

7. Securities and Shareholders

7.1 Capital Structure

As of December 31, 2017, PTTEP's capital structure comprised USD 2,907.16 million of interest-bearing debt and USD 11,516.65 million of shareholders' equity, resulting in an interest-bearing debt to shareholders' equity ratio of 0.25. Details of the capital structure are as follows:

7.1.1 Securities

Capital Stock

As of December 31, 2017, PTTEP's registered and paid-up capital was THB 3,969,985,400, consisting of 3,969,985,400 ordinary shares at a par value of THB 1 per share.

Debentures

PTTEP has investment-grade credit ratings of Baa1, BBB+, and A- from reputable 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. In addition, the Company has also been given a rating of AAA, the highest credit rating, by TRIS Rating Co., Ltd. ("TRIS") which is a domestic credit-rating agency.

In 2017, PTTEP carried out a liability management exercise on USD 1,000 million subordinated perpetual capital debentures issued in 2014. In July 2017, the Company however repurchased USD 855 million of these debentures, leaving USD 145 million outstanding. Concurrently, PTTEP Treasury Center Company Limited (PTTEP TC), a wholly-owned subsidiary of the Company, issued subordinated perpetual capital debentures, with the Company as the guarantor, in an amount equal to the debentures repurchased. These debentures are redeemable by the Company upon the winding-up of PTTEP TC or the Company as well as per the redemption rights stipulated in the offering memorandum. These subordinated perpetual capital debentures were issued in the two following tranches.

- Tranche 1: Issued on July 17, 2017 in the amount of USD 500 million with an initial distribution rate of 4.600% per annum until, but excluding, July 17, 2022. The subsequent distribution rates are to be reset as stipulated in the offering memorandum. These subordinated perpetual capital securities are callable, in full, on July 17, 2022 and on the subsequent distribution rate reset dates.
- Tranche 2: Issued on July 26, 2017 in the amount of USD 355 million with an initial distribution rate of 4.875% per annum until, but excluding, June 18, 2019. The subsequent distribution rates are to be reset as stipulated in the offering memorandum. These subordinated perpetual capital securities are callable, in full, on June 18, 2019 and on the subsequent distribution rate reset dates.

As of December 31, 2017, PTTEP had the following debentures outstanding.

(1) Details of THB debentures (total outstanding THB 27,100 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : THB Million)	Rate per annum	Credit Rating ¹
						TRIS
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 last rated by TRIS on March 15, 2017.

² In 2005, PTTEP entered into a cross currency swap agreement (CCS) with a bank to swap THB 2,500 million for USD 60.82 million. Under this agreement, the interest charged was at 3.85% per annum. In 2007, the Company swapped the USD 60.82 million with the same bank for THB 2,500 million. Under this agreement, the interest was reduced to 3.30% per annum until the expiry date. In 2011, the Company entered another CCS transaction to swap THB 2,500 million for USD 82.92 million at an exchange rate of 30.15 THB/USD as well as to swap THB interest rate of 3.30% per annum to a USD interest rate of 3.30% per annum.

³ In 2011, PTTEP entered into a CCS to swap THB 5,000 million for USD 161.81 million with an interest rate of 4.93% per annum.

⁴ In 2014, PTTEP entered into a CCS to swap THB 8,200 million for USD 251.07 million with an interest rate of 3.013% per annum.

⁵ In 2014, PTTEP entered into a CCS to swap THB 11,400 million for USD 349.05 million with an interest rate of 4.989% per annum.

(2) Details of USD debentures (total outstanding USD 1,513 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : USD Million)	Rate per annum	Credit Rating ¹	
						Moody's	Standard & Poor's
USD debentures, unsecured, unsubordinated	April 5, 2011	April 5, 2021	10 years	700 ²	Fixed 5.692%, coupon payment: semi-annually	Baa1	BBB+
	June 12, 2012	June 12, 2042	30 years	490 ³	Fixed 6.35%, coupon payment: semi-annually	Baa1	BBB+
	September 16, 2013	September 16, 2018	5 years	323 ⁴	Fixed 3.707%, coupon payment: semi-annually	Baa1	BBB+

¹ The latest credit ratings were issued by Moody's on April 4, 2017 and Standard & Poor's on July 16, 2017.

² Issued by PTTEP CIF, and fully guaranteed by PTTEP.

³ Issued by PTTEP CIF, and fully guaranteed by PTTEP, and in 2013 repurchased of USD 10 million. As a result, the principle amount has been decreased from USD 500 million to USD 490 million.

⁴ Issued by PTTEP, and in 2015 repurchased USD 177 million. As a result, the principle amount has been decreased from USD 500 million to USD 323 million.

(3) Details of THB Hybrid Bonds (total outstanding THB 5,000 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit : THB Million)	Rate per annum	Credit Rating ¹
						TRIS
THB Hybrid Bonds, unsecured, unconvertible, callable, subordinated debentures with single redemption upon liquidation which PTTEP can defer the distribution at its sole discretion	June 15, 2012	No maturity date <ul style="list-style-type: none"> ▪ payment upon liquidation or ▪ early redemption subject to terms & conditions 	Perpetual	5,000 ²	<ul style="list-style-type: none"> ▪ Year 1-10: 5.85% ▪ Year 11-30: 6.10% ▪ Year 31-60: 6.85% ▪ Year 61 onwards: 7.85%, ▪ coupon payment: quarterly 	AA

¹ The latest credit rating was issued by TRIS on March 15, 2017.

² The accounting treatment of these hybrid bonds is such that they are recorded in shareholders' equity.

(4) Details of USD Hybrid Bonds (total outstanding USD 1,000 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding ² (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	June 18, 2014	No maturity date <ul style="list-style-type: none"> ▪ payment upon liquidation or ▪ early redemption subject to terms & conditions 	Perpetual	145 ³	<ul style="list-style-type: none"> ▪ Year 1-5: 4.875% ▪ Year 6-10: 5 Years UST+3.177% ▪ Year 11-25: 6M LIBOR+3.351% ▪ Year 26 onwards: 6M LIBOR+4.101%, ▪ coupon payment: semi-annually 	Baa3	BB+

¹ The latest credit ratings were issued by Moody's on April 4, 2017 and Standard & Poor's on July 16, 2017.

² The accounting treatment of these hybrid bonds is such that they are recorded in shareholders' equity.

³ PTTEP was the issuer and repurchased of USD 855 million in 2017, leaving the principle amount of USD 145 million from USD 1,000 million.

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding ² (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	July 17, 2017	No maturity date <ul style="list-style-type: none"> ▪ payment upon liquidation or ▪ early redemption subject to terms & conditions 	Perpetual	500 ³	<ul style="list-style-type: none"> ▪ Year 1-5: 4.60% ▪ Year 6-10: 5 Years UST+2.65% ▪ Year 11-25: 6M LIBOR+2.90% ▪ Year 26 onwards: 6M LIBOR+3.65% ▪ coupon payment: semi-annually 	Baa3	BB+
	July 26, 2017	No maturity date <ul style="list-style-type: none"> ▪ payment upon liquidation or ▪ early redemption subject to terms & conditions 	Perpetual	355 ³	<ul style="list-style-type: none"> ▪ July 26, 2017 - June 2019: 4.875% ▪ June 2019 - June 2024: 5 Years UST+3.177% ▪ June 2024 - June 2039: 6M LIBOR+3.351% ▪ June 2039 onwards: 6M LIBOR+4.101% ▪ coupon payment: semi-annually 	Baa3	BB+

¹ The latest credit ratings were issued by Moody's and Standard & Poor's on July 26, 2017.

² The accounting treatment of these hybrid bonds is such that they are recorded in shareholders' equity.

³ PTTEP TC was the issuer, fully guaranteed by PTTEP.

7.1.2 Number of Shares and Shareholders' Voting Rights 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 regarded as listed securities on the SET. The objective of NVDRs is to promote trading activity in the Thai stock market by removing obstacles such as foreign investment limits and other impediments faced by international institutional investors investing in listed securities on the SET. NVDR investors are entitled to receive all financial benefits, such as dividends, right issues, and warrants, as if they invest in common shares. The major difference between investing in NVDRs and ordinary shares is the lack of voting rights of the former. NVDR holders generally are not allowed to participate and vote in shareholders' meetings except only in the case where the company wishes to delist itself from the SET. In addition, although NVDR is designed mainly to ease foreign investment barriers; the SET does not prohibit Thai investors from investing in the instrument.

As of February 9, 2018, as published on the official website of the SET, PTTEP had a total of 316,908,545 NVDRs outstanding, representing 7.98% of the Company's total issued and paid-up capital of 3,969,985,400 shares.

7.2 Shareholders

7.2.1 Top 10 Shareholders

As of February 9, 2018, 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	316,908,545	7.98
3.	STATE STREET EUROPE LIMITED	86,779,908	2.19
4.	CHASE NOMINEES LIMITED	86,187,182	2.17
5.	THE BANK OF NEW YORK (NOMINEES) LIMITED	44,153,129	1.11
6.	SOCIAL SECURITY OFFICE	38,138,377	0.96
7.	HSBC (SINGAPORE) NOMINEES PTE LTD	23,188,905	0.58
8.	THE BANK OF NEW YORK MELLON	22,703,922	0.57
9.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	21,632,381	0.54
10.	EAST FOURTEEN LIMITED-DIMENSIONAL EMER MKTS VALUE FD	20,043,700	0.50
	Total number of shares held by top 10 shareholders	3,251,596,538	81.89
	Total fully-paid capital as of February 9, 2018	3,969,985,400	100

7.2.2 NVDR Holders Owning More Than 0.50% of PTTEP's Paid-Up Shares*

Rank	NVDR holder (as of February 9, 2018)	Number of NVDR issues	% of total outstanding shares in underlying stock
1.	STATE STREET BANK AND TRUST COMPANY	51,790,751	1.30
2.	STATE STREET EUROPE LIMITED	38,416,968	0.97
3.	THE BANK OF NEW YORK (NOMINEES) LIMITED	25,693,400	0.65
	Total shares	115,901,119	2.92

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

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 operations under the Board's approval. As of December 31, 2017, three out of the Company's 15 directors were either a director or an executive from PTT.

7.2.4 The Company Enters into Shareholders' Agreement with Effect to Security Offering and Issuance or Management Power of the Company

- None -

7.3 Dividend Payment Policy

Under normal circumstances, according to the Company's policy, PTTEP's Board of Directors generally recommends to the shareholders an annual dividend payout of not less than 30% of the Company's net income after tax. The Board of Directors, as appropriate, may also decide to pay interim dividends and subsequently inform the shareholders in the next shareholders' meeting. For the Company's subsidiaries, dividend policy is subject to cash flow, future investment plans, and other factors necessary for continuity of their operations and must be in compliance with related laws and regulations.

According to the terms and conditions of the Company's subordinated perpetual capital debentures No. 1/2555 of THB 5,000 million issued in June 2012, subordinated perpetual capital debentures of USD 145 million issued in June 2014, and subordinated perpetual capital debentures of USD 855 million issued by PTTEP Treasury Center Company Limited (PTTEP TC) and guaranteed by PTTEP in July 2017, the Company shall not declare or make any dividend payments if it defers an interest payment on these debentures or has outstanding deferred interest payments.

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

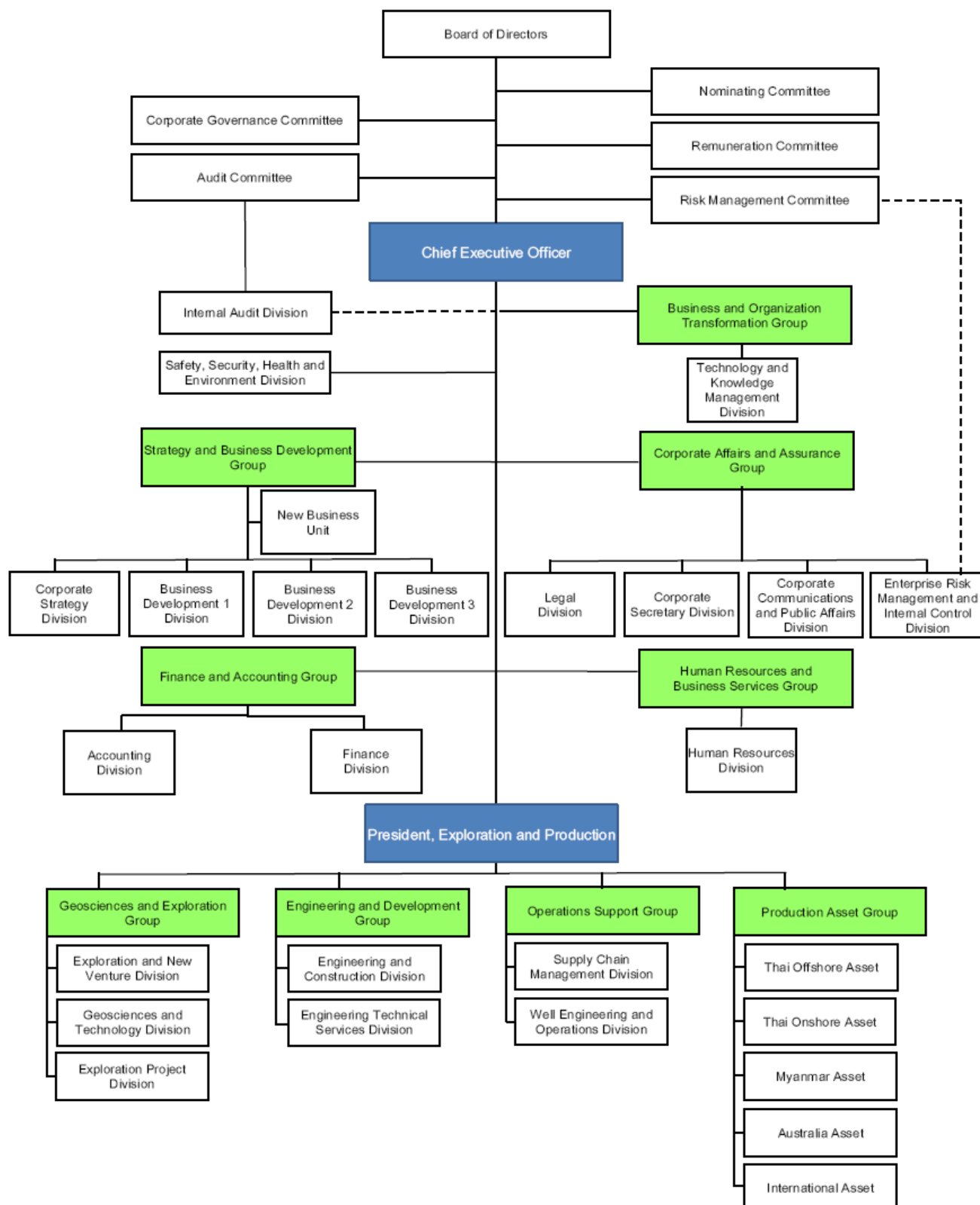
Year	2013	2014	2015	2016	2017
Earnings per Share (THB)	14.07	5.19	- 8.24	2.76	4.54
Dividend per Share	6.00	4.50	3.00	3.25	4.25
Dividend Payout Ratio	40%	82%	N/A**	98%	90%

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

** Dividend Payout Ratio of 2015 is not available due to net loss.

8. Management Structure

As of January 1, 2018



8.1 The Board of Directors

8.1.1 The Board's Structure

PTTEP's Board of Directors (Board) consists of qualified directors who possess a versatility of expertise with appropriate mix of skills suitable for the E&P industry. In 2017, PTTEP reviewed the Board's Skill Mix by classifying it to 12 subject matters under 2 categories.

(1) Core Skill: Basic expertise which is necessary for the directors to govern the Company, namely, business judgment, management skill & corporate governance, and business strategy

(2) Specific Skill: Specific expertise or experience which is useful for the directors to supervise and govern the Company, namely, industry knowledge, accounting, legal, international market, risk & crisis management, economics & finance, SSHE (Safety, Security, Health and Environment), technology, and organization change & development

The directors must not be over 70 years old and shall possess the qualifications according to the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE), laws relevant to public limited companies as well as those of the Securities and Exchange, and 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 commit and dedicate their time to fully perform the duties and responsibilities. The directors, for example, would be regarded as unqualified if absent from the Board's meeting for more than three consecutive times without a reasonable justification.

The Board structure consists of 15 directors, considered to be appropriate for the Company's operational size. The Board consists of non-executive and executive directors. In addition, the Board shall not comprise independent directors of less than half of the incumbent members. As of December 31, 2017, the Board consisted of 15 directors.

- 14 non-executive directors (93.33% of total members)
- 1 executive director: the Chief Executive Officer
- 9 independent directors (60% of total members, a ratio which is more than half of the incumbent members as required by law and the Company's CG&BE)

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

Names, biography, qualifications, experience, and shareholding of the non-executive directors, executive directors, independent directors, and directors from PTT, are disclosed in the "Information of the Board of Directors, Management, Controlling Persons and Corporate Secretary" section as well as in PTTEP's annual report and website.

8.1.2 Authorities and Responsibilities of the Board

According to the principles of accountability, duty of care and duty of loyalty, the Board has been clearly defined of their roles and responsibilities and required to perform them strictly in line with those stipulated by the laws, objectives, Articles of Association of PTTEP, and resolutions of the shareholders' and Board's meetings. The scope of the authority and responsibilities of the Board is as follows:

- (1) To govern PTTEP's operations in compliance with the Company's CG&BE as well as to be a leader and role model in adopting, advising, communicating, and promoting the CG&BE among the employees and other organizations
- (2) To consider and approve of the statement of vision, mission, and corporate values of the 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 that they are in line with the Company's strategy, operational direction, targets, and policies as planned with the emphasis on mobility and applicability to allow the management to effectively and efficiently manage the business, whilst considering the impacts on safety, security, health, environment, innovation and technology, as well as responsibility to the society.
- (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 monitoring system
- (5) To consider and approve significant matters as prescribed by the laws or in the Company's affidavits, policies or regulations, as well as matters that may result in corporate obligations
- (6) To consider the cases which are related to conflicts of interest in a prudent and transparent manner and to review the work process to ensure an appropriate check and balance for efficient internal control. In such case, reports of vested interests of oneself and/or those of related persons must be filed, including potential 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 ensure that audits are performed effectively by internal and external auditors
- (9) To ensure that communication and disclosure of information to the Company's stakeholders are performed in an accurate, complete, appropriate, and timely manner
- (10) To ensure that the Company's stakeholders are treated with a fair and equal treatment
- (11) To consider, approve, and appoint specialists from different professional fields to provide the Company with insightful information as well as to act on the Company's behalf on significant matters which can significantly affect the financial standing and reputation of the 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 Chief Executive Officer (CEO) and the President of the Exploration and Production (PEP), as well as to evaluate performance and determine remuneration of the CEO and PEP. The Board is also responsible for ensuring that the Company has an effective performance evaluation process for the executives.

(14) To consider and delegate appropriate authority to the CEO to manage the Company's operations according to the strategic plan, business direction, targets and policies of the organization, as well as to ensure that there is appropriate oversight and efficient monitoring and evaluation.

The Board is permitted to request for information and seek advices and services in regard to the Company's business operation from the management. In addition, if deemed necessary and appropriate, the directors may seek advices from external and 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 the PTTEP Group (CG&BE) for the Board's approval for implementation throughout the organization
- (2) To promote the 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 the Business Ethics of the Company as well as practices in regard to 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 them with the shareholders
- (4) To govern PTTEP to carry out an assessment of the Company's compliance with the CG&BE
- (5) To disclose information in regard to the Company's Good Corporate Governance to our stakeholders in the Company's 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 performance of the Corporate Governance Committee in the Company's annual report
- (9) To perform other duties relevant to the Good Corporate Governance of the PTTEP Group as assigned by the Board

The Corporate Governance Committee consists of at least three directors, in which the majority of the members must be independent directors. As of December 31, 2017, the Committee comprised three members as follows:

Admiral Tanarat Ubol	Chairman of the Committee and Vice Chairman of the Independent Directors Committee
Ms. Panada Kanokwat	Member and Independent Director
Mr. Pitipan Teparitarn	Member

Ms. Panada Kanokwat was appointed as a member of the Committee in replacement of Mr. Songsak Saicheua on April 27, 2017, while Mr. Pitipan Tepartimargorn was appointed as a member of the Committee in replacement of Mr. Piti Tantakasem on July 27, 2017.

According to its charter, the Committee must hold a meeting at least four times a year. In 2017, the Committee held 4 meetings, while 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 disclosed its annual performance in the Corporate Governance Committee Report for 2017.

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 ensure that the Company's activities are performed 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 ensure that the Company's internal control and internal audit systems are efficient and appropriate as well as that audit reports, audit approaches and results are performed and noted based on generally acceptable standards and relevant best practices, in addition to coordinating with the external auditor
- (5) To consider, select and propose an appointment of an external auditor*, and to propose the audit's remuneration, as well as attend a non-executive meeting with the auditor at least once a year
- (6) To determine independence of the Internal Audit Division as well as to endorse appointments, transfers, performance appraisal or punishments of the Head of the Internal Audit Division. The Audit Committee will appoint an Investigation Committee to investigate the Head of the division in case he or she is suspected of noncompliance to laws, the Company's rules and regulations, and good corporate governance.
- (7) To approve the annual audit plan
- (8) To endorse budget, division structure and manpower of the Internal Audit Division for the management to propose to the Board
- (9) To approve the charter of the Internal Audit Division
- (10) To approve the Conflict of Interest Declaration Form when the Head of the Internal Audit Division has to conduct the audit field work
- (11) To endorse the results from audits which were approved in the annual audit plan as well as special audit request

Note: * The State Audit Act, B.E. 2561 (2018), Articles 4 and 53 prescribed that the Auditor General is authorized to audit the financial report and state its views on the audit results of the state enterprises including PTTEP which is regarded as a state enterprise under the definition of the Budget Procedures Act, B.E. 2502 (1959), Article 4.

