliance Department are shown in the table below.

Name/Position	Education	Trainings	Working Experience in the Past 5 Years	
			Period	Position/Unit
Mr. Verasak Manchuwong Vice President, Compliance Department	Bachelor's Degree in Accounting, Thammasat University	<ul style="list-style-type: none"> ● 2014 ACFE Asia-Pacific Fraud Conference ● 2014 European Compliance & Ethics Institute Conference ● SCCE's 12th Annual Compliance & Ethics Institute, Society of Corporate Compliance and Ethics ● Fraud and Corruption ● Super Strategies The Audit Best Practices ● Chief Audit Executive Summit ● Risk-Based Internal Audit ● Best Practice & Benchmarking of Internal Audit ● Assessing Risk: A better way to audit ● Advance Auditing for In-charge Auditor 	2013 - Present 2003 - 2013	<ul style="list-style-type: none"> ● Vice President, Compliance Department, PTTEP ● Vice President, Internal Audit Department, PTTEP

Attachment 4: Asset Revaluation

- None -

Attachment 5: Supplemental Information on Petroleum Exploration and Production Activities**(A) PTTEP and Its Subsidiaries' Petroleum Reserves Report As of December 31, 2014**

The total Proved Reserves of PTT Exploration and Production Public Company Limited (PTTEP) and its Subsidiaries as of December 31, 2014 are shown in the attached table. The Proved Reserves are reviewed annually by company's earth scientists and reservoir engineers to ensure rigorous professional standards. The Proved Reserves are reported on a gross basis, which includes the company's net working interest and related host country's interest.

The total Proved Reserves (Consolidated Companies) as of December 31, 2014 of PTTEP and its Subsidiaries are 187 Million Stock Tank Barrels (MMSTB) for crude and condensate¹, and 3,814 Billion Standard Cubic Feet (BSCF) for gas. The total Proved Reserves (Consolidated Companies) in term of oil equivalent are 777 Million Barrels (MMBOE), of which approximately 52 percent of the total Proved Reserves is Proved Developed Reserves. Proved Reserves of crude and condensate are approximately 31% while, for gas, are 69% of the total Proved Reserves in terms of oil equivalent.

In 2014, the total production of PTTEP and its subsidiaries is 131 MMBOE (40 MMSTB of crude and condensate and 571 BCF of natural gas (91 Million Barrels of Oil Equivalent (MMBOE)) or equivalent to the production rate of approximately 359,259 Barrels of Oil Equivalent per Day (BOED), approximately 29,846 BOED or 9.06% increase from last year. The production increase was attributed to the acquisition of Hess Corporation's interests in Sinphuhorm and Contract 4 projects in April, which are currently producing and the start of Zawtika production.

¹ Included the proved reserves and production of LPG and Bitumen

	Proved Reserves of Crude and Condensate ⁽¹⁾⁽²⁾			Proved Reserves of Natural Gas ⁽¹⁾			Proved Reserves of Crude, Condensate and Natural Gas ⁽¹⁾⁽²⁾ Barrel of Oil Equivalent		
	(Million Barrels)			(Billion Cubic Feet)			(Million Barrels)		
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Company's share of reserves of consolidated companies									
As of December 31, 2012	125	138	263	2,330	1,852	4,182	501	400	901
1) Revision of previous estimates	7	8	15	13	14	27	14	10	24
2) Improved recovery	4	-	4	25	-	25	8	-	8
3) Extensions and discoveries	5	2	7	84	5	89	19	3	22
4) Purchases/Sales of Petroleum in place	-	-	-	-	61	61	-	11	11
5) Production	(29)	(10)	(39)	(387)	(120)	(507)	(92)	(28)	(120)
As of December 31, 2013	112	138	250	2,065	1,812	3,877	450	396	846
Company's share of reserves of consolidated companies									
As of December 31, 2013	112	138	250	2,065	1,812	3,877	450	396	846
1) Revision of previous estimates	15	1	16	86	48	134	30	9	39
2) Improved recovery	1	-	1	6	-	6	2	-	2
3) Extensions and discoveries	7	-	7	146	-	146	31	-	31
4) Purchases/Sales of Petroleum in place	5	(52)	(47)	222	-	222	42	(52)	(10)
5) Production	(27)	(13)	(40)	(406)	(165)	(571)	(94)	(37)	(131)
As of December 31, 2014	113	74	187	2,119	1,695	3,814	461	316	777

(1) The proved reserves are reported on a gross basis which includes the company's net working interest and the related host country's interest.

(2) Included the proved reserves and production of LPG and Bitumen.