(12) Chairman of the Audit Committee or a member has to attend the shareholders' meeting to answer questions in regard to the Committee's duties or the appointment of the external auditor

(13) To annually review and update the Audit Committee Charter

(14) To review the correctness of self-assessment and related documents in regard to the Anti-Corruption measures in reference to Thailand's Private Sector Collective Action Coalition Against Corruption (CAC)

(15) To perform other duties as assigned by the Board upon its consent

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

The Audit Committee consists of at least three directors, but not more than five directors, all of whom must be independent directors. As of December 31, 2017, the Committee comprised three members, and all members are capable with knowledge, expertise, and experience in auditing financial statements. One of the members, Ms. Panada Kanokwat, holds a degree in accounting. Details are as follows:

Director Name	Position	Financial Statements Audit Experience
Mr. Ampon Kittiampon	Chairman of the Audit Committee	<ul style="list-style-type: none"> - April 2010 - April 2011: Chairman of the Audit Committee, PTT Plc. - May - December 2007: Chairman of the Audit Committee, Rayong Refinery Plc. - December 2005 - April 2007: Member of the Audit Committee, Rayong Refinery Plc.
Mr. Achporn Charuchinda	Member of the Audit Committee	<ul style="list-style-type: none"> - 2013 – 2014: Member of the Audit Committee, Metropolitan Waterworks Authority - 2007 – 2013: Chairman of the Audit Committee, Bank of Thailand's Financial Institutions Development Funds
Ms. Panada Kanokwat	Member of the Audit Committee	<ul style="list-style-type: none"> - 2014 – Present: Member of the Audit Committee, Global Power Synergy Plc. - 2015 – May 2017: Chairman of the Audit Committee, Asia Biomass Plc. - 2013 – 2014: Member of the Audit Committee, TISCO Financial Group Plc. - 2013 – 2014: Member of the Audit Committee, TISCO Bank Plc. - 2011 – 2013: Chairman of the Audit Committee, TISCO Bank Plc. - 2011 – 2013: Chairman of the Audit Committee, TISCO Financial Group Plc.

Mr. Sethaput Suthiwart-Narueput was a member of the Audit Committee from January 1, 2017 to April 26, 2017.

According to the Audit Committee Charter, the Committee must hold a meeting on a quarterly basis. In 2017, the Committee held 13 meetings, and 69 agendas were considered. The majority of incumbent directors, including the Head of the Internal Audit Division who also acted as the Committee's secretary, attended all the meetings. The Committee disclosed its annual performance in the Audit Committee Report for 2017.

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 who are qualified to be the Company's directors, the Chief Executive Officer (CEO) when there is a vacancy or to replace those whose term have expired, or an Acting CEO when there is a vacancy while the nomination process is still underway, for election by the Board or the shareholders, considering the Board composition, knowledge, capability, their useful experience to the Company, number of companies in which they are serving as a director, as well as their conflicts of interest
- (2) To consider the CEO's succession plan and appropriate executive-level management development system to ensure the skills and qualifications as required to achieve the Company's target growth
- (3) To approve the Skill Mix and prepare a list of possible candidates for the Company's directors, CEO, or Acting CEO in advance and/or when there is a vacancy
- (4) To accept opinions or suggestions from PTT Board of Directors to supplement the nomination selection decision before submitting to the Board for consideration and to the Annual General Shareholders' Meeting (as the case may be)
- (5) To consider the annual Board Performance Target and Performance Agreement of the CEO and President of the Exploration and Production (PEP), to propose them to the Board for approval, as well as to set the Performance Evaluation Form of the Chairman, directors, sub-committees, and the CEO and PEP
- (6) To consider and propose qualified directors to be a member or the chairman of the sub-committees when there is a vacancy as well as to propose restructuring of the sub-committees as deemed appropriate
- (7) To regularly review and update its own charter to ensure its appropriateness
- (8) To disclose performance of the Committee in the Company's annual report
- (9) To perform other duties relevant to the nomination of directors, the CEO, or Acting CEO, as 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 independent directors. As of December 31, 2017, the Committee comprised four members who were all independent directors as follows:

Mr. Ampon Kittiampon	Chairman and Independent Director
Mr. Piti Tantakasem	Member and Independent Director
Colonel Nimit Suwannarat	Member and Independent Director
Mr. Sethaput Suthiwart-Narueput	Member and Independent Director

Mr. Ampon Kittiampon assumed the chairmanship in replacement of Mr. Piti Tantakasem on April 27, 2017.

According to its charter, the Committee must hold a meeting at least two times a year. In 2017, the Committee held 8 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 disclosed its annual performance in the Nominating Committee Report for 2017.

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 of the Board and sub-committees prior to proposing at the Annual General Shareholders' Meeting for approval, using fair and reasonable criteria or principles, while ensuring that the remunerations are in line with the individuals' performance, the Company's performance, the industry's practices, as well as the scope of the duties and responsibilities

(2) To consider remuneration of the Chief Executive Officer (CEO) and President of the Exploration and Production (PEP), and the salary structure of the Company's executives with fair and reasonable criteria or principles prior to proposing them to the Board for approval, whereas the remuneration of the CEO and PEP must be in line with duties and responsibilities as well as his or her performance.

(3) To evaluate performance of the Remuneration Committee and report to the Board for annual disclosure to the 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 independent directors. As of December 31, 2017, 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 Vice Chairman of the Independent Directors Committee
Mr. Kulit Sombatsiri	Member

Mr. Kulit Sombatsiri assumed the membership in replacement of Mr. Manas Jamveha on April 27, 2017.

According to its charter, the Committee must hold a meeting at least two times a year. In 2017, the Committee held 2 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 disclosed its annual performance in the Remuneration Committee Report for 2017.

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 of risk management, including recommendations 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 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 risk, investment and geopolitical risk, financial risk, organizational capability risk, and law and regulatory risk, as well as to recommend mitigation strategy to manage the risks to keep them within the acceptable level according to clause (1) and to continuously monitor, assess and improve the 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 a continuous and efficient risk management comparable to other leading companies, as well as to assign certain tasks related to PTTEP's risk management to the risk management functions 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 assigned by the Board

The Risk Management Committee consists of at least three directors, while at least one member must be an independent director. As of December 31, 2017, the Committee comprised six members, three of which were independent directors as follows:

Mr. Sethaput Suthiwart-Narueput	Chairman and Independent Director
Colonel Nimit Suwannarat	Member and Independent Director
Mr. Piti Tantakasem	Member and Independent Director
Mr. Pitipan Teparimargorn	Member
Mr. Wirat Uanarumit	Member
Mr. Twarath Sutabutr	Member

According to its charter, the Committee must hold a meeting at least four times a year. In 2017, the Committee held 13 meetings, while the majority of incumbent directors attended all the meetings. The Committee's secretary, who was the Senior Vice President of the Enterprise Risk Management and Internal Control Division, also attended every meeting. The Committee disclosed its annual performance in the Risk Management Committee Report for 2017.

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 the Chief Executive Officer (as the case may be) on significant matters which are beneficial to the Company as well as major and minor shareholders
- (2) To advise the Board and independent directors on their roles and responsibilities for benefits of the Company as well as the major and minor shareholders
- (3) To review the Company's operations 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 of the qualifications of an independent director according to the CG&BE are considered as an independent director without any appointment approvals from the Nominating Committee. As of December 31, 2017, the Committee comprised nine 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
Ms. Panada Kanokwat	Member
Mr. Bundhit Eua-Arporn	Member

According to its charter, the Committee must hold a meeting at least four times a year. In 2017, the Committee held 4 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 disclosed its annual performance in the Independent Directors Committee Report for 2017.

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 (1) below. The definitions of an independent director, whose qualification is annually reviewed, are as follows:

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

(2) Neither being nor used to being an executive director, employee, staff, or advisor who receives salary, or a controlling person of PTTEP, our parent company, subsidiary companies, associated companies, same-level subsidiary companies, major shareholders, or controlling persons, unless the foregoing status has ended for not less than two years prior to his or her appointment as the Company's independent director, excluding the case where the independent director used to be a government official or advisor of a government unit, which is a major shareholder, or a 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 the Company's directors, executives, major shareholders, controlling persons, or persons to be nominated as a director, executive, or controlling persons of PTTEP or one of the subsidiaries

(4) Neither having nor used to having a business relationship with PTTEP, our parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, in the manner which may interfere with his or her independent judgment, and neither being nor used to being a significant shareholder, or controlling person of anyone having a business relationship with the Company, our parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, 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, services, and granting or receiving of financial assistance. For example, these include receiving or extending of loans, guarantee, collateral, and other similar actions which can potentially result in PTTEP or his counterparty being subject to indebtedness payable to the other party in the amount, whichever is lower, of between three percent or more of the net tangible assets of the Company or twenty million baht or more. The amount of such indebtedness shall be calculated according to the method for calculation of the 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 being an auditor of PTTEP, our parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, and not being a significant shareholder, controlling person, or partner of an audit firm which employs auditors of the Company, our parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, unless the foregoing relationship has ended for not less than two years

(6) Neither being nor used to being a provider of any professional services, including those as a legal advisor or financial advisor who receives service fees exceeding two million baht per year from PTTEP, our parent company, subsidiary companies, associated companies, major shareholders, or controlling persons, and not being a significant shareholder, controlling person, or partner of the provider of the 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 the subsidiary companies, or not being a significant partner in a partnership or an executive director, employee, staff, advisor who receives salary or holds shares exceeding one percent of the total number of shares with voting rights of any companies which undertake a business of the same nature and in competition to that of the Company or our subsidiaries

(8) Not being a director appointed as representative of the directors of PTTEP, the major shareholders or any shareholders who are related to the major shareholders

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

After being appointed as an independent director with the qualifications under (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 companies, associated companies, same-level subsidiary companies, major shareholders, or controlling persons, provided that such decision shall be in the form of a collective decision.

The definition of each of the 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 the PTTEP Group (CG&BE) stipulates that there should be an annual performance appraisal of the Board. In 2017, the appraisal of the Board derived from the score from the self-appraisal of the entire Board and the Board Performance Target, while the Chairman and sub-committees were evaluated by the Board using the corresponding appraisal forms. This allows the Company's directors to review their performance, key issues, and obstacles with which they had faced during the past year as well as to enhance their directorship efficiencies. The Nominating Committee determines the appraisal forms and considers the Board Performance Target prior to proposing to the Board for consideration and approval.

The Board's performance appraisal comprises the followings:

(1) Individual self-appraisal and individual cross-appraisal by other directors, including four evaluation topics, namely, (1) qualifications, (2) independence, (3) roles and responsibilities, and (4) training and self-development

(2) Appraisal of the entire Board, including six evaluation topics, namely, (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 the sub-committees which includes questions on each of the sub-committees' 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 the SEC's new Corporate Governance Code for Listed Companies 2017 and the CG&BE of the PTTEP Group under Section 6.3: Roles of the Board of Directors and Management. This includes topics, such as acting as the Chairman of the Board's meetings and the Annual General Shareholders' Meeting, setting agendas for the Board's meetings, and enhancing relationship between the Board and the management.

The 2017 appraisal included four parts as aforementioned with a scoring scale of 1 to 3 (1=need improvement, 2=meet standard, and 3=good). While the scoring scale remained unchanged from 2016, few questions however were added to be in line with Company's operation and good practice as follows:

- (1) Individual self-appraisal: Question about anti-corruption was added.
- (2) Nominating Committee appraisal: Question about succession plan was added.
- (3) Risk Management Committee appraisal: Questions about risk from investment, oil price and analysis of factors which have effect to Company's business were added.
- (4) Chairman's appraisal: Questions are amended and added to be in line with CG Code 2017.

The Board Performance was evaluated from the four elements according to the Board Performance Target 2017 as follows:

(1)	Corporate KPI	50%
(2)	Meeting attendance and meeting effectiveness	10%
(3)	Appraisal of the entire Board	15%
(4)	CG Perception	25%
(4.1)	From stakeholders	10%
(4.2)	From the Thai Institute of Directors Association (IOD)	15%

Details of the 2017 Board's performance appraisal can be summarized as follows:

(1) The self-appraisal score averaged at 2.79, decreased from 2.84 in 2016 (total score = 3). The individual cross-appraisal by other directors score averaged at 2.90, increased from 2.81 in 2016 (total score = 3).

(2) The 2017 appraisal score of the Board derived from score from the Board Performance Target 2017, which was 4.28, increased from 3.91 in 2016 (total score=5.(1=urgent improvement needed, 2=improvement needed, 3=fair or achieved as planned, 4=good, 5=very good). In 2017, the self-appraisal of the entire Board was also combined into the Board Performance Target 2017 with a weight of 15%. The score from the self-appraisal of the entire Board averaged at 2.87, decreased from 2.91 in 2016 (total score=3).

However, the 2016 appraisal of the Board consisted of two parts, in which each weighs 50% equally between score from the appraisal of the entire Board and score from the Board Performance Target. As such, the result of the 2017 appraisal score of the Board was limited to compare with those of 2016 due to different basis of the scoring calculations.

In addition, the 2017 self-appraisal of the entire Board included an assessment part on the relationship between the Board and the management, provided that the latter was also evaluated by the same set of questions, to further develop their relationships.

(2) The 2017 appraisal scores of the five sub-committees were within the highest range as follows:

(3.1) The appraisal score of the Audit Committee was 3.00, same as 2016 (total score = 3).

(3.2) The appraisal score of the Remuneration Committee was 2.94, decreased from 2.96 in 2016 (total score=3).

(3.3) The appraisal score of the Nominating Committee was 2.86, decreased from 3.00 in 2016 (total score=3).

(3.4) The appraisal score of the Corporate Governance Committee was 2.93, increased from 2.73 in 2016 (total score=3).

(3.5) The appraisal score of the Risk Management Committee was 2.97, increased from 2.94 in 2016 (total score=3).

(3) The 2017 appraisal of the Chairman by the Board was 2.94, decreased from 2.96 in 2016 (total score=3).

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 in the future for efficiency improvement of the Board, sub-committees, Chairman, and management in several aspects, such as time management in the Board's meetings, review of human resource management, and succession plan development for critical positions. The directors will also put more emphasis towards self-development by attending trainings relating to the Board's performance efficiency and initiation to further enhance the Company's medium-term and long-term strategic planning.

8.1.5 Performance Appraisal of the Chief Executive Officer and President, Exploration and Production

The Board specifies that the Remuneration Committee is responsible for conducting of the Chief Executive Officer (CEO) and the President of the Exploration and Production, (PEP)'s performance appraisal whereas the Nominating Committee is responsible for the CEO and PEP's Performance Agreement as measured by the Company's KPI to be used in the determination of his or her remuneration in the given year. The appraisal result must also be approved by the Board to ensure the check and balance as well as to allow the Company to monitor the performance of the CEO and PEP. The appraisal result essentially provides the transparency and justification in consideration of the CEO and PEP'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, while there are normally 12 meetings being held annually on the last Thursday of every month. The Board members have been informed of the 2018 meeting schedule since August 2017. Meetings related to the Company's strategic planning, in which the Board has greatly committed its time and priority, are commonly held as an off-site meeting, whereas additional meetings will be held when deemed appropriate. In 2017, there were 16 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 consider at least for five working days prior to the meeting date, except in those urgent cases or insufficient information. In addition, the agenda documents are delivered to the directors through a software to facilitate the convenience and timeliness as well as to promote a paperless process.

Generally, the Company's Chairman, the Chief Executive Officer (CEO), and the Corporate Secretary are responsible for agenda proposals in the Board's meetings; however, in practice, the Company's directors are also eligible to make the proposals as well.

The Board's meeting agendas are clearly classified, namely, agendas for approval, agendas for acknowledgement, and monthly agendas of performance review as well as budget execution. In 2017, there were 66 and 103 agendas proposed for approval and acknowledgement, respectively, while the other important standing agendas are as follows:

Month	Standing Agendas
January	<ul style="list-style-type: none"> - Annual General Shareholders' Meeting Documents Preparation, including: <ul style="list-style-type: none"> (1) Unaudited Annual Financial Statements (2) Dividend Payment (3) Auditor Appointment and Auditor's Fees Consideration (4) Board of Directors' and Sub-committees' Remuneration - PTTEP's Board Performance Target
February	<ul style="list-style-type: none"> - Annual Registration Statement and Annual Report
March	<ul style="list-style-type: none"> - Annual General Shareholders' Meeting Preparation
April	<ul style="list-style-type: none"> - Appointment of Sub-committee Members - Assessment of the Annual General Shareholders' Meeting
May	<ul style="list-style-type: none"> - Strategic Direction and Annual Manpower Planning
July	<ul style="list-style-type: none"> - Interim Dividend Payment (If any)
August	<ul style="list-style-type: none"> - Board Meeting Schedule
November	<ul style="list-style-type: none"> - Business Plan, 5-Year Investment Plan, and Annual Expenditure Budgeting - CEO's Key Performance Indicator (KPI) and Performance Agreement - Annual Procurement Plan
December	<ul style="list-style-type: none"> - Annual Performance Appraisal of PTTEP's Board of Directors, Sub-committees, and the Chairman - PTTEP Corporate Key Performance Indicator (KPI) and Employees' Merit Increase and Annual Special Payment

In 2017, there were also agendas for consideration relating to the business impacts from the continuous decline in oil price. These included strategic plan on expiring concession biddings, reorganization for long-term sustainability, project investment plans, SPEND SMART program updates, CG&BE revision, and the Company's charters amendment such as those of the Audit Committee.

During each of the meetings, which usually lasted approximately three to four hours, the Chairman would allocate an adequate period of time to each agenda to provide an opportunity for the directors to express their opinions independently. The Company's executives were also invited to attend the meetings to provide necessary information as well as to acknowledge the policies and issues being raised. The Corporate Secretary who is also appointed as the Board's Secretary, on the other hand, attended every meeting to administer and provide advices to the Board on related rules and regulations for proper practices, to take minutes of the meetings, as well as to keep a complete filing of all the necessary meeting information and documents.

The Board's resolution is based on the 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 his or her 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 therefore final vote.

The issues which are required to receive an approval of no less 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 a significant part, 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 a significant part, 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, issuance of debentures, merger and acquisition, and business dissolution
- (6) In case where the Company or one of the subsidiaries agrees to enter connected transactions, or sales or acquisition of the Company's or the subsidiaries' assets, as determined by the Stock Exchange of Thailand's announcement on connected transactions of listed companies (as the case may be)

Minutes of the Board's 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 the meetings' attendants, and name and content of those who state his or her opinions, questions, answers, or clarifications are recorded in details, while reports of the minutes are systematically filed and kept 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 Board's Chairman with an absent letter which must be informed to all of the Board members prior to the meeting and will be subsequently recorded in the report of individual directors' meeting attendance.

In 2017, the non-executive meetings were held 2 times which were without presence of the management. The purpose of the meetings was to discuss and clarify some ongoing issues which were of interest, while the results were summarized for and acknowledged to the CEO for further evaluation.

8.1.7 Meeting Attendance of PTTEP Directors in 2017

Director's Name	Board of Directors	Independent Directors Committee	Non-Executive Directors Committee	Corporate Governance Committee	Audit Committee	Remuneration Committee	Nominating Committee	Risk Management Committee	Annual General Shareholders' Meeting 2017
	Total number of meetings: 16 times	Total number of meetings: 4 times	Total number of meetings: 2 times	Total number of meetings: 4 times	Total number of meetings: 13 times	Total number of meetings: 2 times	Total number of meetings: 8 times	Total number of meetings: 13 times	Total number of meetings: 1 time
1. Mr. Prajya Phinyawat	16/16	4/4	2/2	-	-	-	-	-	1/1
2. Mr. Ampon Kittiampon ^{1,2}	16/16	4/4	2/2	-	12/12	-	6/6	-	1/1
3. Mr. Tevin Vongvanich	14/16	-	2/2	-	-	-	-	-	1/1
4. Mr. Achporn Charuchinda	16/16	3/4	2/2	-	13/13	2/2	-	-	1/1
5. Admiral Tanarat Ubol	16/16	4/4	2/2	4/4	-	2/2	-	-	1/1
6. Colonel Nimit Suwannarat	12/16	4/4	1/2	-	-	-	8/8	11/13	1/1
7. Mr. Sethaput Suthiwart-Narueput ¹	15/16	3/4	2/2	-	4/5	-	8/8	13/13	1/1
8. Mr. Piti Tantakasem ^{1,3}	13/16	4/4	2/2	1/1	-	-	7/8	12/13	1/1
9. Mr. Wirat Uanarumit	15/16	-	2/2	-	-	-	-	11/13	1/1
10. Mr. Twarath Sutabutr ¹	13/16	-	2/2	-	-	-	-	10/12	1/1
11. Mr. Pitipan Tepartimargorn ⁴	15/16	-	2/2	3/3	-	-	-	13/13	1/1

¹ From April 27, 2017

- Mr. Ampon Kittiampon assumed chairmanship of the Audit Committee and the Nominating Committee.
- Mr. Sethaput Suthiwart-Narueput assumed chairmanship of the Risk Management Committee and directorship of the Nominating Committee.
- Mr. Piti Tantakasem assumed directorship of the Risk Management Committee and the Nominating Committee. Mr. Piti also ended chairmanship of the Nominating Committee and directorship of the Corporate Governance Committee.
- Mr. Twarath Sutabutr assumed directorship of the Risk Management Committee.
- Ms. Panada Kanokwat assumed directorship of the Audit Committee and the Corporate Governance Committee.
- Mr. Kulit Sombatsiri assumed directorship of the Remuneration Committee.
- Mr. Songsak Saicheua ended directorship of the Corporate Governance Committee.

² Mr. Ampon Kittiampon assumed vice chairmanship of the Board of Directors on November 30, 2017.

³ Mr. Piti Tantakasem resigned from directorship and membership of the Nominating Committee and Risk Management Committee on January 1, 2018.

⁴ Mr. Pitipan Tepartimargorn assumed directorship of the Corporate Governance Committee on July 27, 2017.

Director's Name	Board of Directors	Independent Directors Committee	Non-Executive Directors Committee	Corporate Governance Committee	Audit Committee	Remuneration Committee	Nominating Committee	Risk Management Committee	Annual General Shareholders' Meeting 2017
	Total number of meetings: 16 times	Total number of meetings: 4 times	Total number of meetings: 2 times	Total number of meetings: 4 times	Total number of meetings: 13 times	Total number of meetings: 2 times	Total number of meetings: 8 times	Total number of meetings: 13 times	Total number of meetings: 1 time
12. Ms. Panada Kanokwat ¹	16/16	4/4	2/2	3/3	13/13	-	-	-	1/1
13. Mr. Kulit Sombatsiri ^{1,5}	11/12	-	1/2	-	-	1/1	-	-	-
14. Mr. Bundhit Eua-Arporn ⁶	4/5	1/2	-	-	-	-	-	-	-
15. Mr. Somporn Vongvuthipornchai	16/16	-	-	-	-	-	-	-	1/1
Former Directors Retiring by Rotation or Resigning During 2017									
1. Mr. Manas Jamveha ⁷	4/4	-	1/1	-	-	1/1	-	-	1/1
2. Mr. Songsak Saicheua ^{1,8}	4/5	-	1/1	0/1	-	-	-	-	1/1

⁵ Mr. Kulit Sombatsiri was elected as director on March 29, 2017.

⁶ Mr. Bundhit Eua-Arporn was elected as director on August 1, 2017.

⁷ Mr. Manas Jamveha retired by rotation on March 29, 2017.

⁸ Mr. Songsak Saicheua resigned from directorship on May 1, 2017.

8.1.8 Number of PTTEP Shares Held by the Directors, Their Spouse and Minor Child as of December 31, 2017

Director's Name		Number of Ordinary Shares		
		As of December 31, 2016	As of December 31, 2017	Increase / (Decrease) During the Year
1. Mr. Prajya	Phinyawat	15,000	15,000	-
2. Mr. Tevin	Vongvanich	146,543	146,543	-
3. Mr. Ampon	Kittiampon	-	-	-
4. Mr. Achporn	Charuchinda	-	-	-
5. Admiral Tanarat	Ubol	-	-	-
6. Colonel Nimit	Suwannarat	-	-	-
7. Mr. Sethaput	Suthiwart-Narueput	-	-	-
8. Mr. Piti	Tantakasem	-	-	-
9. Mr. Wirat	Uanarumit	-	-	-
10. Mr. Twarath	Sutabutr	-	-	-
11. Mr. Pitipan	Tepartimargorn	-	-	-
12. Ms. Panada	Kanokwat	30,000	30,000	-
13. Mr. Kulit	Sombatsiri	N/A	-	N/A
14. Mr. Bundhit	Eua-arporn	N/A	-	N/A
Spouse		N/A	4,587	N/A
15. Mr. Somporn	Vongvuthipornchai	236,869	263,677	26,808
Spouse		3,500	3,500	-
Former Directors Retiring by Rotation or Resigning During 2017				
1. Mr. Manas	Jamveha	-	-	-
2. Mr. Songsak	Saichuea	-	-	-

8.2 The Management

As of January 1, 2018, PTTEP's management, according to the definition of management as defined by the Capital Market Supervisory Board (CMSB), consists of 23 members. Details of their biography, qualification, and past experience are disclosed in the "Information of the Board of Directors, Management, Controlling Persons and Corporate Secretary" section.

List of Names and Number of Shares Held by the Management*, Their Spouse and Minor Child

Name	Number of Ordinary Shares		
	As of January 1, 2017	As of January 1, 2018	Increase/(Decrease) During the Year
1. Mr. Somporn Vongvuthipornchai	236,869	263,677	26,808
Spouse	3,500	3,500	-
2. Mr. Phongsthorn Thavisin ¹	49,715	70,909	21,194
3. Mr. Thiti Mekavichai	72,661	94,392	21,731
4. Mr. Prapat Soponpongpiat	50,685	69,320	18,635
5. Ms. Pannalin Mahawongtikul	19,979	50,701	30,722
6. Mrs. Pranot Tirasai	153,128	172,341	19,213
7. Mr. Montri Rawanchaikul ²	37,614	43,214	5,600
8. Mr. Vuthiphon Thuampoomngam ³	N/A	58,889	N/A
9. Mr. Chatchawal Eimsiri	48,876	58,205	9,329
10. Mrs. Suchitra Suwansinpan	87,794	105,290	17,496
Spouse	300	300	-
11. Mr. Chayong Borisuitsawat ⁴	N/A	55,096	N/A
12. Mr. Waranon Laprabang ⁵	N/A	144,168	N/A

* 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 motivate the staff, create alignment between the employees, management and shareholders, as well as to establish long-term loyalty and a sense of ownership. Details are disclosed in the "Corporate Governance" section under "Policy on Treatment to Stakeholders - Employee" part.

¹ Appointed as the President, Exploration and Production (equivalent to Executive Vice President) and Acting Executive Vice President, Organization and Business Transformation Group on November 1, 2017

² Appointed as Executive Vice President, Strategy and Business Development Group on October 1, 2017 and Acting Senior Vice President, New Business Unit on November 1, 2017

³ Appointed as Executive Vice President, Engineering and Development Group on January 1, 2018

⁴ Appointed as Acting Executive Vice President, Operations Support Group on November 1, 2017

⁵ Appointed as Acting Executive Vice President, Production Asset Group on November 1, 2017

Name	Number of Ordinary Shares		
	As of January 1, 2017	As of January 1, 2018	Increase/(Decrease) During the Year
13. Mr. Yongyos Krongphanich	99,328	105,367	6,039
14. Ms. Jaroonsri Wankertphon	65,604	77,410	11,806
15. Mrs. Netsuda Pokkasorn ⁶	N/A	79,857	N/A
16. Mr. Anutra Bunnag ⁷	-	-	-
17. Ms. Kanchanan Panananda ⁸	51,486	59,081	7,595
18. Mrs. Sirirat Sararattanakul	211,874	223,490	11,616
19. Mr. Sakchai Sarawek	23,522	31,475	7,953
Spouse	4,000	4,000	-
20. Mrs. Maneeya Srisukhumbowornchai	-	-	-
21. Ms. Pratamaporn Deesrinthum ⁹	N/A	52,846	N/A
22. Ms. Porntip Jansuksri	28,588	37,938	9,350
23. Mrs. Thanyaporn Vangvasu	145,511	155,147	9,636
Management Who Retired or Rotated During 2017			
1. Mr. Kanit Sangwongwanich ¹⁰	118,943	138,152	19,209
2. Mrs. Chanamas Sasnanand ¹¹	35,691	44,779	9,088

⁶ Appointed as Vice President, Insurance Department, Finance and Accounting Group on August 1, 2017

⁷ Appointed as Vice President, attached to the Finance Division and assigned as Managing Director, PTTEP Treasury Center Company Limited, Finance and Accounting Group on May 1, 2017

⁸ Appointed as Vice President, Capital and Investor Relations Department, Finance and Accounting Group on January 1, 2018

⁹ Appointed as Acting Vice President, Managerial Accounting Department, Finance and Accounting Group on January 1, 2018

¹⁰ Retired on January 1, 2018

¹¹ Appointed as Acting Senior Vice President, Internal Audit Division on January 1, 2018

8.3 Corporate Secretary

The Corporate Secretary plays a major role in coordinating internally among the Company's Chairman, Chief Executive Officer (CEO), President of the Exploration and Production (PEP), and management, and externally among the companies, shareholders, and regulators. The Board of Directors has appointed Mrs. Pranot Tirasai, who is Executive Vice President of the Corporate Affairs and Assurance Group and the Acting Senior Vice President of the Corporate Secretary Division, as the Corporate Secretary and the Board's secretary, the Corporate Governance Committee's secretary, the Nominating Committee's secretary, the Remuneration Committee's secretary, and the Independent Directors Committee's secretary since October 1, 2013. Mrs. Tirasai is a law graduate and knowledgeable in managing corporate secretarial. She also has experience and other qualifications which contribute to efficiency and effectiveness in the discharge of corporate secretarial functions, in addition to attending seminars and trainings. Details of the Corporate Secretary are disclosed in the "Information of the Board of Directors, Management, Controlling Persons, and Corporate Secretary".

The Corporate Secretary performs roles with fiduciary duties by having responsibilities and duties of care and loyalty, as stipulated in the Securities and Exchange Act. These include preparation and safeguarding of the Company's documents, namely, (1) directors registry, (2) notice and minutes of the Shareholders' meetings, and (3) notice and minutes of the Board's meetings, and annual reports, as well as safeguarding of the Conflicts of Interest Report submitted by the directors and management as well as sending a copy of the report to the Chairman of the Board and Chairman of the Audit Committee, as stipulated by law.

The Corporate Secretary is also responsible for the following duties as required by the Board.

- Overseeing and advising the Board to ensure that the directors perform their roles in compliance with relevant applicable laws, rules and regulations, as well as the Company's objectives, Articles of Association, and 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 the directions as set by the Board and shareholders, as well as 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 of the Good Corporate Governance and Business Ethics of the PTTEP Group, which is regularly being revised to be in compliance with related laws and in line with international practices of leading organizations
- Ensuring that the Company's shareholders are being treated fairly, ethically and lawfully as well as promoting good relationship with minor shareholders
- Acting as a case coordinator who is responsible for managing reports submitted through the Company's Whistleblowing Case Management System
- Performing other duties as appointed by the Company

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 in regard to remuneration of the Company's 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 the directors, overall economic situation, and the shareholders' opinions. The 2017 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 a meeting attendance
- (3) Bonus for the Board if there is a dividend in that year, totaling 0.1% of the Company's consolidated net profit in that year, but no more than THB 60 million per year, and proportionally to the directors' period in the position
- (4) 25% 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 a meeting attendance
- (2) 25% increase for the sub-committee's Chairman
- (3) No remuneration in case of circulation
- (4) Excluding the sub-committees' members who are also 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 2017

Director's Name	Remuneration							2017 Bonus Paid in 2018	Total
	Board of Directors		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	800,000	600,000	0	0	0	0	0	1,686,841.36	3,086,841.36
2. Mr. Ampon Kittiampon	640,000	480,000	600,000	0	0	300,000	0	1,349,473.09	3,369,473.09
3. Mr. Tevin Vongvanich	560,000	480,000	0	0	0	0	0	1,349,473.09	2,389,473.09
4. Mr. Achporn Charuchinda	640,000	480,000	520,000	0	100,000	0	0	1,349,473.09	3,089,473.09
5. Admiral Tanarat Ubol	640,000	480,000	0	200,000	80,000	0	0	1,349,473.09	2,749,473.09
6. Colonel Nimit Suwannarat	480,000	480,000	0	0	0	320,000	440,000	1,349,473.09	3,069,473.09
7. Mr. Sethaput Suthiwart-Narueput	600,000	480,000	160,000	0	0	320,000	650,000	1,349,473.09	3,559,473.09
8. Mr. Piti Tantakasem	520,000	480,000	0	40,000	0	300,000	480,000	1,349,473.09	3,169,473.09
9. Mr. Wirat Uanarumit	600,000	480,000	0	0	0	0	440,000	1,349,473.09	2,869,473.09
10. Mr. Twarath Sutabutr	520,000	480,000	0	0	0	0	400,000	1,349,473.09	2,749,473.09
11. Mr. Pitipan Tepartimargorn	600,000	480,000	0	120,000	0	0	520,000	1,349,473.09	3,069,473.09
12. Ms. Panada Kanokwat	640,000	480,000	520,000	120,000	0	0	0	1,349,473.09	3,109,473.09
13. Mr. Kulit Sombatsiri	440,000	400,000	0	0	40,000	0	0	1,027,817.86	1,907,817.86
14. Mr. Bundhit Eua-arporn	160,000	200,000	0	0	0	0	0	565,669.54	925,669.54
15. Mr. Somporn Vongvuthipornchai	640,000	480,000	0	0	0	0	0	1,349,473.09	2,469,473.09
Former Directors Retiring by Rotation or Resigning During 2017									
1. Mr. Manas Jamveha	160,000	120,000	0	0	40,000	0	0	325,352.42	645,352.42
2. Mr. Songsak Saicheua	160,000	160,000	0	0	0	0	0	443,662.38	763,662.38
Total	8,800,000	7,240,000	1,800,000	480,000	260,000	1,240,000	2,930,000	20,243,020.64	42,993,020.64

Remarks: (1) The 2017 Annual General Shareholders' Meeting (AGM) approved bonus for the Board if there is a dividend in that year, totaling 0.1% of the Company's consolidated net profit in that year, but no more than THB 60 million per year.

(2) Mr. Tevin Vongvanich returned his PTTEP directorship remuneration in 2017 to PTT Public Company Limited (PTT) according to PTT's President and Chief Executive Officer's management contract.

(3) PTTEP provides the Chairman with a corporate car to carry out corporate-related purposes while in the chairmanship.

8.4.2 Remuneration of the Directors of Subsidiaries and Associated Companies

PTTEP's subsidiaries and associated companies are functional units in carrying out the Company's E&P and related businesses to optimize the Company's benefits, taking into account of the business and investment conditions. The Company assigns the executives to hold a directorship position in our subsidiaries and/or associated companies to ensure that they are managed in compliance with the business direction and strategy.

The Company's executives who are assigned to be directors of the subsidiaries or associated companies either in the E&P businesses or related businesses, such as PTTEP Services Co., Ltd., and B8/32 Partners Co., Ltd. do not receive any additional remunerations. The executives who are assigned to be directors of subsidiaries or associated companies engaging in other businesses, for example, PTT Digital Solutions Co., Ltd., and Energy Complex Co., Ltd., are however entitled to an additional remuneration with subject to the remuneration policy of such subsidiaries or associated companies.

8.4.3 Remuneration of the Chief Executive Officer

Remuneration of the Chief Executive Officer (CEO) is determined using fair and appropriate procedures and defined under the principles which are unbiased, reasonable, justifiable, and transparent. PTTEP's Remuneration Committee is responsible for reviewing remuneration of the CEO 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 comparably in size and industry, and overall economic situation. The CEO's remuneration consists of both short- and long-term arrangements such as salary and bonus payment as well as eligibility in the Employee Joint Investment Program (EJIP).

The ratio of annual compensation of the CEO compared to the average annual compensation of the Company's executives is approximately 1.56:1, while the ratio of annual compensation of the CEO compared to the average annual compensation of the Company's employees is approximately 9.74:1.

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 establish an unbiased and reasonable structure which reflects, not only the Company's own business nature and its 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 prior to the implementation.

The Chief Executive Officer meanwhile 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 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 the Company's competitiveness in the job market as well as to be able to provide the Board with thorough explanations particularly when the changes in the salary structure and payment method are drastic.

The ratio of the average annual compensation of the executives compared to the average annual compensation of the Company's employees is approximately 6.26:1.

Remuneration of the Executives

	2016		2017	
	Number	Total Amount (THB)	Number	Total Amount (THB)
Salary	10 ¹	78,142,595	12 ¹	92,112,950
Bonus		35,151,487 ²		56,137,890 ³
Other compensation ⁴		10,228,158		12,310,683
Total		123,522,240		160,561,523

In 2017, compensation (salary, bonus, and contribution to the provident fund) of PTTEP's and the subsidiaries' employees, including wages of the seconded employees, totaled THB 7,729,646,209.

8.5 Personnel

As of December 31, 2017, PTTEP and our subsidiaries had a total workforce of 3,774 employees.

Number of Employees^{*}

Employee Type	Total (Persons)
Thai Permanent Employees	2,071
Thai Contracted Employees	1,268
Non-Thai Contracted Employees	58
Local Employees in Overseas Subsidiaries	367
Seconded Employees from PTT Group Companies and Joint Venture Partners	10
Total	3,774

Remarks: ^{*} Based on the Company's database as of December 31, 2017

¹ Executives, 12 in total, consisted of the Chief Executive Officer, President of the Exploration and Production, Executive Vice Presidents and equivalent, and PTT's executives who have been seconded to PTTEP.

² Bonus for 2016 was paid in January and February 2017.

³ Bonus for 2017 was paid in January and February 2018.

⁴ Provident Fund

Number of Employees in Each Function Group¹

Function Group ²	Thai Permanent Employee	Thai Contracted Employee	Non-Thai Contracted Employee	Local Employee	Seconded Employee
Chief Executive Officer	64	19	2	0	0
Business and Organization Transformation Group	36	6	0	0	0
Corporate Affairs and Assurance Group	91	24	0	0	0
Engineering and Development Group	284	139	14	22	1
Finance and Accounting Group	136	89	0	0	0
Geosciences and Exploration Group	172	40	12	5	0
Human Resources and Business Services Group	102	94	1	0	0
Operations Support Group	268	234	14	0	0
Production Asset Group	844	612	14	340	9
President, Exploration and Production	8	3	0	0	0
Strategy and Business Development Group	66	8	1	0	0
Total	2,071	1,268	58	367	10

Remarks: ¹ Based on the Company's database as of December 31, 2017

² Based on the Company's organization structure as of December 31, 2017

Employee Turnover

	IN ¹	OUT ¹
Thai Permanent Employees	37	70
Thai Contracted Employees ²	60	78
Non-Thai Contracted Employees	9	39
National Employees	86	49
Seconded Employees	3	7

Remarks: ¹ Based on the Company's database as of December 31, 2017

² The turnover was exclusive of outsourced staff, such as maids, drivers, and etc.; 30 of whom resigned, and 36 of whom were hired in 2017.

In 2017, the Company's total employee turnover rate was 6.44%, while the voluntary resignation rates in 2013 through 2017 were as shown below.

Voluntary Turnover Rate

2013	2014	2015	2016*	2017*
7.9%	6.6%	6.3%	5.9 %	3.9 %

*resignation and early retirement in 2017

8.5.1 Human Resources Development Policy

To increase the organization's capability and accelerate the competency development of the Company's staff for continuous expansion of the business domestically and internationally, PTTEP has developed and improved the capability development system and process by implementing a competency-based 70:20:10 model of on-the-job training, coaching and mentoring, and formal training, respectively. In 2017, the Company provided training and development programs to employees through the following channels.

(1) In-House and External Training

The Company provides in-house and external trainings, domestically and overseas, to the staff and management at all levels. These trainings comprise a wide variety of courses, including technical and functional training, Safety, Security, Health and Environment (SSHE) training, organizational knowledge training, as well as other skills required to increase their day-to-day work efficiency, such as computer skills training, foreign language training, business administration, and leadership skills training.

(2) Long-term Training and Development Programs

Long-term training and development programs are aimed to prepare our employees for roles and assignments in the Company's current and future projects. The programs are generally provided to selected employees based on their Individual Development Plan (IDP) in 1-3 years. Under the approach, the employees are required to undertake on-the-job trainings through various assignments relating to the Company's projects or to be temporarily assigned to work with the Company's business partners or services companies in Thailand and overseas.

In 2017, the Company invested in human capital development programs at an amount of THB 56,494,471 with an average of 49 training hours per employee per year and 104 coaching and mentoring hours per employee per year. Meanwhile, with 144 mentors and 305 mentees in technical job families, the mentors to mentees ratio was at approximately 1:2 and is expected to increase in the following years. In addition, 1,430 employees, or 89% of the Company's employees selected for the Individual Competency Development Plan (ICDP) in 2017, took the actions to fulfill their competency requirements. As a result, our employees' competency increased approximately by 8% which was higher than the set target of 5%.

(3) Master's Degree Scholarship Programs for Employees

The Company provides scholarships to employees to help them pursue master's degrees in world-class universities all over the world in the following fields.

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

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

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

The Company calculates the Human Capital Return on Investment (HCROI) in several dimensions. These include man-hours and cost spent on development activities against total revenue and production, time to autonomy of young technical professionals, and readiness of immediate successors for senior management positions, as well as a continuous development of additional measurements to evaluate the HCROI more efficiently. The results are subsequently used to evaluate and elevate the efficiency and effectiveness of the development activities for further and future improvement.

9. Corporate Governance

9.1 Good Corporate Governance Policy

PTTEP Board of Directors (Board) recognizes the significance of operating of the businesses under the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE). The Board is confident that the strict adherence will successfully lead the Company to achieve the goals of “Growth, Prosperity, Stability, Sustainability and Dignity” as well as to enhance the confidence of our shareholders and other stakeholders. The Board has assigned the Corporate Governance Committee to govern, supervise, and provide the necessities to ensure that the Company’s operations are in line with the CG&BE and that the good corporate governance is maintained at the level of international standards. In 2017, the Company earned various acceptances through numerous awards and recognitions for our good corporate governance, domestically and internationally. Details are disclosed in the “Awards and Recognitions for Good Corporate Governance” part.

In 2017, the Board has reviewed the implementation of the Corporate Governance Code 2017 (CG Code) which was established by the Securities and Exchange Commission, by means that are suitable to the company’s business. The Board participated in the CG Code sharing session to understand its usefulness and business applications. The Board assigned the Corporate Governance Committee to appraise the CG Code compliance to ensure the suitable implementation to maximize its value for the Company’s future and sustainable growth.

PTTEP has continued to develop and apply the Company’s CG Code principles to be in line with those of the international best practice as follows.

9.1.1 Shareholders’ Rights and Equal Treatments

PTTEP understands the importance of shareholders’ rights and equal treatments; the Company’s Good Corporate Governance therefore has included a number of guidelines to assure the Company’s shareholders of their basic rights which, among others, allow them to trade and transfer our shares, declare the share ownership, and attend the shareholders’ meetings in person or through their proxies. In addition, the shareholders and their proxies are allowed to participate and vote in significant issues at the Company’s 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 fees, approval of connected transactions, acquisition or disposition of assets which, according to relevant laws, are sizeable, and other issues which are of significance to the Company. The shareholders are also entitled to profit sharing in the form of dividend as well as to receive adequate and timely information from the Company. The Company has only one class of shares, namely, ordinary shares, while one share is equal to one vote. Our efforts to ensure and enhance the shareholders’ rights are as follows:

(1) **Annual General Meeting of Shareholders:** In 2017, PTTEP respected and promoted the shareholder’s rights in Annual General Meeting of Shareholders (AGM or the Meeting) by arranging the following activities.

Before the Meeting

(1.1) Shareholders were allowed to propose agenda items and nominate qualified candidates for the election of PTTEP directors prior to the AGM from September 15 to December 15, 2016. The criteria was announced publicly through the SET's portal and the Company's website. The shareholders' proposals were then considered by using the Company's relevant rules and regulations to ensure that the proposed agenda items are relevant and truly beneficial to the business. The Nominating Committee was responsible for short-listing of the nominated candidates to the Board for consideration. Consequently, the Board would inform the shareholders of the resolution together with the rationale for each of the proposals at the AGM. In 2017, none of such agenda or a candidate was proposed at the AGM.

(1.2) PTTEP disclosed the AGM date approximately two months prior to the Meeting through the SET and the Company's website. The disclosure was made immediately when the Board determined the date on January 26, 2017. In addition, the Company disclosed the record date on which the shareholders had the right to attend the Meeting as well as to receive dividend to be on February 9, 2017, subsequently resulting the share registration closing date to be on February 10, 2017.

(1.3) The AGM invitation letter and supplementary documents, both in Thai and English, were published on the Company's website (www.pttep.com) more than 30 days prior to the Meeting, on February 24, 2017. The invitation letter included necessary details of each agenda, which clearly stated type of the agenda, be it for an acknowledgement or approval. The Board's opinions on each agenda are clearly stated as well as other rules and regulations related to the Meeting. A proxy form, which was stipulated by the Ministry of Commerce, was also included in the invitation letter. A comprehensive list of required documents that the shareholders were required to bring to the Meeting, on the other hand, was provided to preserve their rights to attend, while other important attachments were instructions of the Meeting, voting procedure, and map of the venue. The AGM invitation letter and supplementary documents, both in Thai and English, were distributed to the shareholders by post 19 days prior to the Meeting.