(B) Capitalized Costs Relating to Oil and Gas Producing Activities

Capitalized costs represent cumulative expenditures for proved and unproved properties, and support equipment and facilities used in oil and gas exploration and production operations together with related accumulated depreciation, depletion, amortization and impairment.

Proved properties include exploration & development wells, transportation pipeline, and related equipment and producing facilities associated with proved reserves project. Unproved properties represent amounts associated with non-proved reserve project. Support equipment and facilities include warehouse, field offices, vehicles and movable assets used in oil and gas producing activities.

The net capitalized costs represent the undepreciated value for these assets.

(Unit: Million US Dollar)	2014	2013
Proved properties	21,628	20,532
Unproved properties	5,042	3,172
Decommissioning costs	1,984	1,065
Support equipment and facilities	<u>187</u>	<u>185</u>
Gross capitalized costs	28,841	24,954
Accumulated depreciation, depletion, amortization and impairment	<u>(13,014)</u>	<u>(9,207)</u>
Net capitalized costs	<u>15,827</u>	<u>15,747</u>

(C) Costs Incurred in Oil and Gas Property Acquisition, Exploration, and Development Activities

Costs incurred in oil and gas property acquisition, exploration and development activities represent amounts both capitalized and charged to expense during the year.

Property acquisition costs include costs to purchase proved and unproved properties.

Exploration costs include the costs of geological and geophysical work, carrying and retaining undeveloped properties, and drilling and equipping exploratory wells.

Development costs include costs associated with drilling and equipping development wells, improved recovery systems, facilities for extraction, treating, gathering and storage, producing facilities for existing developed reserves, and costs associated with transportation pipeline.

(Unit: Million US Dollar)	2014			2013		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Acquisition of properties						
- Proved	590	-	590	484	344	828
- Unproved	352	95	447	-	-	-
Exploration costs	124	579	703	236	239	475
Development costs	<u>1,270</u>	<u>759</u>	<u>2,029</u>	<u>1,146</u>	<u>1,324</u>	<u>2,470</u>
Total	<u>2,336</u>	<u>1,433</u>	<u>3,769</u>	<u>1,866</u>	<u>1,907</u>	<u>3,773</u>

(D) Results of operations for producing activities

Results of operations from oil and gas producing activities for the year 2014 and 2013 are shown in the following table.

Operating costs include lifting costs incurred to operate and maintain productive wells and related equipment. Exploration expenses consist of geological and geophysical costs, and dry hole costs.

General administrative expenses are expenses directly related to oil and gas producing activities.

Depreciation, Depletion and Amortization expense relates to capitalized costs incurred in acquisition, exploration and development activities, transportation pipeline, including amortized decommissioning costs.

Other (income) expenses include pipeline transportation income and foreign exchange gains and losses directly related to oil and gas producing activities.

Income tax expenses are based on the results of operations from petroleum producing activities.

General corporate overhead and finance costs are excluded from the results of operations for petroleum producing activities.

(Unit: Million US Dollar)	2014			2013 (Restated)		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Gross revenues						
Sales – Related parties	5,034	1,643	6,677	5,324	820	6,144
Sales – Third parties	294	935	1,229	257	1,087	1,344
Total Sales	5,328	2,578	7,906	5,581	1,907	7,488
Expenses						
Operating expenses	494	637	1,131	431	556	987
Exploration expenses	80	253	333	36	136	172
General administrative expenses	93	78	171	77	96	173
Petroleum royalties and remuneration	668	118	786	699	118	817
Depreciation, depletion and amortization	1,633	906	2,539	1,301	319	1,620
Other (income) / expenses	<u>(3)</u>	<u>962</u>	<u>959</u>	<u>6</u>	<u>(37)</u>	<u>(31)</u>
Total expenses	2,965	2,954	5,919	2,550	1,188	3,738
Results before income taxes	2,363	(376)	1,987	3,031	719	3,750
Income tax expenses	<u>865</u>	<u>353</u>	<u>1,218</u>	<u>1,159</u>	<u>282</u>	<u>1,441</u>
Net results of operations	<u>1,498</u>	<u>(729)</u>	<u>769</u>	<u>1,872</u>	<u>437</u>	<u>2,309</u>

(E) Standardized Measure of Discounted Future Net Cash Flows (SMDCF) Relating to the Proved Oil and Gas Reserves

The standardized measure of discounted future net cash flows related to the above proved oil and gas reserves, is computed by applying 12-month average prices* (with consideration of price changes only to the extent provided by contractual arrangements), to the estimated future production of year-end remaining proved oil and gas reserves less estimated future expenditures (based on year-end costs) to be incurred in developing and producing the proved reserves.