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

(1.5) The Company also permitted the shareholders to submit questions relating to the Meeting or other information relevant to the Company prior to the Meeting.

At the Meeting

(1.1) The Meeting was held on March 29, 2017 at 14.00 hrs. at the Bangkok Convention Center, 5th Floor, Central Plaza Ladprao, Bangkok. The Meeting date, time, and venue were set up for the convenience of the shareholders. The barcode and electronics system were used for the registration, vote counting, compilation, and display of each resolution to

ensure that the Meeting was carried out with full efficiency and accuracy. Assistants were adequately arranged to facilitate the process. To accelerate the registration process, the registration was opened to the shareholders four hours prior to the Meeting. The Company also provided revenue stamps to the shareholders who intended to vote through a proxy.

(1.2) All 15 of PTTEP directors attended the Meeting. The Company's Chairman presided over the Meeting, while the sub-committee members, Chief Executive Officer, senior executives from the Finance and Accounting Group, and senior executives from other function groups also participated to respond and provide clarifications to inquiries from the shareholders. Auditor, external legal advisors (inspectors), right protection volunteers, including shareholder volunteers to witness vote counting, also participated in the Meeting. The Chairman ensured that the Meeting was carried out according to the Company's Articles of Association (AoA) and the agendas as stated in the invitation letter. The Chairman efficiently allocated time to each agenda item and provided adequate time and opportunity for the shareholders to share their views and make in-depth inquiries in regard to those subjects relating to the Company's operations and the Meeting's agendas prior to the vote casting and resolution.

(1.3) PTTEP clearly provided information on the number and ratio of the shareholders who attended the Meeting by themselves and proxies, including the procedure, vote casting, vote counting as indicated in the Articles of Association before the commencement. The shareholders and proxies were required to use voting ballot for voting on each agenda scheduled for the Meeting whether to agree, disagree, or abstain. For each agenda, a barcode system was used to tally the votes, while each agenda was treated and voted separately, to ensure accurate and effective vote-counting procedure. The resolution was clearly reported and displayed in the Meeting as required by relevant laws and the Company's Articles of Association, while volunteers who were selected from the shareholders and independent inspectors would be appointed to witness the vote-tallying and sign off on all the ballot cards collected, counted, and signed. These cards were for internal reviews after the Meeting adjourned.

The Company permitted the 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 arrival. The Company would also count the shareholders as participants in the Meeting starting from the agenda that they arrived.

(1.4) All information presented at the Meeting was available in both Thai and English, while a translator translating from Thai to English for foreign shareholders who attended the Meeting was also provided to ensure fairness and equality among the shareholders.

(1.5) External independent legal advisors, acting as inspectors as well as witnesses, were engaged to oversee the Meeting to ensure the Meeting's transparency and that it was conducted lawfully according to the AoA. Responsibilities of the inspectors included examination of documents provided by the shareholders or their proxies eligibility of quorum as well as verification of potential conflicts of interest as to whether he/she shall be abstained from voting on a given agenda, voting procedure, and voting count and as to whether they were in line with the AoA or as informed by the Chairman of the Meeting. The inspectors were also responsible for ensuring ballot collection from the attended shareholders and auditing of the vote-tallying. In addition, volunteers, who represented the shareholders at the Meeting, were appointed to act as witness for the vote-counting procedure for each agenda item.

After the Meeting

(1.1) PTTEP disclosed the Minutes of the Meeting together with the vote-tallying results from each agenda item to the SET and also in the Company's website on the same day immediately after the Meeting.

(1.2) 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 procedure, contents, questions, and opinions related to PTTEP's business operations and the Meeting's agenda, as well as clarifications of each agenda made by the Company's directors and top executives. In addition to the inclusion of the directors who attended and who were absent from the Meeting, the Company 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 and executives. 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). The Minutes of the Meeting would also be delivered to the Company's shareholders to provide evidence of the Meeting as well as to allow the shareholders to make objections within the timeline enforced by relevant laws. In 2017, the Company however did not receive any objections or inquiries from the shareholders in regard to the Meeting. The approved minutes, video and audio clips of the Meeting were also published, both in Thai and English, in the Company's website.

(2) **Disclosure of Significant Material Information:** PTTEP ensures that information communicated to the shareholders is timely and accurate, not only for the information that is required by related regulations, but also other information which the Company considers as substantial for the shareholders to be well informed. The disclosures are made through various channels, such as the SET, media or printed media, and the Company's website.

The Company clearly discloses the shareholding interests in our subsidiaries and associated companies as well as the controlling shareholder, namely PTT, to ensure the shareholders that our organization structure is transparent, verifiable, and does not constitute any forms of cross- or pyramidal-shareholding structure.

(3) **Development of Understanding of Business Operation and Long-Term Engagement with Shareholders:** PTTEP continuously organizes various activities for the shareholders and society. The Company equally provides chances for all of the shareholders to participate. In 2017, major activities were as follows:

(3.1) PTTEP organized activities for 100 shareholders to visit Vidyasirimedhi Institute of Science and Technology (VISTEC) and Kamnoetvidya Science Academy (KVIS) at Wangchan in Rayong province to enhance participation and long term relationship between the Company and the shareholders.

(3.2) PTTEP organized trips for 239 shareholders to visit our Sirikit Oil Field in Kampheng Phet province to enhance understanding and ensure confidence in the Company's operation. In this event, our executives had a chance to take enquiries about the Company directly from the shareholders, while the age limit policy for the participants was not in effect to promote an equal treatment to all.

(3.3) PTTEP published a quarterly newsletter to provide additional means of communication between the Company and the shareholders. The newsletter included information on the operational performance, progress of the key projects, Corporate Social Responsibility (CSR) activities, corporate governance activities and anti-corruption measures. The

Company also published other useful information, for example, “How to prepare yourself before the AGM” and “GRC, immunity for PTTEP sustainability” to provide information in regard to our Governance, Risk Management, Internal Control & Compliance (GRC). The information was publicized on the Company’s website as well as sent to the shareholders upon request.

(4) Equal Treatments to Shareholders: PTTEP provides a direct communication channel between our minor shareholders and independent directors through e-mails. The Company’s shareholders, for example, are able to attain more information from or make inquiries to independent directors in regard to their activities, corporate governance, and audit-related issues. In addition, the shareholders are allowed to directly contact the Corporate Secretary or Investor Relations Unit for additional information. The Company operates businesses with optimal efficiency, with a focus on sustainability of the organization, appropriate and consistent returns to the shareholders, and long-term relationship with the stakeholders, ensuring that all are managed and assessed by the use of modern and well-accepted management tools.

(5) Prevention of Insider Trading

PTTEP puts a great emphasis on controlling the use of our internal information by including this matter in the 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 of the Company’s stakeholders. Key approaches are as follows:

(5.1) The Compliance Department is assigned as the center for monitoring the insider trading prevention program and preparing a list of personnel who bear material and/or internal information (Insider List) which includes directors, related executives and employees.

(5.2) The directors, management, and employees are always informed of PTTEP’s regulations and policies in regard to insider trading prevention through various communications as well as trainings to ensure that they understood and strictly followed to prevent one from misusing such information directly or indirectly for his or her personal interests. 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. In 2017, there was no report of any misuses of internal information.

(5.3) PTTEP requires a group of personnel to abstain from trading of the Company’s securities during the blackout periods, such as when material information is being disclosed, which may affect the securities price. These are, for example, release of the Company’s financial statements or operating results as well as investment in new projects which are announced in advance by the Compliance Department. These personnel include all directors, Executive Vice Presidents (EVPs), Senior Vice Presidents (SVPs), Vice Presidents (VPs) of the Finance and Accounting Group (FNA) as well as other management and employees bearing material internal information. This prohibition also applies to their spouses and minor children. The individuals are also refrained from directly and indirectly selling and/or buying of PTTEP’s securities during the periods. Violation of this prohibition is considered as a disciplinary offense.

PTTEP also requires all of the Company’s directors, management holding position of SVPs and above, VPs of FNA as well as their spouses and minor children to refrain from directly and indirectly trading securities of PTTEP at all times and to inform the Compliance Department two days in advance if necessary.

(5.4) The directors, management holding position of SVPs and above, and VPs of FNA must disclose a complete information in regard to their securities possession as well as related activities to the Compliance Department, and not only to the SEC, but also to the Board on a monthly basis for CG&BE compliance monitoring purpose. Shareholding by the directors and EVPs, VPs and above of FNA is also disclosed in the Company's annual report as required by the SEC.

(6) PTTEP requires the directors, EVPs, and VPs and above of FNA to immediately report their conflicts of interest to the Company shall there be concerns, either by himself or herself or a related person. The Corporate Secretary must then send a copy of the form to the Chairman of the Board and the Chairman of the Audit Committee for their acknowledgement within seven working days after receiving, as stipulated by the Board, the Securities and Exchange Act (Volume 4), B.E. 2551, and the Capital Market Supervisory Board.

(7) PTTEP assembles a set of guidelines to handle conflicts of interest in the CG&BE for the directors, management, and employees to strictly follow. These guidelines require all mentioned to report to the Company of every possible conflict of interest, both of themselves as well as of 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's mission which puts an emphasis on significance of the stakeholders' rights. The Company's 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 a leading Asian E&P company driven by competitive performance, advanced technology and green practices. On the other hand, the Company's stakeholders, whether they are internal or external parties, have always been taken into account when decisions are made. Major stakeholders of the Company are, including but not limited to, shareholders, customers, employees, governments, joint venture partners, communities and societies, environment, suppliers, creditors, competitors, customs and traditions, and human rights. The importance of the Company's stakeholders is clearly written in the CG&BE in which practical guidelines with respect to business ethics are established in an effort to maintain the balanced duties and responsibilities between the Company and our stakeholders. Details of the CG&BE are disclosed in the Company's website.

9.1.2.1 Anti-Corruption

Importance

PTTEP's Board of Directors (Board) recognizes the importance of corporate governance and how we needs to be transparent, fair and free from all forms of direct and indirect corruptions, and without any tolerances, primarily through the mechanism resulted from the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE) which has been developed to regulate every vital area of the businesses to maintain the internal consistency. Everyone in the organization and related parties, including directors, executives, employees, and vendors is strictly obligated to sign and conform to our CG&BE Commitment of Compliance with the highest standards. The Board has determined to apply CG&BE to our subsidiaries as well. The Company continues to encourage other related parties such as joint venture partners to uphold the best practices in regard to the matter.

The Board understands that effective anti-corruption measures require good corporate governance with clear management and governance structures as well as adequate and appropriate risk management, internal controls, and close supervision. Independent audit and clear guidelines in all relevant issues as stipulated in the CG&BE, in turn, require the Board and management to function as an exemplary role model and Corporate Governance Leader (CG Leaders), while the Corporate Governance Committee additionally is responsible for monitoring of the compliance. The Company's CG&BE is written according to our internal control principles and published in traditional formats as well as in digital and downloadable formats in our website (www.pttep.com) for the stakeholders and those interested in Thai, English, and Burmese. In addition, the Company established the "Standard of Practices for Anti-Corruption" which is one of the Company's internal control measures to provide some of the models for our management and employees to employ to prevent and minimize corruption risk.

In addition, in order to ensure transparency within the PTTEP Group operations, the Company has insisted on the "No Gift Policy" whereby accepting gifts and other benefits from external parties is prohibited. PTTEP has also clearly communicated this policy to external parties. PTTEP has adopted "Integrity & Ethics" as PTTEP values and is instilling them into all employees across the organization.

Scope of PTTEP Group's Anti-Corruption Policy

PTTEP's CG&BE has been considered as an integral part of the Company's anti-corruption policy as it also covers all principles, practical guidelines, and clear examples of the issues relating to anti-corruption measures. These are such as good corporate governance structure as stipulated in the Corporate Governance component, practical guidelines and treatments of conflicts of interest, procurement and contract related issues, anti-money laundering provisions, political neutrality positions, the use and maintenance of data and assets, as well as practical steps and guidelines for anti-corruption as a part of Business Ethics. The CG&BE also has mandatory conditions with regard to the Company's directors, management, employees, subsidiaries, as well as the PTTEP Group's vendors, who are required to sign an agreement to conduct their business in accordance with our CG&BE.

The Company defines corruption based on related principles and laws, at both domestic and international levels, where there are mandatory conditions with which PTTEP Group has to comply. The Company primarily considers that no action must inappropriately entail any forms of an individual's use of authority or another person's for undeserved exploitation to gain benefits. Besides, such act is deemed a violation of the laws and/or the PTTEP Group's regulations. Anti-corruption policy covers all forms of corruption whether conducted as a giver, receiver, or through a designated representative or agent. The Company also recognizes that certain activities, such as political supports, not-for-profit donations, sponsorships, or facilitation of payments may be determined risky as these can potentially be used as a channel for corruption. The definition of "corruption" therefore also extends to include such activities as being mala in se. Extra precaution must be taken to ensure all activities are conducted without any corruptions.

Measures and Principles for Implementation

Implementation of anti-corruption measures reflects a company's strength of its internal control system, risk management, compliance and auditing channels in addition to enhancing the cultural and ethical values of the organization, where each topic is under the responsibility of a designated unit. PTTEP utilizes internal control forms and risk management procedures according to the following Three Lines of Defense:

(1) First Line of Defense: The departments, with knowledge and understanding of the laws directly relating to their operation, are to ensure compliance with applicable laws and regulations. Internal controls and appropriate risk management are to be conducted by the person responsible for the First Line of Defense. The person is required to pass rigorous training to ensure that he or she has an adequate level of knowledge and is ready to carry out their duties and responsibilities as well as able to handle a variety of circumstance.

(2) Second Line of Defense: The units which perform duties and are responsible for the general laws, regulations and policies of the organization consist of, mainly, the Corporate Governance Unit, Risk Management Unit, Internal Control Unit, and Compliance Unit which are all under the function group called the "Corporate Affairs and Assurance Group". Governance, Risk, Internal Control, Compliance Management System (GRC MS) has been established for integrating management that would be able to achieve the indicated objectives, in compliance with the legal requirements and under an adequate risk management. The GRC MS is divided into nine elements: (1) Leadership and Commitment, (2) Policies, Objective, and Plans (3) Organization and Resources, (4) GRC Assessment, (5) Controls and Response, (6) Monitoring and Assurance, (7) Audit, (8) Continual Improvement, (9) Communication and Culture.

(3) Third Line of Defense: The Audit Unit works together with PTTEP's external auditors to audit the overall system of both the First Line and Second Line of Defense.

The units which are responsible for the GRC conduct internal control assessment on potential fraudulent risks which comprise risk of asset misappropriation, corruption, and fraudulent financial reporting, following adequacy evaluation of the internal control system and according to the Office of the Securities and Exchange Commission (SEC). The Company's Vice Presidents from each of the functions assess our fraudulent risk on the basis of 3 considerations, namely, pressure, opportunity, and rationalization. The results of the assessment indicate that PTTEP has an adequate and appropriate level of internal control. The majority of the function groups have carefully assessed the 3 considerations and adjusted their measures so that they are timely and appropriate.

The Company also has other tools to prevent corruptions. These include review and incorporation of anti-corruption risks to 2017 Risk Profile : Legal Division, as well as to specify key risk indicators and mitigation plans to closely monitor the risks and promoting awareness and anti-corruption practice to employee and conduct monitoring on the compliance to such practice.

Continuing to Provide Communication, Knowledge and Training

Our Corporate Governance Committee has a definite plan to instill the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE), together with anti-corruption policies, in everyone as well as all of the related parties of the organization through continuous trainings and activities. The activities are designed to accommodate interest and background knowledge to all targets and expanded to cover those external parties such as vendors as well. Achievement indicators for both internal and external parties are subsequently established and reported to the Corporate Governance Committee and the Board on a quarterly basis. These steps are taken to ensure that all of the parties adhere to the policies thoroughly and efficiently. In 2017, the following operations related to anti-corruption measures were implemented:

Measures for internal parties

- (1) Induction of the principles of Governance, Risk Management, Internal Control & Compliance (GRC) to the Company's new Board members, executives, and employees, so that they all clearly understand and adhere to them.
- (2) Promotion of GRC among the Company's Board members and management to provide related information and case studies that are beneficial to the Board of Directors and management before the start of Board meetings and management meetings whereby the chairman of each meeting would emphasize the importance of GRC and encourage all directors and management to put what they had learned into practice.
- (3) Arrangement of GRC full-day courses for employees who had passed the induction course, covering the Company's tools for risk management, internal control, compliance, and CG&BE, with a focus on anti-corruption and related issues to ensure understanding and effectively application to daily operation.
- (4) Continuation from 2016 of the Company's online training over anti-corruption for the management and employees to increase their understanding of the causes, impacts, regulations, risk management, internal control, and standard of practices for anti-corruption, whereby 95% of the targeted management and employees participated and passed the training.
- (5) Continuation from 2015, the CG&BE Workshop was arranged for the Company's management and local employees at the Yangon office in Myanmar to promote a better understanding and effective implementation of the CG&BE. The workshop was led by the top management of the Myanmar Asset to underline the importance of the CG&BE. Exchanges of ideas and discussions were encouraged, also through enjoyable activities, helped to make the workshop successful and effective.
- (6) Organization of the annual "PTT Group CG Day 2017" under the title of "PTT Group CG Day 2017: CG in DNA", focusing on transparency in the PTT Group at all levels, as well as among the vendors, customers, and society, to sustainably create a transparent and corruption-free culture
- (7) Establishment of a whistleblowing communication system to promote the Company's whistleblowing channels and create greater understanding of protection and process.as well as disclosure of the cases and penalties on an annual basis (details are shown under "Whistleblowing Reporting and Protection Procedures" part) to promote not only anti-corruption, but also transparency of the values within the Company
- (8) Continuation of the Company's communication channels, such as standee/notice boards, and newsletters to provide a continuous flow of knowledge among the employees at the headquarters and at all of our operating sites.

Measures for external parties

PTTEP has a definite intention to become a leading company in the realm of Corporate Governance (CG) internally and externally. This includes implementation of a policy which also covers external parties, for example, vendors, partners, and representatives of the PTTEP Group. In 2017, the Company encouraged the external parties to be ethical and corruption-free through the following activities.

- (1) Arrangement for a session on GRC for the vendors in the Vendor Symposium, so that knowledge could be provided continually to vendors.

(2) Communication clearly to the external parties of the Company's "No Gift Policy" which refrains the Board of Directors, management, and employees from accepting gifts or other benefits from all business-related contacts and transactions

(3) Promotion of anti-corruption values by participating in various public activities (details are shown under "Collective Efforts with the Public to Counter Corruption" part)

In addition, the Company provided channels for the external parties to contact and make inquiries in regard to the CG&BE by emailing directly to the Corporate Secretary Unit at cgpromotion@pttep.com.

Whistleblowing Reporting and Protection Procedures

PTTEP's Board of Directors establishes the Reporting and Whistleblowing Regulation for the PTTEP Group to ensure effectiveness, transparency, fairness, and equivalency of the complaint handling process to be at the same level of that of the international standard. The regulation is meant to provide a protection to whistleblowers and those cooperating with the Company in good faith. The procedure is a mechanism which allows an opportunity for both internal and external parties of the organization to report a suspicious misconduct or wrongdoing, which might be in violation of laws, CG&BE, anti-corruption policy, and other related regulations, committed by the Board, management, employees, or representatives of the PTTEP Group.

Investigations of the complaints are conducted strictly in an orderly way, in a proper manner, and within the timeframe and procedure as prescribed in the regulation to ensure the transparency and fairness of the complaint handling process. For this matter, the following key measures are carried out.

- The Corporate Secretary evaluates the information and adequacy of the preliminary evidence before forwarding the complaint to the Company's investigator within seven working days. If this period must be extended, the extension can only be made with the approval from the CEO. Each extension must not exceed seven working days.
- Review procedure and conclusion of the complaints depend on the case. Non-complex cases will normally be completed within 30 working days, while more complex cases will be completed within 60 working days. If the period is extended due to necessity, the extension can only be made with the approval from the CEO. Each extension must not exceed 30 working days. The case investigators cannot be individuals who are stakeholders of the complaint. Every complaint coming through from the whistleblowing channels is summarized and reported to the Corporate Governance Committee and/or Audit Committee, depending on the case, in addition to the Company's Board of Directors.

Whistleblowing channels of the PTTEP Group are as follows:

- (1) Mail to PTTEP director, supervisor, or the Corporate Governance Section
of the Corporate Secretary Division:
PTT Exploration and Production Plc.
555/1 Energy Complex Building A, 33rd Floor,
Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900

(2) Fax to supervisor or the Corporate Governance Section of the Corporate Secretary Division (+66-2537-4949)

(3) E-mail to supervisor or the Corporate Governance Section of the Corporate Secretary Division (cg hotline@pttep.com)

(4) Report through the whistleblowing system which is available in the Company's intranet (CG Portal) for the employees and PTTEP's website (www.pttep.com) for the external parties. The system will assign an individual Report Number and PIN to the whistleblowers to ensure security and prevent forbidden access by unauthorized personnel, as well as to allow the whistleblowers to perform a follow-up on the progress of the reported complaint and request further details and make inquiries. This system is served as the necessary tool for preventing and monitoring the risks of corruption.

In 2017, PTTEP received a total of eight complaints through the Whistleblowing Regulations (CG Hotline) and HR Regulations. Complaints from 2016 and 2017 are summarized and compared in the table below.

Topic	2016	2017	Change
Number of whistleblowing cases	9	8	11% (↓)
Whistleblower			
- External reporter	4	4	-
- Internal reporter	4	2	50% (↓)
- Anonymous reporter	1	2	100% (↑)
Number of accepted cases after considering evidence and witnesses	6	7	17% (↑)
Number of wrongdoing cases	4	3	25% (↓)

Investigation results from the seven cases in 2017 above are as follows:

- There were three cases of wrongdoing. There were not any violations of the anti-corruption policy, and the damages were not significant.

(1) One case was related to a non-compliance of the SSHE Policy, and the wrongdoer was punished by a verbal warning.

(2) One case was related to a non-compliance of the HR Regulations, and the wrongdoer was punished by a verbal warning.

(3) One case was related to a fraud involving a sub-contractor company which is now on the Company's blacklist.

- There were four complaints which were determined to have no grounds for any wrongdoings and were not deemed as cases of persecution or defamation.