Future income taxes are calculated by applying the appropriate year-end statutory tax rates to the future pre-tax net cash flows and deducted by applicable tax deductions or tax credits.

Net Cash flows are discounted using a rate of 10% per year to reflect the estimated timing of the future cash flows.

The estimation of discounted future net cash flow shown below is not intended to represent the fair value of oil and gas properties. The fair value should take into account of several factors, such as probable and possible reserves which may turn into proved reserves in the future, anticipated future oil and gas prices, interest rates, changes in development and production costs and risks associated with future production. Therefore the fair value will subject to the view and perception of analyst.

* Twelve-month average prices are calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month.

Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Unit: Million US Dollar)	Domestic		Foreign		Total	
	2014	2013	2014	2013	2014	2013
Future cash inflows	20,573	19,426	15,771	23,439	36,344	42,865
Future production costs	(2,784)	(2,782)	(2,381)	(6,671)	(5,165)	(9,453)
Future development costs	(6,393)	(5,163)	(2,111)	(2,636)	(8,504)	(7,799)
Future income tax expenses	<u>(4,016)</u>	<u>(3,333)</u>	<u>(1,648)</u>	<u>(2,388)</u>	<u>(5,664)</u>	<u>(5,721)</u>
Future net cash flows	7,380	8,148	9,631	11,744	17,011	19,892
10% annual discount	<u>(1,495)</u>	<u>(2,095)</u>	<u>(3,287)</u>	<u>(4,740)</u>	<u>(4,782)</u>	<u>(6,835)</u>
Standardized measure of discounted future net cash flows (SMDCF)	<u>5,885</u>	<u>6,053</u>	<u>6,344</u>	<u>7,004</u>	<u>12,229</u>	<u>13,057</u>

Changes in Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves

(Unit: Million US Dollar)	2014	2013
Present value at beginning of year	13,057	14,437
Sales and transfers of oil and gas produced, net of production costs	(5,339)	(5,180)
Development costs incurred during the period	2,590	2,557
Net changes in prices and production costs	(357)	(2,364)
Net changes in development costs	(2,290)	(1,303)
Extensions, discoveries and improved recovery	943	932
Revisions of previous quantity estimates	1,040	697
Purchases / sales of petroleum in place	73	258
Accretions of discount	2,454	1,067
Net changes in income taxes	58	1,956
Present value at the year end	<u>12,229</u>	<u>13,057</u>

(F) Other Information

Productive Oil/Condensate and Gas Wells

The numbers of productive wells at December 31, 2014 were as follows:

	Oil/Condensate*		Gas	
	Gross	Net	Gross	Net
Thailand	879	466	1,145	500
Foreign				
Southeast Asia	27	7	141	60
North America	9	4	-	-
Middle East and Others	7	6	11	11
Total	922	483	1,297	571

* include Bitumen Wells

Drilling in Progress of Oil/Condensate* and Gas Wells

The numbers of wells in progress at December 31, 2014 were as follows:

	Gross	Net
<u>Exploratory</u>		
Thailand	1	0.44445
Foreign		
Southeast Asia	5	3.8
Middle East and Others	2	0.345
Total	8	4.58945
<u>Development</u>		
Thailand	38	19.18335
Foreign		
Southeast Asia	5	0.915
Australia	-	-
Middle East and Others	2	1.35
Total	45	21.44835

* include Bitumen Wells

Net Oil/Condensate* and Gas Wells Drilled Annually in 2014

	Net Productive wells drilled	Net dry well drilled
<u>Exploratory</u>		
Thailand	14.138895	8.0275
Foreign		
Southeast Asia	4.0	2.6685384
Australia	-	-
Middle East and Others	1.5	0.72
Total	<u>19.638895</u>	<u>11.4160384</u>
<u>Development</u>		
Thailand	211.0559	2.9582
Foreign		
Southeast Asia	14.08636	-
Australia	0.896875	-
Middle East and Others	1.7	-
Total	<u>227.739135</u>	<u>2.9582</u>

* include Bitumen Wells

Gross wells include the total number of wells in which the company has an interest excluding utility wells.

Net wells are the sum of the company's fractional interests in gross wells.