- The results of the complaint investigations were subsequently reported to the complainants, the Audit Committee or the Corporate Governance Committee (as the case may be), as well as to the Board to be used for further improvements of the Company's internal control measures.

Monitoring the Implementation of Anti-Corruption Measures

The Board assigns the Corporate Governance Committee to monitor implementation of the Company's anti-corruption policy which is a part of our CG&BE. The Corporate Secretary is responsible for gathering of the information and reporting of the results to the Corporate Governance Committee at meetings on a quarterly basis. Implementation of PTTEP Group's anti-corruption measures also requires a cooperation from several other units which serve as the Second and Third Lines of Defense. Each unit has its own individual reporting system, for example, reporting to the Risk Management Committee and/or the Audit Committee. In addition, all of the results must be reported to the Board of Directors and Company's shareholders through the Annual Report.

The Corporate Governance Committee also monitors performance of the measures on a yearly basis according to the CG&BE and evaluates the performance by using Key Performance Indicators (KPIs) to ensure that the goals are met.

Audit

PTTEP designates the Internal Audit Division to perform auditing tasks, which include investigation of corruption, by setting out an annual audit plan and undertaking further examination, when complaints or issues appear. Currently, the Internal Audit Division has a comprehensive set of practical guidelines on the investigation of corruption that covers risk assessment, prevention and detection of corruption, as well as practical guidelines used in the investigation process for complaints of corruption.

In 2017, the Internal Audit Division performed a compliance audit over the Standard of Practice for Anti-Corruption by focusing on high risk units. The audit results show no corruption or bribery, while the Company's management and employees proved to understand the anti-corruption measures. PTTEP continues to communicate and emphasize the importance of its anti-corruption policy in order to create the transparency culture across the Company.

PTTEP has procedures to regularly review sales and marketing activities to monitor and prevent the risk of corruption as well as to provide solutions as needed. The Company sells most of our products to PTT, and the pricing structure is reviewed and specified clearly in the purchase agreement between the two. Sales prices are based on the global market prices on which the mutual agreement between the Company and the joint venture partners are based. The pricing structure requires approval from the Audit Committee and the Board prior to arrangement of the purchase agreement. The Board members who have a vested interest in such agreements are not allowed to participate in the review session and must be abstained from voting on the given matters.

Review of Sufficiency and Adequacy of Anti-Corruption Measures

PTTEP commits to continuously improve our procurement process. We also assigned an independent third party auditor to audit PTTEP's procurement process and the internal controls which identified as a prevention of the corruption risks and to provide developmental observations. The independent third party auditor reported that no significant findings were found. Some developmental observations were noted and have been embedded in PTTEP's procurement process.

Collective Efforts with the Public to Counter Corruption

PTTEP acknowledges the significance of our role as a listed company by assuring our shareholders and stakeholders with the confidence that the Company's management is transparent, fair, and corruption-free. The Company, as a company whose major shareholder is the government, has a responsibility to lead by example and to encourage the society to adopt better anti-corruption standards. In 2017, the Company proactively took several measures and participated in several activities to counter corruption. These were, for example, Thailand's National Anti-Corruption Day which was organized at Centara Grand at Central World by the Anti-Corruption Organization of Thailand (ACT) on September 6, 2017, where our CEO, management, and employees pledged to combat against corruption; and International Anti-Corruption Day (Thailand) which was organized by the Thai government, Office of the National Anti-Corruption Commission (NACC), the Office of Public Sector Anti-Corruption Commission (PACC), the Anti-Corruption Organization of Thailand (ACT), and other anti-corruption networks at Impact Forum, Muang Thong Thani on December 9, 2017.

PTTEP became an "Active Level" member of the United Nations Global Compact (UNGC) in 2011, and, on April 1, 2015, the Company was promoted by the UNGC to the "Advanced Level" for our compliance to the UNGC's principles in the areas of human rights, labor, environment, and anti-corruption. The Company considers such international recognition as one of our proudest achievements. In addition, in 2016, the Company also became a founding member of the Global Compact Network Thailand.

PTTEP was certified as a member of Thailand's Private Sector Collective Action Coalition Against Corruption on July 4, 2014. This certification highlights our dedication and commitment to fight all forms of corruption, as well as leading us to believe that the Company should also expand our anti-corruption efforts to be adopted by and among our subsidiaries, joint venture partners, vendors, and business partners.

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 the CG&BE to achieve the sustainability and create the optimal value for the shareholders. Details are disclosed in the "Shareholders' Rights and Equal Treatments" part.

(2) Employees

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

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

(2) To understand the local customs, cultures and traditions of the locality in which we operate

(3) To respect the local traditions, cultures and cultural differences, and not to behave in any ways which contradict them

(4) Not to discriminate against any individuals 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 recruits, selects, and employs employees based on their qualifications, experience and abilities to work in the target positions. According to the Good Corporate Governance and Business Ethics of the PTTEP Group, both internal and external candidates shall be fairly treated during our transparent recruitment process. Our employees are given an opportunity to develop and grow in their professional career as well as to join external activities under the Company's policy.

(2.3) PTTEP sets up and regularly reviews compensation and benefits packages to ensure fairness to both the Company and the employees according to our short-term and long-term business performance, pay positioning in petroleum industry in each of the countries, types of work, required skills and expertise, difficulties of work, responsibility and accountability of each position, and the individual employees' performance results to attract and retain competent and capable employees.

(2.4) PTTEP provides and regularly reviews welfare and benefits packages to ensure fairness to both the Company and the employees according to our ability to pay at the present and in the long run, focusing on the welfare and benefits which help to enhance the quality of life of the employees and their families. These are, for example, housing interest subsidy program, and healthcare benefits for employees and their families which are comparable to those provided by other petroleum companies in each of the countries. The Company regularly reviews welfare and benefits program to suit the changing social, economic, and other obligatory conditions of the business. In addition, the Company also provides psychological and legal consultation services through our "Sabaijaidee" program to the employees, their spouses and children to help them guard against anxiety from their family, private life, and work concerns. The services are provided by psychologists and professionals from one of our consulting companies.

The Company establishes a provident fund program for our employees to ensure their financial security after resignation and retirement. The fund consists of contributions from both the Company and the employees. The Company makes a monthly contribution at a rate of 15 percent of our employees' basic monthly salary, while the employees contribute 2 to 15 percent of their basic monthly salary. Receiving this fund is subject to the Company's regulations.

The Company also establishes the Employee Joint Investment Program (EJIP) which is intended to encourage the employees to invest, on a voluntary basis, on an accumulative buying of the Company's shares on a periodic basis to incentivize performance, create alignment among the employees, management, and shareholders, as well as to establish a long-term loyalty and sense of ownership. This program was commenced on February 1, 2013 and will remain effective until January 31, 2018, carrying over a total period of 5 years. Purchasing of ordinary shares is generally carried out through SET's trading system. Eligible employees shall make a request to the Company to deduct a sum from their basic salary, ranged from 2 to 10 percent, while the Company will contribute another portion equal to 100 percent of the employees' contribution in each month to purchase the shares. Receiving and realizing the share value, on the other hand, is subject to the Company's performance in the long-term.

In addition, the Company also establishes the Long Service Awards Program to celebrate and commemorate the long-term commitment and loyalty of our employees who have achieved significant milestone years of service, namely, 5, 10, 15, 20, and 25 years of employment with the Company. The award recipients are honored at the special event held at our headquarters in June of every year. The purpose of the program is to strengthen our corporate employee engagement through recognizing and honoring the commitment and dedication of long-term employees, while promoting long-standing careers within the Company.

(2.5) PTTEP gives priority to human resources development to increase the organization's capability to drive the business performance as the Company always believes that human resources hold a key to our success. The Company provides opportunities for the employees to develop and enhance their knowledge, skills and experience through both short-term and long-term training and development programs. Apart from professional capability and necessary skills building, the Company also embeds the working values to all employees, so they can work with the same standard of expected behaviors to attain the Company's vision and mission. In 2017, our employees attended training and development programs such as ISO 14001 Environment Awareness Course at an average of 49 hours per person per year. Details are disclosed in the "Management Structure" section under "Human Resources Development Policy" part.

(2.6) PTTEP realizes the value and importance of a regular consultation between the Company's employees and their supervisors to solve the problems incurred in the day-to-day operation as fast as possible as well as to maintain a good working relationship between them. Shall any conflicts arise between the employees and their supervisors, the employees may file a complaint through one or more communication channels provided. The employees, including relevant witnesses, who comply with the provided measure and procedure and act in good faith shall be protected, without facing a penalty, termination, or any other negative consequences. The CG Hotline channels are also established for the employees to raise the issues relating to frauds. The reports received through these channels will be investigated confidentially and made known only to relevant persons to protect the whistleblowers.

(2.7) PTTEP conducted the Employee Engagement Survey for the sixth time in 2017 with an objective to understand the factors relating to our employees' engagement with the Company to improve the policies and practices. The result showed that 65% of the employees had engaged with the Company, which was 12% higher than last year. The Company also conducted focus group interview sessions to gather information to establish the improvement plan at both the organization and the function group levels. In 2018, the Company will continue to regularly monitor the progress of such plan and continue to conduct the annual Employee Engagement Survey.

(3) Clients

PTTEP is committed to our mission to be a leading producer and supplier of crude oil, natural gas, condensate and LPG at fair and competitive prices. The Company sells the products under short-term 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 the product prices, financial stability, safety standards, and compliance to local laws and regulations of each client. The Company treats all buyers equally for the optimal benefit of all and is also committed to strictly complying with

the contracts and regularly coordinating with the buyers so that we can produce and deliver quality products as specified in the contracts on time and according to their demand.

(4) Governments

PTTEP conducts the business by adhering to the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE). The Company strictly complies with the laws applicable to our operations in all locations we operate.

(5) Joint Venture Partners

Joint venture projects between PTTEP and the Company's domestic and foreign joint venture partners operate under mutual working agreements according to the international standards. These agreements include details in regard to the rights and duties of joint venture partners such as the right to become a member of a project's management committee. The committee is responsible for establishment of the guidelines on the procurement of products and services as well as for development of the strategic planning and annual budgeting with a clear scope and approach. The partners also have the right to audit annual financial and accounting records as well as to set appropriate and clear measures, for example, penalty imposed on partners for failures to honor an agreement. The Company meanwhile remains focused on distribution of information to joint venture partners and external parties with transparency.

(6) Communities and Societies

PTTEP commits to building a sustainable relationship with all of the Company's stakeholders and continues to improve the quality of life of communities both in and outside the operations area. The Company effectively uses the Issue and Stakeholder Management System (ISMS) as a tool to analyze social risks which may impact all domestic and international operations.

(7) Environment

PTTEP strives to achieve the excellence and for a leadership position in Safety, Security, Health and Environment (SSHE). The Company's SSHE Policy, SSHE Management System, standards, procedures, guidelines and tools, as well as KPIs are developed to achieve our vision and commitment in SSHE and implemented throughout all of the operations. The Company continues to publicly disclose the SSHE performances indexes, such as lost time injury frequency rate, total recordable injury rate, and hydrocarbon and chemical spill rates in the website. The information is routinely communicated with the Company's external and internal stakeholders, including the staff and the Department of Mineral Fuels, through the annual Sustainability Report.

PTTEP implements the environmental management system according to the ISO 14001 Standard to improve the efficiency of the environmental management system. Currently, The Company receives the ISO 14001:2015 Certification, issued by AJA Registrars under the United Kingdom Accreditation Services (UKAS). The certified sites include the Arthit Project, Greater Bongkot North and South fields of Bongkot Project, S1 Project, PTTEP 1 Project, L53/43 & L54/43 Project, Sinphuhorm Project, Petroleum Core Research Center, and PTTEP Petroleum Development Support Base, and in Australia for PTTEP Australasia Project's support base at Darwin and office of PTTEP Australasia (Ashmore Cartier) Pty Ltd. In 2018, PTTEP is planning to acquire the ISO 14001:2015 Certification for the Zawtika Project in the Republic of the Union of Myanmar.

PTTEP determines to continue the Green Practice Roadmap which is aimed to mitigate environmental impacts from the operations. The roadmap also aims to increase efficiency and create value added processes to the Company's business by reducing greenhouse gas emission, increasing the biodiversity of our operating sites, reforestation, reducing costs, improving resource efficiency, and reducing wastes. The Company also continues to follow the 5S program throughout our offices similarly to those implemented within the PTT Group as well as to continue with the Group's green supply chain practices which involve green procurement, green logistic, green office and carbon neutral event to use green and environmentally friendly products in the operations. In addition, the Company encourages all employees, both operational and management levels, to understand our environmentally friendly business practices by regularly organizing fundamental and intensive environmental awareness training courses for them in compliance with the laws.

(8) Suppliers

According to the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE), every supplier is an important part of our businesses. The Company therefore employs a policy which aims to treat our business partners equally. Our procurement operations are performed on the basis of equality and fair competition; while we fully comply with the laws and terms of concerned legal transactions, taking into account the Safety, Security, Health, and Environment (SSHE). The Company's suppliers must also follow the operational standards which adhere to the Company's policy. Their employees meanwhile are also required to have good business ethics and respect to human rights.

PTTEP Vendor Guide

PTTEP develops the Vendor Guide to provide the suppliers with the Company's business information and practices. These are, such as the CG&BE, procurement process, contract management, and PTTEP Vendor Sustainable Code of Conduct and related laws, as well as several supplier communication channels for enquiries and complaints.

Details of the PTTEP Vendor Guide are available in the Company's website at www.pttep.com > E-Service > Procurement and Contract > PTTEP Vendor Guide.

Vendor Registration

PTTEP maintains the concept of fairness and free competition without trade barriers towards all suppliers. There are 3 channels for the interested suppliers to register with the Company.

(1) PTTEP website: Suppliers can offer their products and services through the Company's website at www.pttep.com > E-Service > Procurement and Contract > Vendor Registration.

(2) The Category & Vendor Management Section: Suppliers can contact the Category & Vendor Management officers during the business hours to offer their products and services.

(3) PTTEP Users: Suppliers can directly propose their products and services to the users who may, in turn, provide the suppliers' names to the Category & Vendor Management Section for the vendor pre-qualification process.

New Vendor Pre-qualification

PTTEP pre-qualifies suppliers by screening and evaluating them according to their product and service categories. The evaluation process is performed by a special procurement committee and comprised of three functional areas.

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

Independently, with equality and transparency, each function of the committee has the authority to consider and evaluate the suppliers to ensure that they possess the qualifications to deliver the products or provide the services needed.

SSHE Contractor Management and Plan

PTTEP continues to enhance the measures relevant to the management of suppliers in the SSHE which is one of the Company's core values. In addition to the operational guidelines, the SSHE Contractor Management Procedure and Plan is implemented to ensure the understanding as well as to improve the SSHE performance of the suppliers. The Company also encourages the suppliers to strictly comply with the SSHE Contractor Management Procedure and Plan through our annual SSHE Contractor Forum to ensure that they correctly understand the SSHE policy, standards, manuals and work procedures, and plan of the operations in all of the locations in which we operate.

The Notification of the National Anti-Corruption Commission (NACC) or Por.Por.Chor

According to the notification of the NACC, there is a page at www.pttep.com > E-Service > Procurement Announcement to disclose the information in regard to reference prices of procurement transitions for the Company's suppliers and stakeholders to be acknowledged of.

The Company also recommends all of the suppliers to comply with the NACC's announcement concerning the principles, methods and submission of accounting records by the persons being a party to the contract made with a State Enterprise or State Agency B.E. 2554.

Procurement Sourcing Strategy

PTTEP prepares a business analysis especially to review the overall procurement performance by using the procurement spending data from the past three years. This data is to be analyzed for risks relating to the process and the degree of market saturations. Further assessment is to classify products and services into categories and analyzed the Company's spending geographically to identify critical contractors/suppliers in each of the locations.

Upon identifying the critical contractors/suppliers, the Company uses the analysis to prepare procurement and contract strategy plans for each product and service group. The supply market analysis will then be generated to support our future procurement activities. The Company needs to submit the procurement and contract strategy plan, including the bidder list, to the Procurement Committee (PC) and joint venture partners (if any) for approval prior to proceeding with the bidding. (For transparency, the bidder list and the procurement/contract strategy plan must be internally and initially approved by three parties, namely, the operation, asset, and procurement functions before being submitted to the PC and the joint venture partners.)

Suppliers Selection

For the bidding process, two sealed envelopes and two-stage bidding are required. One envelope is for technical proposal, while the other is for commercial proposal. The technical envelope is opened first for evaluation of the technical aspects, quality, and the SSHE. Then for the technically acceptable bidders from the first stage, the process will continue with the opening of the commercial envelope.

Subsequently, the results of the bidding will be submitted to the Procurement Committee (PC), joint venture partners (if any), and the Board (for high value procurement) for approval prior to the contract drafting.

The Company only selects the suppliers who are technically and SSHE qualified as well as able to offer the lowest price or the best interest to the PTTEP Group.

Contract Management and Assessment

As an important and integral part of PTTEP's Contract Management and Supplier Relationship Management (SRM) for operating in the petroleum exploration and production business, the contract holders need to ensure that they and all relevant parties fully understand and comply with PTTEP's work plan, contract objectives, SSHE standards, and risks mitigation plan, as well as critical key performance indicators (KPIs). The contract holders also need to assess and follow up periodically on the performance to ensure that the suppliers operate according to the contractual terms. At the end of the contract, the contract holders also must complete the Contract Closed-out Report to record their performance, identify the areas of improvement and development in regard to the supplier's capability for a better and longer relationship.

Suppliers Collaboration Initiatives

In 2017, PTTEP aimed to develop an effective supply chain management and supported supplier collaboration initiatives to cultivate good relationships with the suppliers. The objective of the "Vendor Symposium Program" was, not only to allow the vendors to understand our procurement sourcing processes, CG&BE, and SSHE Management System (SSHE MS), but also to establish an awareness and knowledge of sustainability among the vendors. More than 70 vendors joined the program.

The Company, together with the suppliers and contractors, also organized Corporate Social Responsibility (CSR) activities to conserve the marine life and ecosystem. The activities included releasing of turtles back to nature, cleaning of their nursery and habitats, and planting of coral reefs at the Sea Turtles Conservation Center at the Royal Thai Navy in Sattahip, Chonburi province. Such CSR programs help to develop productive and meaningful collaborations and sustainable relationships between the Company and the others, making it possible to achieve a sustainable growth driven by safety and green practices into the future.

Local Content

To enhance the capability of the local suppliers in Thailand to compete with international companies, PTTEP supports domestic procurements and services from the operation areas. The purpose is also to increase employment and income generation to support the locals as well as to reduce the transfer of Thai currency to other countries. As a result of our

commitment to building long-term relationships with the communities where we operate, the Company has gained from each of the communities a license to operate. Meanwhile, the Company also encourages our suppliers to operate with care and responsibility wherever they are and to increase their local procurement to reduce the costs as well as to support their community.

Supplier Sustainability Management

PTTEP is committed to operating the businesses which lead to a sustainable growth and adhering to a good corporate governance for community, social, and environmental development. To efficiently achieve the goals, the Company emphasizes on the supply chain management and development through monitoring the suppliers.

PTTEP Vendor Sustainable Code of Conduct is defined with contents and scope of the code according to related rules, regulations, and laws. The vendors are obligated, in all of their activities, to operate in full compliance with the laws and regulations of the countries in which they operate while upholding the Company's policies concerning compliance with all applicable laws, business ethics, human rights, operational health and safety of workers, and environmental management. The Company also encourages the vendors to, in turn, apply the Vendor Sustainable Code of Conduct with their vendors to preserve the objectives.

Suppliers' Environmental, Social, and Governance (ESG) Assessment

PTTEP enhances the Company's supply chain management to the next level towards sustainable development. In 2017, PTTEP, together with the PTT Group of companies, conducted an Environmental, Social, and Governance (ESG) workshop. The workshop encouraged our suppliers to conduct ESG self-assessment as well as to understand PTT Group's Supplier Sustainable Code of Conduct which specifically focuses on ESG aspects. The assessment was divided into four categories, namely, (1) Onshore Civil Work, (2) Mechanical Construction, (3) AHT/AHTS/PSV, and (4) Electrical Material. The ESG assessment is an on-going process and will be continued as one of the Company's effort to work towards an even higher standard in this aspect in the future.

Whistleblowing

To instill confidence and protection to the suppliers and related parties from possible retaliation as a result of reporting in good faith of suspicious misconduct or wrongdoing of the directors, management, employees, or persons acting on behalf of the Company which might be in violation of the laws, CG&BE, or other regulations of the PTTEP Group, the Company establishes the CG Hotline to handle the matters. The suppliers can email to the cghotline@pttep.com, report through "PTTEP Whistleblowing System" at www.pttep.com, or fax to +66-2537-4949.

(9) Creditors

PTTEP recognizes the importance of the Company's internal and external stakeholders such as creditors, according to our policy of equitable treatment for all stakeholders as well as the CG&BE.

Emphasis is placed on accurate, complete, timely, and transparent information disclosure to all of the stakeholders. Information disclosed by the Company 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 (GAAP) and subsequently endorsed by the Company's Audit Committee as well as the Board of Directors prior to public disclosure.

PTTEP's debenture issuances and all relevant processes are in compliance with the laws, policies and regulations stipulated by the SEC, as well as the policies, purposes, and resolutions set forth at the Company's shareholders' meeting. The Company agrees to fulfill the obligations stated in the terms and conditions of the debentures and loan agreements as well as to ensure that the information is accurately and adequately disclosed to all of the stakeholders. The Company also maintains all of the necessary measures to remedy incidents or other types of impairments which may arise as a result of non-compliance.

(10) Competitors

PTTEP treats our competitors with professionalism, equality, and transparency. The Company, in our greatest effort, tries to avoid all unethical manners and ill-intentions to defame the reputation of our competitors through false, unfair statements, or acts. The Company is also committed to complying with local laws and regulations in regard to trade competition. Details of the Trade Competition Policy are disclosed in the CG&BE.

(11) Customs and Traditions

PTTEP adheres to local customs and traditions of all the areas and locations in which we operate. Orientations and trainings are provided by knowledgeable and experienced instructors as well as representatives from the Ministry of Foreign Affairs or the local embassies who are capable to provide suggestions and information in regard to customs, traditions, sensitive issues, and local practices to the employees who will be transferred there to understand and behave appropriately.

(12) Human Rights

PTTEP has a human rights policy where the Company is committed to respecting fundamental human rights by complying with all applicable legal requirements, cultures, customs and values in dealing with all of our stakeholders, avoiding complicity in human rights abuses, and strictly prohibiting ourselves from direct and indirect employment of child and forced labor. The Company's Human Rights Policy fully complies with the UN Universal Declaration of Human Rights, and the UN Guiding Principles on Business and Human Rights and its corresponding covenants, including the international principles relating to labor practices and the United Nations Declaration on the Rights of Indigenous Peoples where applicable to the business. The Company also actively participates in the United Nations Global Compact (UNGC) while our UNGC Communication on Progress Report meets the criteria required for the "Advanced Level" status for three consecutive years.

Currently, PTTEP is a member, in fact one of the founding members since 2016, of the Global Compact Network Thailand together with 14 other Thai organizations who have placed high priority on sustainable development. The objective of the network is to encourage Thai business sector to recognize the importance of conducting their business under the UN Global Compact principles.

The Company is also committed to providing fair employment, while ensuring that the employees have a safe and hygienic working environment, whether or not the country in which we invest has local laws on human rights. The Company ensures that no threats exist to employees or those related to the Company's operations. Only ethical partners without any infringements of human rights are considered and be partnered with. The Company also provides the interaction between the executives and employees by allowing the latter to have their representatives in the welfare committee while exchanges of views and suggestions are encouraged for improvements of welfare and other benefits to improve our employees' well-being.

(13) Laws

PTTEP respects laws everywhere in which we operate. The Board sets the matters relating to the compliance with applicable laws in the Business Ethics of the PTTEP Group. The directors, management, and employees are required to understand as well as strictly abide by the laws relating to the Company's operations in all areas to enable the PTTEP Group to operate with accuracy and efficiency.

The Compliance Department is the center of compliance performance and supervision of the PTTEP Group. The Department has a direct reporting line to the Senior Vice President of the Legal Division, the Executive Vice President of the Corporate Affairs and Assurance Group, and the Chief Executive Officer, respectively. In 2013, the Company announced the Compliance Policy to express our commitment to full legal compliance as well as to define roles of all managers and employees in promoting of the compliance. The Compliance Program, on the other hand, has continuously been developed to enhance awareness of compliance-related matters among the employees.

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 a good corporate governance. PTTEP place high importance to the information disclosed to the Stock Exchange of Thailand (SET) as well as to the shareholders. The information must be accurate, sufficient, timely, and equally available to all parties. The information is prepared according to the Company's Business Ethics. The departments which are responsible for providing information and replying to external queries from the SET and 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 validate that they are presented accurately and in all material respects according to the Thai Financial Reporting Standards. The financial statements are subsequently approved by the Audit Committee and the Board prior to being disclosed to the public. The Board reports their responsibilities with respect to the financial statements in PTTEP Annual Report. In addition to the SET's requirements, the Company also releases our unreviewed quarterly financial statements as well as unaudited annual financial statements in advance to allow timely access to the financial information for the shareholders and investors. Unless stated otherwise, the information before and after the review and audit usually and generally does not contain any significant changes. The Company also discloses non-financial information, such as acquisition and disposal of assets, related party transactions, dividend payments, the management discussion and analysis, risk management, invitation letter for the shareholders' meetings, minutes of meetings, as well as other information which is important for investment decisions according to the SET's and SEC's requirements. The Company also disclosed annual corporate governance report in the annual report and annual registration statement (Form 56-1).

Information that PTTEP discloses to SET, the shareholders and investors, and the general public is disseminated in both Thai and English in the Company's website which also features other up-to-date information considered to be of interest to the aforementioned parties. Key information available in the website comprises petroleum exploration and production projects, investment projects, quarterly and annual analyst, meeting presentations, webcasts, roadshow presentations,

historical and latest stock performance, analysts' coverage, and news releases. The Company also reports our safety, security, health and environment performance which is included in the annual Sustainability Report. The Company also makes available on the website videos and infographics presenting the financial information and operating results for those interested.

The Company also publishes a quarterly investor newsletter, the Explorer's Journal, which includes information which may be beneficial to our shareholders and investors, such as quarterly performance highlights, project updates, good corporate governance practices, topics on sustainable development, and knowledge sharing of the fundamentals of the exploration and production business. The newsletter is bi-lingual, Thai and English, and available in both hardcopy and electronic formats, where the latter can be downloaded from the Company's website which has proven to be an effective communication channel between the Company and our shareholders.

In 2017, PTTEP disclosed a total of 38 articles through the SET portal and organized the following activities for the shareholders and analysts.

Activities	Amount (Times)
Domestic and overseas roadshows/conferences	19
Analyst meetings	4
Opportunity day (by SET)	4
Shareholders' and investors' site visits	5
Knowledge sharing events for investor	4
Company visits and conference calls	30

Apart from the activities, the Company also participated in a number of events which were organized by the SET for retail investors, such as "SET in the City", and interacted with the investors through daily telephone correspondence. Every year the IR team also sets up a booth at the Company's AGM to be able to closely interact with the shareholders.

The Company understands that disclosure of the information which is accurate, complete, timely, and transparent is a key to the CG&BE and therefore is committed to performing our best in the area.

9.1.3.2 Investor Relations

The Investor Relations Section (IR) is responsible for communication of relevant information and news which reflect PTTEP's fair value to analysts, the Company's shareholders, and general investors according to the SET's and SEC's requirements to foster confidence within the analysts and investment community. IR is also entrusted with upholding of the corporate image and perception among analysts and investors, while also relied upon to coordinate and to advise over IR related issues to the Company's executives.

PTTEP's IR can be contacted through the following three channels.

- (1) By phone: +66-2537-5919, +66-2537-5304, +66-2537-5779, +66-2537-4446
and +66-2537-4000 ext. 800-7374
- (2) By e-mail: ir@pttep.com
- (3) By fax: +66-2537-4444

9.1.4 Board's Responsibilities

The followings are major responsibilities of the Board. Details are disclosed in the "Management Structure" section, "Duties and Responsibilities of the Board" part.

(1) Policy-Making and Operational Direction

The Board is responsible for making decisions in regard to 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 organizational development strategy to accommodate continuous changes in the business environment, as well as to provide the management with advices to lead the Company towards our five ultimate goals, being "Growth, Prosperity, Stability, Sustainability, and Dignity".

(2) Good Corporate Governance and Business Ethics

The Board is responsible for the establishment of PTTEP's CG&BE for all of the directors, management, and employees to adhere to, while operating businesses for the PTTEP Group. This is to ensure that our businesses are operated under good standards, and justification and ethics with transparency and efficiency. In addition, 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 the CG&BE.

(3) Internal Control and Auditing

The Board is responsible for assuring that the PTTEP Group is equipped with an effective internal control system which is comparable to the acceptable risk levels. The Audit Committee and the Internal Audit Department are assigned to periodically and regularly review and monitor the 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 the PTTEP Group, in compliance with relevant laws and regulations, and in trust of the management, investors, and other stakeholders.

The Company's 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 management of the risks which can potentially deter PTTEP from achieving our strategic goals. The Board appoints the Risk Management Committee which is a standing sub-committee to monitor and ensure an efficient and effective risk management for the PTTEP Group as defined by the Risk Management Charter of 2014. The Risk Management Committee is also assigned to determine and assess key 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 a continuous evaluation of risks to ensure that the risks are at acceptable levels, as well as to report the results to the Board on a regular basis.

(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 the 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 conflict of interest, he or she must withdraw from participation or be abstained from voting, and subsequently inform the authority of the stake, in the given issue according to the CG&BE.

(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 as well as to properly manage compliance risks. Compliance is considered one of the keys which allow the Group to function discretely as well as to be able to operate according to our strategy towards the business goals. The Compliance Department is assigned by the Board to be responsible for this matter.

9.2 Sub-Committees

PTTEP Board is responsible for appointing the directors who have expertise and knowledge in certain areas as specified by the Company. Each of the Company's sub-committee meanwhile is responsible for a specific set of tasks as specified by its respective charters. Qualifications, responsibilities, and service terms of the sub-committee members are prescribed by the Company's regulations through the designated charter. All members of the Audit Committee must be independent directors, while the majority of the members of the Nominating Committee, Remuneration Committee and the Corporate Governance Committee 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, the Chairman of each sub-committee, 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 as well as to disclose them in the 56-1 Form and PTTEP Annual Report as the 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. Name of the directors, duties and responsibilities, meeting attendance, and remuneration policy are disclosed in the "Management Structure" section. Reports of the Company's sub-committees meanwhile are disclosed in the "Reports of the Sub-Committees" part.

9.3 Nomination of Directors, Chief Executive Officer, and Management

9.3.1 Nomination of Directors

When there is a vacancy of a director position or when a director's term limit is due, it is a duty of the Nominating Committee to select the candidates who fit with the required skill, experience, and are in line with the Company's Target Skill Mix to ensure that the Board's composition is complete, well-rounded, and for the optimal benefit to PTTEP. The Company thoroughly and transparently places high importance on the Board's diversity, gender, independency and conflicts of interest. Gap Analysis of the Board's current Skill Mix and Target Skill Mix are taken into account, where Target Skill Mix of the Board during 2017 – 2018 consisted of the followings.

- (1) Organization Change and Development: to support PTTEP's reorganization which emphasizes on the preparation of strategic long-term growth in E&P related businesses and new businesses in parallel with development of the succession plan
- (2) Legal: to support legal risk management and compliance which are corporate-level risks with direct impact to the Company's license to operate
- (3) Accounting: to align with IOD's Corporate Governance Report of Thai Listed Companies (CGR) which requires at least one member of the Audit Committee to possess a degree in accounting

The process begins with the Committee searching through PTTEP's pool as well as the State Enterprise Policy Office (SEPO)'s directors' pool which comprises a list of directors from state-owned enterprises who are regarded as highly-qualified in state-enterprising. The Company also seeks advices from our major shareholder, PTT, as well as from the Company's minor shareholders (if any) according to the rules in regard to nomination of a person to fill in the positions which are due to retire by rotation. A list of qualified candidates must be endorsed by the State Enterprise Policy Committee according to the Regulations of the Office of the Prime Minister on State Enterprise Policy and Governance Determination B.E. 2557.

Election of directors to replace those who are due to retire by rotation must obtain an approval from the AGM 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) Should the number of the director candidates be less than the number of those to be elected, PTTEP will propose at the Meeting to elect those candidates as the directors by voting for the individual candidates, under which each of them must receive majority votes.
- (2) Should the number of the director candidates exceeds the number of those 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, while the voting will then be carried out for each of the individuals. Those with the highest ballots will be elected, as many as the number of the opened positions. Each of them must receive majority votes.

When a director position becomes vacant for reasons other than rotation, the Board, with approval from the State Enterprise Policy Committee, may elect a new director, using the three-fourths majority voting rule. The elected director is permitted to remain in his or her directorship for only as long as the remaining term of the predecessor.

9.3.2 Nomination and Succession Plan of the Chief Executive Officer

The Nominating Committee has included in its Charter the role to consider the Chief Executive Officer's succession plan and appropriate executive-level management's development system to ensure a candidate list with the skills and qualifications in line with the Company's target growth.

The Nominating Committee is responsible for considering the candidates' skills, experience, and various other specific qualifications to bring about the best of interests to the Company, looking into their probable conflicts of interest.

The Company formulates a succession plan for the Chief Executive Officer to prepare the Company for the time when the 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 Chief Executive Officer is a director, forms the Group Leadership Development Program (GLDP). The program's primary focus is to enhance the capability of the PTT Group's executives, Senior Vice Presidents and above to prepare them for a possible nomination to become the Chief Executive Officer in one of PTT Group of companies.

(2) PTTGMC, with PTT being the Company's major shareholder, reviews the shortlisted executive names from (1) and proposes them to PTT's Board of Directors who is responsible to select PTTEP's next Chief Executive Officer.

(3) After receiving the candidate names, accompanied by opinions of PTT's Board from (2), and comparing them with the Company's potential candidates in the executive vice president level, the Company's Nominating Committee will reassess the individual's knowledge, capability, and experience relating to the business, conflicts 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 the opinions and a fair and reasonable package proposed by the Remuneration Committee, to the Board for approval and appointment of the Company's new Chief Executive Officer.

9.3.3 Nomination of Management and Succession Plan

The Board grants the Chief Executive Officer an authority to select and appoint the individuals who possess the knowledge, capabilities, and experience to management positions in consultation with the Career Review Board Committee (CRB) and the presence of PTTEP Rules and Regulations for Human Resources Management. The nomination must then be acknowledged by the Board. Exceptions are made to the appointment of the Executive Vice President and above, where the Board's approval is required. If the nominee is from outside of the organization, an interview with the interview committee is required, while nomination of the Head of Audit Function requires an approval from the Audit Committee.

PTTEP has a systematic 5-year succession plan for the vacant management positions which are resulted from retirement and from reorganization to support the Company's business expansion domestically and internationally. The Career Review Board (CRB) Committee is authorized to select and appoint successors for management positions using the Company's Management Success Profile of each business area (Asset Management, Business Development, Technical Support, and Business Support) as screening criteria. These profiles comprise competency, personal attribute, organization knowledge, as

well as experience required for the target positions, while Currently Estimated Potential (CEP) is also taken into consideration. Once the successors are identified, their individual short-term and long-term development plans will be established with focus on technique and functional knowledge, managerial skills, and soft skills required according to the corporate values and organizational culture to ensure that the successors are readily qualified for the target positions by the time of the requirement.

9.4 Development of Directors

Orientation of New Directors

The orientation which is provided to the Company's new directors consists of the followings.

(1) Presentation by the Chief Executive Officer, the President of the Exploration and Production, and executives: This briefing involves the nature and operational guidelines of the business, knowledge and techniques in regard to the petroleum exploration and production business of the PTTEP Group, relevant rules and regulations, the CG&BE, and essential information for the directors to perform the duties with efficiency.

(2) Director Manual: This contains essential information, including the strategic plan, relevant rules and regulations, and the CG&BE, which will be beneficial for the directors to perform the duties. The Manual is regularly reviewed and updated for the directors to use as a reference.

(3) Operational Sites Visit: New directors visit operational sites of the PTTEP Group to enrich their understanding of the Company's operations and optimize their knowledge and experience for the benefit of the Company.

At the end of each orientation, new directors will evaluate the effectiveness of the orientation for further improvement. The director who is elected to be the Chairman and a member of a sub-committee is also required to attend an extra session and subsequently informed of the important subjects relating to the additional new role, including performing the duties of the Chairman and a member of a sub-committee as well as conducting and leading meetings of the Company's directors and shareholders.

Trainings of Directors

PTTEP's directors are knowledgeable, yet they are ambitious to learn and understand more about the business and their duties as a director. PTTEP encourages every director to acquire further knowledge through training organized by the Thai Institute of Directors Association (IOD) as well as those others to enhance the ability to perform their role. The followings are details of the seminars and trainings attended by four of the Company's directors during 2017.

Directors	Courses
(1) Mr. Prajya Phinyawat	- Board that Make a Difference (BMD) 4/2017 by IOD
(2) Admiral Tanarat Ubol	- Strategic Board Master Class (SBM) 1/2017 by IOD - Board Matters and Trends (BMT 4/2017) by IOD - The 22 nd World Petroleum Congress (WPC), Istanbul, Turkey
(3) Mr. Wirat Uanarumit	- CG in Germany - Volkswagen, Deutsche Bank and more by IOD - Ethical Leadership Program (ELP) 7/2017 by IOD - The 22 nd World Petroleum Congress (WPC), Istanbul, Turkey Anti-Corruption: Leadership Role of the Board by IOD
(4) Ms. Panada Kanokwat	- Board Role in Strategic Leadership by Mr. Christopher Hafner (Special lecture by IOD)

Currently, 13 of 15 of the Company's directors have participated in IOD's Director Certification Program (DCP), while one has attended the IOD's Director Accreditation Program (DAP). As a result, there are 14 out of 15 directors (93.33%) who have attended the two mentioned courses. In addition, the Company has applied an IOD membership for all of the directors and provided them with the information in regard to new and updated seminars or trainings to keep the directors consistently informed. Details of the training courses attended by the directors are disclosed in the "Information of the Board of Directors, Management, Controlling Persons, and Corporate Secretary" section.

To continuously provide knowledge and share opinions with the directors, the Company invited speakers from the management to provide lecture and exchange opinions with the Board. In 2017, four sessions were arranged, namely, (1) "External Environment & Strategy Review" conducted by external speaker and PTTEP management, (2) "Review Strategy" by the Company's management, (3) "Exploration Growth" by the Company's management, and (4) a special lecture on "CG Code: A Key to achieve Collaborative Leadership and Long-Term Performance" by Mr. Rapee Sucharitakul, Secretary-General of the Securities and Exchange Commission, Thailand. The Company also updates the directors with laws and best practices of good corporate governance for an even better understanding on a regular basis.

9.5 Authority of the Chief Executive Officer

9.5.1 Authority under Resolutions from the Shareholder Meetings

The 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.

9.5.2 Authority under Resolutions from the Board's Meetings of PTTEP

The Board authorizes the 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 Chief Executive Officer is also authorized to be the acting body, conducting 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. 2558, Regulation on Procurement for E&P Business B.E. 2558, and Regulation on Investment Project 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. The Chief Executive Officer's delegation of authority is permitted unless the concerned attorney or the delegated person 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

Details are disclosed in the "Policy and Business Operations Overview" section, "Structuring Policy of the PTTEP Group" part.

9.7 Directors' Serving Terms and Their Directorship in Other Companies

PTTEP's Articles of Association prescribes that one-third of the Company's directors shall be retired by rotation in each AGM and that the Board shall consist of no more than 15 members, each with a 3-year serving term. The Board meanwhile

determines to allow each of the directors or independent directors to serve on the Board for no more than nine consecutive years, while a director who has served on the Board for nine years will not be considered for another term. This essentially allows our competent and qualified directors the time to continuously and effectively perform their duties.

PTTEP recognizes the value of knowledge and experience which our directors have earned over the years in the position. PTTEP therefore does not have a rigid limit for director's term (a two-term or six-year term, in example). This is so that the Nominating Committee could best select the replacements for the optimal benefits of the Company and shareholders.

In terms of the qualifications, the Company's directors shall not assume a directorship in more than three listed companies at once. Details of the number of directorships held by each of the Company's directors are disclosed in the "Information of the Board of Directors, Management, Controlling Persons, and Corporate Secretary" section. As of December 31, 2017, none of the directors held a directorship in more than three listed companies. Meanwhile, serving term of the members of the sub-committees is equal to that of the Board members.

9.8 Roles of the Chairman and the Chief Executive Officer

The Chairman and the 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 the Chairman of the Board are as follows:

- (1) Supervise the Board to perform its duties with efficiency, according to the Board Performance Target and shareholder's expectations, with independency from the management
- (2) Determine agendas for the Board's meetings
- (3) Be the Chairman at the Board's and the shareholders' meetings and ensure that the Company's directors perform their duties as stipulated in the CG&BE and stimulate it as the Company's culture
- (4) Support and ensure constructive relations between directors and management

For transparency and appropriateness, the Chairman is not allowed to hold any positions in any of the Company's sub-committees as clearly stated in the charter of the sub-committees. The Chief Executive Officer meanwhile 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 election of the Company's Chairman of the Board. Shall there be none who is suitable for the position, the Company's directors will be considered. The current Chairman, Mr. Prajya Phinyawat, is an independent director and has performed his duties with autonomy and discretion. The appraisal score of the Chairman in 2017 was 2.94 where 3 was the highest. The Chairman and his performance were appraised and examined for future improvements by the Board. Details of 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 in regard to 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 the businesses with efficiency, accuracy, transparency, and in the best interests of the shareholders.

9.10 Policy and Practices for the Chief Executive Officer, and Executives with Directorships in Other Companies

PTTEP clearly states in the CG&BE in regard to the duration which the 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 PTTEP and their position held in the Company in those external activities. Meanwhile, remuneration of the Company's executives who are assigned to assume a directorship in the organizations or units in, or related to, the petroleum exploration and production is considered PTTEP's; otherwise, the remuneration is considered theirs. Details of the number of directorships held by each of the executives are disclosed in the "Information of the Board of Directors, Management, Controlling Persons, and Corporate Secretary" section.

9.11 Conflict of Interest Policy

PTTEP, under 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 the CG&BE.

(1) Directors, management, and employees shall treat the interests of the PTTEP Group with priority and shall not involve or be involved in any activities potentially leading to any conflicts of interest.

(2) Directors, management, and employees shall review and disclose their transactions potentially leading to a 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 the laws and regulations as required by the SET particularly when they are related to connected transactions.

The Company establishes preventive measures of conflicts 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 the PTTEP Group's loss of benefits, conflicts of interest, or operational inefficiency.

(2) Directors, management, and employees who may have a potential conflict of interest in regard to procedures relating to a bidding process, and selecting and awarding of a transaction 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 shall there be a suspicion or uncertainty that what they or their related persons are involved in or that their shareholding in the business which has a transaction with the Company may lead to a conflict of interest.

(4) Director, management, and employees must review their conflicts of interest on an annual basis. To review the conflict of interest related to particularly the procurement process, the management and employee who are directly involved in the procurement process must disclose their transactions potentially leading to a conflict of interest every 6 months. This is so the supervisor can consider a re-assignment of duty to prevent the conflict of interest.

9.12 Business Ethics

PTTEP is committed to operating ethically as the Company's Business Ethics are regarded as the behavioral framework and guideline for the directors, management, and employees to perform effectively, transparently, and ethically, as well as to treat all of the stakeholders equally. These practices have resulted in confidence and acceptance in the efficiency and transparency of the Company's business operations, creating a long-term sustainable value for the stakeholders.

Business Ethics of the PTTEP Group is a part of the CG&BE. The Board first established the Business Ethics in 1989, and it has since been revised every year. The current version of the CG&BE was approved by the Board on December 21, 2017, and it is regarded as the highest regulation for operating of the businesses within the PTTEP Group. The CG&BE is available for download from the Company's website.

The Business Ethics consist of principles, samples of questions and answers, information for additional study, and list of the departments which are responsible for each of the principles. There are 10 ethical issues which reflect our organizational values to which the Company's directors, management, and employees must adhere.

- (1) Compliance with the 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 of 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 the CG&BE booklets to the directors, management, and employees for their reference and adherence. They are also required to sign their name as an accord to be committed to applying the 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 the Company's shareholders, investors, and interested parties, contents of the CG&BE booklets can also be found on the Company's website under the Corporate Governance section.