Quarterly Information in 2014 and 2013 for the consolidated financial statement are as follows:

	Unit: US Dollars			
<u>Year 2014</u>	<u>4thQ</u>	<u>3thQ</u>	<u>2thQ</u>	<u>1thQ</u>
Revenues				
Sales	1,806,541,773	1,959,035,689	1,945,629,666	1,784,951,307
Revenue from pipeline transportation	38,743,913	37,369,030	34,093,118	27,719,064
Other income				
Gain on foreign exchange	-	-	8,799,731	-
Interest income	7,591,572	4,914,057	4,192,842	5,872,059
Gain on financial derivatives	150,822,109	72,180,673	-	-
Other income	22,406,240	19,177,450	113,233,296	9,008,108
Total Revenues	2,026,105,607	2,092,676,899	2,105,948,653	1,827,550,538
Expenses				
Operating expenses	191,263,799	174,700,003	206,484,931	284,058,014
Exploration expenses	125,555,697	125,778,008	65,446,671	16,136,152
Administrative expenses	134,168,168	80,748,989	90,959,020	52,157,514
Petroleum royalties and remuneration	183,634,854	205,190,408	206,394,243	190,552,959
Depreciation, depletion and amortization	779,671,245	666,409,088	617,887,060	499,289,046
Other expenses				
Loss on foreign exchange	21,009,922	32,994,674	-	3,845,566
Loss on financial derivatives	-	-	24,862,208	1,122,584
Management's remuneration	1,794,914	1,324,709	1,460,664	1,478,452
Impairment loss on assets	996,790,379	-	-	-
Other expenses	-	-	41,125,056	-
Finance costs	82,180,451	62,393,567	58,352,226	56,508,961
Total Expenses	2,516,069,429	1,349,539,446	1,312,972,079	1,105,149,248
Share of gain from associates	870,730	1,602,727	1,117,896	(123,874)
Profit before income taxes	(489,093,092)	744,740,180	794,094,470	722,277,416
Income tax expenses	(250,218,520)	(268,157,680)	(233,634,994)	(342,549,087)
Profit(Loss) for the year	(739,311,612)	476,582,500	560,459,476	379,728,329
Earnings per share (Baht)				
Basic earnings per share	(0.20)	0.12	0.14	0.10
Diluted earnings per share	(0.20)	0.12	0.14	0.10

Unit: US Dollars

<u>Year2013 (Restated)</u>	<u>4thQ</u>	<u>3thQ</u>	<u>2thQ</u>	<u>1thQ</u>
Revenues				
Sales	1,816,244,897	1,776,487,811	1,781,405,147	1,797,758,169
Revenue from pipeline transportation	37,212,847	37,267,755	38,552,033	37,641,884
Other income				
Gain on foreign exchange	-	4,178,300	-	40,622,210
Interest income	7,054,380	5,642,364	8,065,016	12,303,333
Gain on financial derivatives	-	-	11,292,979	1,386,592
Other income	44,049,806	17,257,284	11,753,485	16,202,162
Total Revenues	1,904,561,930	1,840,833,514	1,851,068,660	1,905,914,350
Expenses				
Operating expenses	226,440,686	215,117,451	200,628,467	185,190,875
Exploration expenses	56,740,786	48,387,325	29,969,883	36,921,675
Administrative expenses	143,094,657	69,834,128	56,468,580	63,264,848
Petroleum royalties and remuneration	202,384,841	199,176,958	203,851,715	211,327,022
Depreciation, depletion and amortization	460,170,810	410,311,195	376,448,407	390,469,550
Other expenses				
Loss on foreign exchange	64,211,059	-	70,139,908	-
Loss on financial derivatives	9,488,063	8,631,630	-	-
Management's remuneration	1,497,165	1,468,264	1,709,515	1,510,184
Finance costs	61,774,202	42,804,873	47,953,612	48,232,161
Total Expenses	1,225,802,269	995,731,824	987,170,087	936,916,315
Share of gain from associates	986,765	2,197,555	1,376,333	1,596,581
Profit before income taxes	679,746,426	847,299,245	865,274,906	970,594,616
Income tax expenses	(440,967,971)	(280,822,598)	(503,732,394)	(290,746,670)
Profit(Loss) for the year	238,778,455	566,476,647	361,542,512	679,847,946
Earnings per share (Baht)				
Basic earnings per share	0.06	0.14	0.09	0.17
Diluted earnings per share	0.06	0.14	0.09	0.17

Five-year Petroleum Sales Volume and Unit Price Summary

	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Net sales of petroleum (BOED)	321,886	292,629	275,923	265,047	264,575
Average petroleum unit prices					
Average unit prices of crude oil and condensate (USD per BBL)	94.91	100.15	103.27	102.23	73.77
Average unit prices of natural gas (USD per MMBTU)	8.03	7.92	7.59	6.00	5.52
Average unit prices of petroleum (USD per BOE)	63.38	65.58	64.86	55.49	44.83
Lifting cost (USD per BOE)	5.26	4.88	4.28	4.35	3.75