PTTEP continuously enhances and promotes the knowledge and understanding of the Company's CG&BE among the directors and personnel. The Board governs the ways in which the CG&BE is communicated to the directors and personnel to ensure that they are able to perform and conduct the business accordingly. Communications also extend to external parties, for example, vendors, joint ventures, and agents of the PTTEP Group to encourage ethical culture among the Group and the society as a whole. The details are explained under "Continuing to Provide Communication, Knowledge and Training" part in "Anti-Corruption" part.

The Board's role is also to monitor and evaluate CG&BE activities. The Corporate Secretary is in charge of reporting them to the Corporate Governance Committee and the Board on a quarterly basis to ensure that CG&BE activities achieve the target performance. The Corporate Governance Committee reviewed the 2017 operation plan, while taking into account the 2016 evaluation results, to ensure continuity and efficiency for the development of the following year's operation plan.

9.13 Internal Controls

PTTEP places high importance on the internal control system based on the updated 2013 COSO (The Committee of Sponsoring Organizations of the Treadway Commission) framework to reasonably assure that the Company's three business objectives can be accomplished. These objectives are, namely, (1) efficient and effective operations with prudent use of resources and assets, (2) accurate, reliable, and timely disclosure of financial and non-financial information for internal and external uses, and (3) compliance with laws, rules, and regulations as well as the Company's policies and procedures.

PTTEP's internal control system comprises five key components as follows:

(1) Control Environment

PTTEP has a control environment which creates ethical working attitude among the management and employees, along with an atmosphere and awareness of the Company's internal control according to the principles of good corporate governance which aims towards specific corporate objectives: Growth, Prosperity, Stability, Sustainability and Dignity. The Board is responsible for governing and enhancing this internal control system. The Company meanwhile is responsible for the design of the organizational structure, reporting lines, and delegation of work authority.

The Company also focuses on human resources management by developing strategies and processes to attract, develop, and retain competent individuals to be in line with the corporate objectives. The management and employees are also held accountable for their internal control responsibilities to ensure achievement of the objectives.

(2) Risk Assessment

PTTEP places high importance on risk management by appointing the Risk Management Committee to establish the policy and risk appetite and limit, as well as overseeing the effectiveness of the company-wide risk management. The Company has also applied for the ISO 31000 Risk Management concept, targeting identification and assessment of all risks related to our businesses, including fraud risk and the risks which may arise as a result of significant changes within the Company, to appropriately manage the risks in a timely manner and throughout.

(3) Control Activities

PTTEP has adequate control activities which are able to mitigate the risks to acceptable levels for the respective business environments or business units. Control activities are, such as development of general controls over technology or their deployment through regulations, policies, and working procedures, periodically reviewed and improved. The Company also encourages the employees to be constantly aware of the importance of conformance to the control activities as well as to be in compliance with related laws and regulations to ensure that our internal control system is as effective as designed.

(4) Information and Communication

PTTEP realizes the significance of information and communication, particularly information processing processes which are accurate, complete, up-to-date, accessible, protected, verifiable, and consistent for both internal and external uses. The Company also restricts the access to confidential information and permits the access only to authorized persons. The main objective of these processes is to support our business operations in making of effective decisions. In addition, the Company has effective internal and external communication systems in place to support functioning of the internal control system as well as a special communication channel to allow our stakeholders to confidentially report their concerns or complaints.

(5) Monitoring Activities

PTTEP assesses the effectiveness of our internal control system through ongoing evaluations which are built into the Company's daily operational activities, along with separate evaluations to ensure that the system is adequate and appropriate for the current business environment and dynamic risk factors. Once the deficiencies are identified, improvement plans will subsequently be developed, while responsible parties will be assigned to respond with timely resolutions. For the separate evaluations, the Company has developed the control self-assessment evaluations on an annual basis at both the corporate and business process levels. The Internal Audit Division, which has a direct reporting line to the Audit Committee, meanwhile has responsibilities to perform independent audits correspondingly.

Details of the 2017 results of the internal control adequacy evaluation are disclosed in the "Internal Controls and Risk Management" section.

9.14 Risk Management

PTTEP Board and the management recognize the importance of strong and effective risk management as changes in the business environment are uncontrollable and may impact the businesses. The Company therefore established the Risk Appetite Statement as well as the Metrics & Risk Governance Framework to be the guidelines. Risk management meanwhile is considered a responsibility of all personnel, while the Risk Management Policy requires the directors, management, employees, suppliers and contractors to manage risk thoroughly and systematically to ensure our target achievement.

The Company applies risk management guidelines of the ISO 31000, an international standard for risk management, throughout the Company. Risk management practices are taken into account within the organization at all levels, including the corporate, function groups, divisions, departments, working units, project management, and assets management, as well as processes such as investment and divestment decision making.

The Risk Management Department is responsible to ensure adequacy of the risk management system and its effectiveness across the organization. In addition, the department is responsible for systematic and effective mitigation of the Company's exposure to risks as well as for monitoring and reporting of the results to the management, the Risk Management Committee, and the Board. The Risk Management Department is also responsible for cultivation of a positive risk management culture throughout the organization.

9.15 Remuneration of Auditor

9.15.1 Remuneration of Auditor

(1) Audit Fee

In 2017, PTTEP and the subsidiaries, both domestic and overseas, paid audit fees to the Office of the Auditor General of Thailand (OAG) and other auditing firms for a total of USD 1.2 million.

(2) Non-Audit Fee*

In 2017, PTTEP paid a non-audit services fee to the OAG for a total of USD 0.5 million. This fee was charged for the preparation of Comfort Letters supporting the issuance of subordinated capital debentures.

*Remarks: "Non-Audit Fee" is a terminology commonly used by the Securities and Exchange Commission of Thailand (SEC reporting requirement).

9.15.2 Summary of the Auditors' Report for the Past Three Years (2015-2017)

The OAG expressed its opinions, but without any issues, in the Auditors' Report of PTTEP's consolidated financial statements in the past three years.

9.16 Other Good Corporate Governance Practices

PTTEP places high importance on governing of the business operations with the Company's CG&BE as well as most of the international best practices, taking into account appropriateness of the practices, current business environment, as well as benefits to the Company's and, especially, the shareholders and stakeholders. Some of the practices which are the integrated results of the aforementioned are as follows:

- (1) To elect a director, each candidate must receive a vote of more than half of the total number of shareholders attending the shareholders' meeting and casting their votes (majority vote) even if the number of candidates is equal to the number of director positions opened at the time.
- (2) A director, who turns 70 years of age, is immediately disqualified to serve as a PTTEP director.
- (3) PTTEP allows each director or independent director to serve on the Board for no more than nine consecutive years. Any director who has served on the Board for nine consecutive years will not be considered for another term.
- (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 shareholders' meeting must be carefully examined to ensure that granting of a proxy is conducted properly and that the granting does not interfere with the rights of the shareholders attending the meeting.
- (6) The directors' Skill Mix is reviewed on an annual basis with a clear definition of required skills and experience. The Target Skill Mix is re-examined each year to be in line with PTTEP's strategies as well as to withstand economic volatility prior to the nomination and development of the director. In addition, PTTEP ensures that the Board's diversity continues and remains intact without gender and nationality discrimination.
- (7) PTTEP appoints a female director who graduated in accounting and is qualified as an independent director to be an Audit Committee member. This is beneficial to the Audit Committee, providing a reasonable assurance of the Company's financial statements. In addition, all of the new Nominating Committee members appointed are independent directors. This is to ensure transparency of the director nomination process, to prevent conflicts of interest, as well as to be in compliance with the Corporate Governance of the PTTEP Group.
- (8) Performance appraisals of the Board and the sub-committees are conducted with integrity, using the Performance Evaluation Form and the Board Performance Target. The appraisals include an individual self-appraisal and individual cross-appraisal by other directors, appraisal of the Chairman, and appraisal of the Board and each of the sub-committees. Results of the appraisals are translated into plans for further performance improvements of the directors.
- (9) The Independent Directors Committee had four meetings in 2017, while there were two Board meetings, which were without the management's present, to discuss and exchange opinions on significant and beneficial matters relating to the Company and our shareholders. The minutes of the meetings were reported to the CEO.
- (10) PTTEP ensured that compensation of the CEO and executives were in line with the Company's short-term and long-term performance, and financial performance (Tied to Performance). The Company also disclosed the ratio of the CEO's annual compensation to the average of the employees' annual compensation.

(11) Effective and tailored activities were organized to promote understanding of the CG&BE among the Company's directors, members of sub-committees, executives, and employees. The activities demonstrated clear planning and performance indicators for evaluating knowledge and a system for keeping track of the results. With the Corporate Governance Committee in charge of planning of the activities, designing of the performance indicators, and regular monitoring to ensure that substantial results were achieved. These activities were also extended to the vendors in an effort to foster a shared good culture in the business community and society. Details of these activities are available in the "Business Ethics" section of this report.

(12) The Board of Directors, executives, and directors from the Company's subsidiaries attended a special lecture by Mr. Rapee Sucharitakul, the SEC Secretary-General of the Corporate Governance Code for listed companies 2017, under the theme "CG Code: A Key to achieve Collaborative Leadership and Long-Term Performance". The lecture emphasized on integration of CG principles to business to promote sustainable organization development.

(13) In 2017, PTTEP conducted the CG&BE Perception Survey for the first time and subsequently included it in the Key Performance Indicator of the Board of Directors for 2017. The survey, which was conducted by an external consultant and gathered from more than 3,500 internal and external stakeholders, was classified into 5 groups, namely, (1) Government Officials, (2) Partners, (3) Vendors, (4) Community, and (5) Management and Employees (excluding the Board of Directors).

The results of the survey led to a comprehensive improvement plan to fully meet the stakeholders' expectation in various aspects such as disclosure and communication with external stakeholders on anti-corruption policy and whistleblowing system.

PTTEP also implemented the following other practices.

(1) PTTEP has always felt it vital that the Company's Chairman remain independent, thus has set independence as the first priority for Chairman nomination except there are other qualified reasons to select from other list of directors. The Company places importance and consider the fundamental attributes of business-related knowledge and expertise, working experience, leadership skills, as well as performance appraisal results to ensure that the Chairman governs the Company with full independency. More details along this line are discussed in the "Independence of Chairman" section of this report. The Company's current Chairman is qualified as an independent director.

(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, 2017, the Company had 15 directors. This is in line with the Company's AoA and considered to be reasonable for the current business environment of the petroleum exploration and production industry where experts from various disciplines are required for the directors to adequately and effectively monitor various areas of the business operations. Currently, the Company has five sub-committees which are responsible for specific tasks as described in their respective regulations. Each of the committees' performance is assessed on a yearly basis.

(3) 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.

(4) Although PTTEP has a free float ratio of less than 40 percent of the total paid-up shares, the Company places high priority on the rights of the minor shareholders by organizing activities to periodically communicate beneficial information with the information beneficial to these shareholders as well as to gain acceptance from other external agencies.

(5) PTTEP specifies that a quorum, at the time of the Board's passing of a resolution, must comprise at least two-thirds of the Board members who are present at the meeting. The Company also stipulates that if a director fails to attend a board meeting three times consecutively, unless an absence is deemed necessary, he or she will automatically be disqualified from the director position. The Company also uses attendance as a performance indicator for the Board Performance Target evaluation. The Company also schedules the meetings in advance throughout the year and always ensure that the directors will be available to attend the meetings. These measures collectively are already deemed sufficient, as evidenced by the attendance of the Board meetings in 2017, when the ratio always exceeded two-thirds. Prior to every voting, the Chairman allows the directors to ask questions and discuss various issues in details to ensure that the Board's resolutions have unanimous consent.

(6) PTTEP does not have an Employee Stock Option Program (ESOP) for the management. The Company, however, has established an Employee Joint Investment Program (EJIP) to allow the Company's management and employees to voluntarily purchase PTTEP stock every month throughout a five-year period, during which the Company will contribute an additional amount equal to the amount deducted from the payroll of the eligible candidates on a monthly basis. All shares purchased each month are suspended from trading for three years from the acquiring date. The objective of the EJIP is to encourage the management and employees to become more dedicating and be loyal to the organization as well as to create an increased sense of group ownership in the long run.

(7) PTTEP has not implemented a cumulative voting system as our AoA clearly prescribes that a director must be elected through the use of majority vote. The Company, however, has provided other mechanisms to protect the rights of our minor shareholders such as allowing them to propose a director candidate in advance during the nomination process.

(8) PTTEP places high importance on distribution of the Annual General Meeting (AGM) invitation letter prior to the meeting to provide the Company's shareholders with adequate time to appropriately review the agendas. To ensure that our shareholders receive full benefits, such as rights to receive their dividend payments from the Company in a timely manner, the meeting is usually held in March every year. For the best interest of the shareholders, the audit of PTTEP's financial statements, however, normally requires relatively more time than other companies due to the complexity of having international operations across various countries. Currently, the Company is able to distribute the invitation letter 19 days and publish it on the Company's website at least 30 days prior to the date of the meeting.

9.17 Awards and Recognitions for Good Corporate Governance

(1) PTTEP was rated "Excellent" and received 5 of the National Corporate Governance Committee's symbols, the highest level, according to the Corporate Governance Report of Thai Listed Companies (CGR) 2017 of the Thai Institute of Directors Association (IOD). The survey criteria of the reports are similar and comparable to those of the ASEAN CG Scorecard Standard. The Company has continuously been rated and placed at this highest level since the first assessment in 2001.

(2) PTTEP was recognized as an exemplary corporate in organizing of the Annual General Meeting of Shareholders (AGM) for the year 2017 by successfully scoring 100 percent in the AGM checklist assessment conducted by the Thai Investors Association.

(3) PTTEP received three awards from The Asset Magazine, Hong Kong, namely, (1) Platinum Award of The Asset Corporate Awards for the ninth consecutive year for demonstration of excellent performance in the five business aspects, namely, finance, corporate governance, social responsibility, environmental responsibility, and investor relations, (2) The Asset Best Initiative in Innovation for the third consecutive year, and (3) The Asset Best Investor Relations Team Award for the third consecutive year.

(4) PTTEP received three awards from the Corporate Governance Asia Magazine which is a financial journal focusing on corporate governance in Hong Kong and Asia, namely, (1) Asia's Best CFO (Investor Relations) for the fourth consecutive year, (2) Best Investor Relations Company (Thailand) for the fifth consecutive year, and (3) Asia's Best Environmental Responsibility for the fourth consecutive year.

(5) PTTEP was selected as a member of the 2017 Dow Jones Sustainability Indices (DJSI) in the DJSI World Oil and Gas Upstream & Integrated Industry for the fourth consecutive year. DJSI is a family of internationally recognized indices which evaluate the sustainability performance of the largest 2,500 companies in the S&P Global Broad Market Index.

(6) PTTEP was selected as a constituent of the FTSE4Good Index Series: the FTSE4Good Emerging Index by FTSE Russell Limited which is a global leader in indexing and analytic solutions for the second consecutive year. The FTSE4Good Emerging Index was used to measure the performance of the companies which demonstrate strong Environmental, Social, and Governance (ESG) practices in emerging markets.

(7) PTTEP received two awards at the SET Awards 2017 held by the Stock Exchange of Thailand and Money and Banking Magazine, namely, (1) Outstanding Investor Relations Award which is presented to listed companies with outstanding performance in the area of Investor Relations, and (2) Outstanding Innovative Company Award which is presented to listed companies, securities companies, and asset management companies with outstanding innovations. This award supports innovative developments which allow companies to continually respond to the long-term competitiveness of the industry and the nation. PTTEP received this award from the Company's management system called ECSPM: Enterprise Change, SSHE and Project Management Platform which covers the protection, planning and control of both the system and equipment more than 100 projects simultaneously.

(8) PTTEP received Thailand Sustainability Investment Award 2017 from the Stock Exchange of Thailand (SET). The award recognized PTTEP as a listed company with an outstanding performance in Environmental, Social and Governance (ESG) aspects, good business performance, as well as a member of DJSI World in Oil and Gas Upstream and Integrated Industry of the Dow Jones Sustainability Index.

(9) PTTEP received, for the fifth consecutive year, the Sustainability Report Award 2017–Best Category organized by the Securities and Exchange Commission, Thailand, in conjunction with Thai Listed Companies Association and Thaipat Institute. The award recognized the Company's excellence in performing and reporting of the social responsibility for sustainability of the business and society, based on completeness, credibility, and communication.

(10) PTTEP received a Distinguished Award in the category of Financial Management Excellence at Thailand Corporate Excellence Awards 2016 presentation ceremony which was organized by Thailand Management Association in corporation with Sasin Graduate Institute of Business Administration of Chulalongkorn University. The Company received this prestigious award for excellent financial management as demonstrated by our strong financial performance.

(11) PTTEP was recognized as a “2017 Top 100 Global Energy” by Thomson Reuters which is one of the most trusted news organizations. The study, the first holistic assessment of its kind, objectively identifies today’s leading energy companies. The 2017 Thomson Reuters Top 100 Energy Leaders methodology is based on eight principle pillars of performance, namely, financial, management and investor confidence, risk and resilience, legal compliance, innovation, people and social responsibility, environmental impact, and reputation.

(12) PTTEP received a Water A List award from the Carbon Disclosure Project (CDP) which is a non-profit global environmental disclosure platform in recognition of the Company’s outstanding sustainable water management practice. The Company also attained the leadership level by CDP for our achievement in climate management for the fourth consecutive year, making PTTEP the only company in the South East Asia to receive leadership level recognition in both categories in 2017.

(13) PTTEP received an award for Best use of multimedia for IR from the IR Magazine Awards & Conference South East Asia 2017. This award was presented to the companies which demonstrate an outstanding performance in Investor Relations activities in Southeast Asia through innovative applications.

(14) PTTEP was awarded a runner-up of the Duty of Care Awards 2017 in the category of Communications from the International SOS Foundation. The Company is the first Thai organization to be recognized by the foundation for continuous consideration towards employees’ safety, security, health, and the environment. The Company produced an SOS VDO to communicate to all employees, and also mitigate the potential risks which can impact personal health and security of our employees, expatriates, and business travelers.

(15) PTTEP received a Platinum Award for SIOLA program at The 9th Annual Global CSR Summit & Awards and the Global Good Governance Awards 2017. This is the highest award in the Category of Best Community Program. SIOLA (Stimulation, Intervention, Optimization of Services for Children) is the program which offers play-based education to maximize benefits for early childhood development, healthcare, counseling for young parents and new families as well as microfinance in Indonesia.

(16) PTTEP received a Bronze Stevie Award in Innovation in Community Relations category from the Asia-Pacific Stevie Awards Program for the Company’s two corporate social responsibility projects, namely, the SIOLA project in Indonesia and the Crab Hatchery Learning Center project in Songkhla province, Thailand.

9.18 Reports of the Sub-Committees

9.18.1 The Corporate Governance Committee Report

PTTEP places high importance on adherence of the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE), which has continuously been improved, for the Company's business operation. The Board assigns the Corporate Governance Committee, comprising of at least three directors, most of whom are independent directors, to govern and ensure that the CG&BE is in compliance with throughout the organization.

In 2017, the Committee convened 4 times, while the majority of incumbent members attended every meeting. The duties and responsibilities of the Committee can be summarized as follows:

- (1) Assessed and reviewed the CG&BE to be in compliance with the laws, practices of international standards and other leading companies, and recommendations from well-recognized institutions, as well as subsequently submitted the results for the Board's approval
- (2) Promoted business operations of the PTTEP Group and performance of the Board, management, and employees to be in line with the CG&BE by monitoring and providing recommendations over the CG&BE-related activities to enhance knowledge and understanding of the CG&BE, as well as over the complaints received through the CG Hotline on a quarterly basis
- (3) Governed to ensure that PTTEP has an efficient and adequate system in place to appropriately support the Company's anti-corruption policy, practices, and internal control systems for everyone in the organization to cultivate as well as for the vendors to uphold the best practices on this matter and abide by the CG&BE of the PTTEP Group.
- (4) Provided recommendations and monitored the progress of PTTEP's long-term 2016–2020 Corporate Social Responsibility (CSR) and communication work plan and related activities on a quarterly basis to create sustainable growth and attain the trust of stakeholders in all of the locations in which the Company operates
- (5) Considered and reviewed implementation of the Corporate Governance Code (CG Code) by means that are suitable to the PTTEP Group's businesses and creating long-term business values as well as established corporate governance reporting according to the SEC's CG Code and international standards, incorporated the CG Report in the annual report for the stakeholders

The Corporate Governance Committee reported the results of all meetings to the Board for acknowledgement on a regular basis. In 2017, the Committee abided by its assigned tasks according to the Charter for the Corporate Governance Committee and its amendments with prudence, competence, and independence. The Committee properly provided straightforward opinions for optimal benefits of PTTEP, the Company's shareholders as well as stakeholders.

(Signed) Admiral Tanarat Ubol

(Tanarat Ubol)

Chairman of the Corporate Governance Committee

9.18.2 The Audit Committee Report

PTTEP is determined to continue our E&P business with a long-term strategy for both sustainable growth and balance between the outstanding business performance and the Good Corporate Governance and Business Ethics, while emphasizing the importance of fair and good corporate governance as well as benefits for the shareholders and stakeholders. The Audit Committee and the Internal Audit Division, in line with this direction, are appointed by the Board to govern, oversee and review the Company's processes and their conformity with the Corporate Governance Code (CG Code) and Anti-Corruption policy to ensure that the risk management and internal control system remain effective in accordance with the changing business environment as well as to ensure that the Company's work processes and goals are closely monitored as we strive towards achieving a sustainable future.

The Audit Committee consists of at least three, but no more than five, independent directors, while at least one member must be a designated financial expert who is able to review the accuracy and reliability of the financial reports. In 2017, the Committee convened 13 times, while the majority of incumbent directors attended all the meetings, to discuss matters related to the management, the Company's internal auditors and external auditors. In 2017, the Committee's principal activities are the followings.

(1) Review of Financial Reports

The Committee reviewed the Company's quarterly and annual financial statements, together with the management and the external auditor, namely, the Office of the Auditor General, to ensure the statements' accuracy, completeness, and compliance with all relevant laws and regulations as well as generally accepted accounting standards, including International Financial Reporting Standards (IFRS). The Committee also provided recommendations in regard to the Company's Management Discussion and Analysis (MD&A) to provide an analysis of the factors affecting the Company's operation and financial statements as well as to identify action plans to mitigate the negative impacts. In addition, the Committee emphasized on the key audit matters in the Auditor's Report, referring to the estimations and assumptions which were made with executive discretion. Such estimations and assumptions must be derived or referenced from reliable sources or recognized experts, so as to assure the estimation figures are correct and accurate.

(2) Review of the Internal Controls System

The Committee reviewed and endorsed the assessment results of the Company's system of internal controls. This review comprised an assessment questionnaire, as required by the Securities and Exchange Commission of Thailand (SEC), which found that the Company had incorporated a proper internal control system and continuously improved as needed along changes of the business and the business environment. The Committee also continued to encourage a continuous implementation of the preventive controls which help to prevent or reduce the business risks which may have an unfavorable impact on the Company. The Committee, together with the Risk Management Committee and the Corporate Governance Committee, shared the information and collaborated with each other to ensure that the Company's risks, internal controls, and Corporate Governance and Business Ethics were consistently operated.

(3) Review of Connected Transactions or Transactions with Potential Conflicts of Interest

The Committee reviewed the connected transactions or transactions with potential conflicts of interest prior to the Board's consideration to ensure the rationality and benefits for the Company and the shareholders, particularly the minority shareholders. The Committee also reviewed the disclosure of the transactions and deemed that the transactions were correctly and completely disclosed, that the price and the conditions were fair, and that the transactions were appropriately approved by the management or the Board of Directors prior to their commencement.

(4) Review of Compliance with Laws and Related Regulations

The Committee reviewed the Company's and the subsidiaries' performance in terms of their compliance with the securities and exchange laws, SET's regulations, and other related laws. The Committee also encouraged the Company to monitor and study new laws, both Thai laws, and other countries' laws, in which the PTT Group operates or invests. The Committee also acknowledged the compliance report relating to the Company's and our subsidiaries' business operations, as reported by the Compliance Department, in addition to the other compliance audit results as reported by the Internal Audit Division.

(5) Oversight of Internal Audit Activities

The Committee considers a revision of the Audit Committee Charter and Audit Charter every year to ensure that they are up-to-date and conform to changes of the Company's business and the business environment. In addition to their responsibility to review the audit results and regularly monitor the management's action plans for audit findings to ensure that they are handled adequately for both in-house audits and joint venture audits, the Committee also urged and supported operation of the Continuous Control Monitoring System-Procure to Pay process which is an approach that introduces an information system to monitor and detect for irregularities on a continuous basis. In 2017, the system was also employed in Myanmar, a country in which PTTEP operates extensively.

(6) Nomination of/Meeting with the External Auditor

The Committee considered nomination of the Office of the Auditor General who serves as the Company's external auditor and, for 2017, determined that the external auditor performed its duties with independence, continued to exhibit the required experience in auditing of the Company's financial reports, and ensured the accuracy and reliability of the Company's financial reports. In addition, the Committee proposed the audit fee for 2017 and met separately with the external auditor and the Internal Audit Division, in an absence of the management, to acknowledge and identify the auditor's approach and audit plan as well as to consider the key audit matters in the auditor's report.

(7) Oversight of Fraud Prevention

The Committee encouraged improvement of the Company's internal controls system to assure optimal controls over fraud prevention. For example, the Committee promoted procurement through a competitive bidding process to ensure transparency and verifiability. The Company has also become certified as a member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC), demonstrating our determination to stand strongly and prominently against corruptive practices. The Committee also was responsible to verify results of the Company's self-assessments relating to the anti-corruption process as required by CAC and as required according to the Corporate Governance Code for Listed Companies 2017.

The Audit Committee reported the results of all meetings to the Board on a regular basis. The Audit Committee conducted its work thoroughly, methodically and strictly according to the Audit Committee Charter to enhance the Company's good corporate governance. This approach and follow-through assured that the Company is able to deliver the best possible performance when compared to our industrial peers. The Committee's opinion for 2017 is that the Company's financial report was accurate and in compliance with the generally accepted accounting standards, inclusive of International Financial Reporting Standards. The Company also conducted the operations in compliance with the laws and related regulations by incorporating the proper systems of risk management, internal controls, internal audit, and corporate governance. The Audit Committee's performance was graded "Very Good" by its own committee, the Board of Directors, and related parties.

(Signed) Ampon Kittiampon

(Mr. Ampon Kittiampon)

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 members are independent directors. The Committee's main duties and responsibilities are to evaluate the Board's structure and composition, including the appropriate proportion of directors with the essential Skill Mix for the Company's business nature and current circumstances, to establish the director nominating process and rules for the shareholders to nominate names of the qualified candidates, as well as to consider the President and Chief Executive Officer's succession plan for the company's continuous and efficient performance.

In 2017, the Nominating Committee convened 8 times, and the majority of incumbent directors attended all the meetings. The duties and responsibilities of the Committee can be summarized as follows:

- (1) Reviewed the Board's Skill Mix and agreed to add Organization Change & Development as another specific skill to cope with the fluctuation in the E&P business, to support management of the risks affecting the Company's long-term growth, to maintain the competitiveness, as well as to pursue new investment opportunities to support the Company's short-term and long-term sustainability
- (2) Specified the Target Skill Mix of the nominees in replacement of the directors who are due to retire by rotation and presented it to the shareholders during the nominees proposal process
- (3) Nominated names of the candidates with the appropriate Skill Mix in replacement of the directors who are due to retire to the Board or the Annual General Shareholders' Meeting for consideration, considering the Board's composition, his or her knowledge and expertise, work experience and usefulness to the Company, conflicts of interest, as well as holding of directorship or executive-level position in other listed companies
- (4) Nominated candidates for sub-committee members to the Board for election when there is a vacancy
- (5) Considered the annual Board Performance Target, developed the Performance Evaluation Form of the Board, sub-committees, and Chairman, as well as to report the assessment results to the Board for acknowledgement
- (6) Developed and monitored the executive-level management development system to prepare the Company's for future short-term and long-term growth

The Nomination Committee reported the results of all meetings to the Board for acknowledgement on a regular basis. The Nominating Committee performed its duties and responsibilities with prudence and independence for the best interest of the shareholders and stakeholders.

(Signed) *Ampon Kittiampon*

(Mr. Ampon Kittiampon)

Chairman of the Nominating Committee

9.18.4 The Remuneration Committee Report

PTTEP's Good Corporate Governance requires the Remuneration Committee to consist of at least three directors where most of the Committee members are independent directors. The Committee's responsibility is to evaluate an appropriate remuneration for the Board, sub-committees, and Chief Executive Officer, as well as the salary structure of the Company's senior executives by adhering to fair and reasonable principles, procedures, and structure.

In 2017, the Remuneration Committee convened 2 times where all of the incumbent members attended both meetings. The duties and responsibilities of the Committee can be summarized as follows:

(1) Reviewed the remuneration of the Board and sub-committees on fair and reasonable principles based on their duties and responsibilities, benchmarking with other listed companies of similar industries and business size, PTTEP's annual performance as well as the industry and economic environments

(2) Considered the Chief Executive Officer's performance and remuneration based on the assigned duties and responsibilities, and PTTEP's annual performance, benchmarking with other companies under PTT Group

The Remuneration Committee reported the results of all meetings to the Board for acknowledgement on a regular basis. The Remuneration Committee performed its roles in a transparent, fair, cautious, and independent manner, while providing straightforward opinions for the best interests of the shareholders and stakeholders according to PTTEP's Good Corporate Governance and as specified by the Securities and Exchange Commission.

(Signed) *Achporn Charuchinda*

(Mr. Achporn Charuchinda)

Chairman of the Remuneration Committee

9.18.5 The Risk Management Committee Report

Petroleum exploration and production business faced with another year of volatile environment in several aspects, namely, low oil price, decline in fossil fuel demand, and disruptive technology. PTTEP has also encountered both internal and external challenges, such as substitution of LNG for domestic gas, uncertain regulations pertaining to concession end projects, changes in laws and regulations relating to PTTEP's business and operation, as well as short reserves life and lack of new projects. PTTEP's Board of Directors appointed the Risk Management Committee consisting of at least three directors, while at least one member must be an independent director. As of December 31, 2017, the Committee comprised six members, three of which were independent directors. The Committee played a vital role to ensure that the risks which may affect or alter the achievement of PTTEP's objectives were managed to be in line with PTTEP's Board of Directors' directions and policies as well as to consider potential consequences entailing from the aforementioned risks especially in the areas of strategic planning, investment, and core competency.

In 2017, the Committee convened 13 times. The duties and responsibilities of the Committee can be summarized as follows:

(1) Managed strategic risks in response to the dynamically changing environment which may affect PTTEP's business and operation by initiating the "External Environment and Strategic Review Session" for internal and external viewpoints to analyze and assess the risks associated with the Company's "RESET, REFOCUS, RENEW" strategies. The Committee also focused their consideration on the implementation of business plans in accordance with the Company's strategy as well as our execution risks. Moreover, new investment in related E&P business and upstream of energy business are considered and emphasized to support Company sustainable growth.

(2) Enhanced the organization's readiness level to cope with emerging risks in addition to existing corporate risks so that the Company encounters less financial and reputation impacts. Risk Management Committee suggested to review and improve the Corporate Risk Flagging process for a better response time, and further developed the legal & compliance risk management framework to better monitor and mitigate the risks relating to litigation and compliance for a more comprehensive risk management system

(3) Considered and screened investment projects including M&A projects, new exploration projects, and joint investment with PTT on LNG value integration, prepared for Thailand's new bidding rounds in regard for concession end projects in terms of key risks, alignment to the Company's strategic directions, and project value realization, as well as recommended several other forms of risk evaluation and mitigation, such as worst-case scenario analysis, mitigation strategies preparation, engagement and collaboration with the government, and optimized investment decision framework

(4) Improved effectiveness of the Risk Management Committee's meetings through standardizing of presentation templates to effectively focus on key issues as well as arranged informal sessions between the committee members and PTTEP's executives

The Risk Management Committee consistently oversaw PTTEP's enterprise risk management to ensure that the businesses were operated within the Company's risk appetite, particularly of those relating to the oil price market, finance, and exploration and production

The minutes of the Risk Management Committee's meetings were reported to the Board on a monthly basis. In 2017 the Committee performed its duties relating to PTTEP's risk management systematically, prudently, and competently to the best of their ability for the highest benefit of PTTEP and the stakeholders.

(Signed) Sethaput Suthiwart-Narueput

(Mr. Sethaput Suthiwart-Narueput)

Chairman of the Risk Management Committee

9.18.6 The Independent Directors Committee Report

PTTEP Board of Directors has appointed the Independent Directors Committee to promote the Good Corporate Governance to ensure that the business is conducted for the best interest of the Company, with equality to all of the stakeholders, by providing constructive opinions transparently and independently.

The Independent Directors Committee consists of 9 independent directors, from 15 directors of the Board. This is a selection ratio which is more stringent than the Securities and Exchange Commission (SEC)'s requirement of one-third.

In 2017, the Committee convened 4 times, and the results of the meetings can be summarized as follows:

(1) Considered PTTEP's independent director qualifications to be in line with the Securities and Exchange Commission (SEC)'s requirements

(2) Considered SEC's Corporate Governance Code for Listed Companies 2017 which emphasizes on embedding the principles of social and environmental responsibilities in the business operations. This includes defining of the objectives, determining of the means to attain the objectives, monitoring, evaluating, and reporting of the performance which will be used as the Board's guideline to ensure the Company's long-term value creation to the society and environment

(3) Provided recommendations for enhancement of the Company's long-term growth management within the scope of strategic planning, reorganization, human resource management, and succession plan for executive-level management

(4) Recommended the courses which the Company might consider to achieve higher sales in oil and gas, as well as analyzed and monitored the LNG logistic process to formulate the most efficient and effective production and delivery plan to serve PTT and for the best benefit of PTTEP.

(5) Scheduled the Independent Directors Committee's meetings for 2018 and reviewed the 2017 Independent Directors Committee Report which is to be disclosed in the annual report

(6) Provided comments and useful enquiries with independency when considering agendas relating to connected transactions between PTT and PTTEP to appropriately protect the benefits and rights of the Company's minor shareholders, promoted transparency and independent decisions within the Board as well as ensured that the directors with conflict of interest to the context of a given agenda are abstained from the meeting and voting for the best interest of the Company, shareholders, and stakeholders

The Independent Directors Committee reported the results of all meetings to the Board for acknowledgement on a regular basis. The Independent Directors Committee performed its duties by providing beneficial recommendations to the Company and the shareholders to assist the Board to perform with highest efficiency and effectiveness.

(Signed) *Prajya Phinyawat*

(Mr. Prajya Phinyawat)

Chairman of the Independent Directors Committee

10. Corporate Social Responsibility

10.1 Operational Policies towards Responsibility for the Society and the Stakeholders

PTTEP's vision is to become a leading Asian E&P company, driven by competitive performance, advanced technology, and green practices. The vision is to create sustainable values for all of stakeholders. The Company aligns our sustainability practices with the international standards, such as the United Nations Sustainable Development Goals (SDGs) which is globally accepted and implemented by both public and private sectors; the United Nations Global Compact Advanced Level, Social Responsibility Guidance Standard: ISO 26000, Global Reporting Initiative (GRI), Dow Jones Sustainability Indices (DJSI), Sufficiency Economy Philosophy, and several other internationally-accepted practices. Currently, the Company prioritizes our sustainability contributions to five SDGs which are SDG 3, 4, 7, 8, and 16, while continuing to support the rest of the SDGs in our routine operations.

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 our definite sustainability objectives and determination to overcome all of the challenges towards developing and becoming a sustainable organization. For the Sustainable Development Policy, please see the Company's website (www.pttep.com).

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 a universal understanding of the Company's approach to sustainability. Harmony in respect to social responsibility throughout the Company is also established by having everyone operate according to international standards and policies, such as ISO 26000, Safety, Security, Health and Environment (SSHE) Policy of the International Association of Oil & Gas Producers (IOGP), International Petroleum Industry Environmental Conservation Association (IPIECA), OHSAS 18001, and the United Nations' Universal Declaration of Human Rights (UDHR). All divisions within the Company also strictly adhere to our Corporate Governance and Business Ethics, local laws, culture and values, while interacting with all stakeholders such as employees, communities, suppliers, business partners, regulators, investors and security personnel.

In 2017, PTTEP conducted an in-depth stakeholder engagement survey for both internal and external stakeholders to identify and prioritize material issues in respect to PTTEP. For the stakeholder management, the Company has also designated each of the divisions to have its own separate responsibility and participation programs for different groups of stakeholders that they are involved with.

For more details on stakeholder engagement practices, please see PTTEP 2017 Sustainability Report.

10.2 Operation and Reporting

PTTEP has adopted the Global Reporting Initiative (GRI): G4 Sustainability Reporting Guidelines (Core), using sector specific guidelines of the GRI such as the Sustainability Reporting Guidelines & Oil and Gas Sector Supplement (OGSS) which is one of the world's most prevalent guideline for sustainability reporting to provide information in regard to the Company's economic, environmental, and social and governance performance. Information of the Company's capability to

reduce greenhouse gas emission, for example, is included in the report. The high standard, comparable to those of financial management, allows the Company to monitor our sustainability effectively. The report includes sustainability data and performance indicators from all parts of the business. This ranges from business planning, corporate risk assessment, internal control process, internal auditing, monitoring and reporting of the Company's performance. PTTEP also adopts and includes other international best practices in our sustainability report, such as DJSI best practices and requirements, AA1000 APS-AccountAbility Principles Standard (2008), SASB Materiality Map™ of Sustainability Standards Board (SASB), and SDG Compass to support the UN Sustainable Development Goals. In 2017, the Company was able to implement the actions required to address these issues as planned.

In addition, the Company has another report dedicated to sustainability. The report is of a standard comparable to the GRI's sustainability reporting as well as those required of the oil and gas industry. The Company's sustainability reporting demonstrates our continuous effort in fulfilling the ten principles of the United Nations Global Compact (UNGC): Advanced Level as well as those of other reporting standards relevant to the oil and gas industry such as IPIECA's Oil and Gas Industry Guidance on Voluntary Sustainability. The sustainability performances are publicly disclosed for all stakeholders to acknowledge that our sustainability issues are being properly addressed.

For more details, please see PTTEP 2017 Sustainability Report.

10.3 Impacts of Business Operation on Social Responsibility

Details are disclosed in the "Legal Dispute" section.

10.4 Projects and Activities for Benefits of the Society and the Environment (After Process)

To be a sustainable organization with a vision of becoming a leading Asian E&P company driven by competitive performance, advanced technology, and green practices, PTTEP believes that the key to our license to operate and license to grow are the sustainability of social and environmental stewardship.

To meet the stakeholder's needs as well as to gain their trust and support, the 5-year CSR and Communication Roadmap 2016-2020 was initiated as a guidance with an even greater emphasis on social and environmental stewardship. All CSR projects have been categorized into four themes, namely, Basic Needs, Education, Environment, and Culture. Currently, the Company has been focusing on six key environmental CSR projects, namely, Crab Hatchery Learning Center, Forest Restoration Project for Eco-learning at Sri Nakhon Khuean Khan Park and PTTEP Reforestation Project, Waste to Energy Project, PTTEP Love Sea, Love Beach, PTTEP Teenergy Project, and Underwater Learning Site of H.T.M.S. Project.

For more details, please see PTTEP 2017 Sustainability Report.

11. Internal Controls and Risk Management

11.1 Board of Directors' Evaluation of PTTEP's Internal Controls

PTTEP's Board of Directors (the Board) and the management place a great emphasis on effectiveness of the internal control system. The management appoints the Internal Control Section to annually assess the adequacy and effectiveness of the system, while the Board appoints the Audit Committee to review the assessment results to ensure that the internal control system provides the Company with effective and efficient operations, accurate and reliable reporting, and the compliance required under relevant laws and regulations.

In 2017, the Board endorsed the Audit Committee's report on the assessment result of all of the five components of the Company's internal control system, namely, (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring activities. The report stated that the Company's internal control system is adequate and effective. When control deficiencies are detected, they will be immediately corrected to support the business operations to ensure they are in compliance with laws and regulations at all times. In addition, there is an adequate internal control system in place to govern and monitor business operations of the Company's subsidiaries.

The Internal Control Self-Assessment Form provided by the Office of the Securities and Exchange Commission of Thailand (SEC) is employed to assess the Company's internal control system, covering the five components of the framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The assessment results are as follows:

1. Control Environment

PTTEP has appropriate control environment that can be summarized below.

- PTTEP operates businesses under principles of the Good Corporate Governance and Business Ethics (CG&BE) which is regularly updated to be in compliance with international standards and best practices and considered as the highest internal regulation of the PTTEP Group. The management and employees at all levels are required to sign the commitment form to formally acknowledge the CG&BE and to act accordingly. They are also required to self-assess their conflict of interest annually. In 2017, the Company continued to communicate on CG&BE to ensure that it is well understood by the management and employees through various training courses and activities, such as a special lecture for the Board and high-level executives on the new CG Code by the Secretary-General, Securities and Exchange Commission of Thailand, Anti-Corruption Online Training (revised version), and CG&BE Workshop for those working in the Republic of the Union of Myanmar. In addition, joint venture partners, suppliers/vendors, and company representatives are acknowledged of the principles and our anti-corruption policy through PTTEP's vendor symposium. The Company also stands firmly in a position to fight together with the public sector and civil society against corruption, as demonstrated in various occasions such as the International and National Anti-Corruption Day.
- PTTEP continues to monitor and assess that the code of conduct are being followed to ensure that the management and employees can effectively integrate ethical conduct into their work life. In 2017, the Company earned an "Excellent" (highest) level of recognition from the Corporate Governance Report of Thai Listed Companies conducted by the Thai Institute of Directors Association (IOD). In addition, the Company conducted the CG&BE Perception Survey to determine

the perception and confidence of our key stakeholders towards PTTEP's commitment to CG&BE values. The result from the survey, in turn, has been analyzed to develop the CG&BE improvement plan to further strengthen our CG&BE culture.

- PTTEP establishes a clear segregation of duties between the Board and the management. The Board's duty is to develop the corporate operational strategies and govern business performance of the management to achieve objectives as set in the strategies. The Board also delegates their power to the management through internal regulations to ensure flexibility and efficiency of the operations.

- PTTEP's organizational structure is designed with flexibility and efficiency in line with the internal control principles, such as segregation of duties, and check and balance. In 2017, to appropriately respond to the dynamic environment, the Company initiated several organizational restructuring exercises, for example, establishing of the Corporate Affairs and Assurance Group (CAA), the Business and Organization Transformation Group (BOT), and the New Business Unit. In addition, the President, Exploration and Production Position was appointed to be responsible for managing E&P operations. The Company's Reserves Committee was also established to check and balance of the reserves estimation, reporting and disclosure.

- PTTEP has appropriate reporting-line structure and hierarchy of authorities for the Company's business requirements and responsibilities of the management and employees, as they are clearly defined and documented in the Company's Functional Description and the Delegation of Authority and Signatures (DAS). In 2017, PTTEP revised DAS according to the new organization structure.

- PTTEP has an extensive set of resource management regulations and policies which focus on attracting, developing, and retaining individuals. The Company also develops the Individual Competency Development Plan (ICDP) for the management and employees based on the five capability themes which are in line with our business objectives. These five themes are, namely, (1) operating assets, (2) exploration success, (3) development projects, (4) joint venture management, and (5) mergers and acquisitions. The Company also sets level of knowledge and competency for personnel and continuously reviews and updates them for manpower development planning to facilitate our business growth and future expansion. In addition, a specific development plan for high potentials, management succession plan, job rotation, and promotion plan have been developed, while an employee engagement survey is carried out annually to achieve a higher level of employee satisfaction. As for the corporate remuneration policy, the Company employs the pay-for-performance compensation system to retain highly competent individuals.

- In 2017, PTTEP revised Internal Control Standard. The updated documents were subsequently acknowledged by the management and employees through training courses, and activities and publication such as GRC Newsletter to ensure accurate understanding of the principles, roles, and responsibilities of each individual in relation to internal control principles.

2. Risk Assessment

PTTEP employs an international risk management approach which can be summarized below.

- PTTEP establishes Risk Appetite Statement, Risk Governance Framework, and Risk Metrics & Limit to clearly define roles, responsibilities, and authorities relevant to risk management at all levels of the Company, including the Board, the Risk Management Committee, and the management, as well as supporting and operational business units.

- PTTEP develops Enterprise Risk Management Policy, Risk Management Standard and Guideline which are regularly reviewed and updated to ensure that all key risk activities are covered. In 2017, the Company revised the Risk Management Standard by including Hedging Committee's roles and responsibilities, reviewing the Risk Management Framework and revising the Risk Management Reporting Structure according to the new organization structure.
- PTTEP acknowledges the Risk Appetite Statement, Risk Management Policy, including standards, guidelines, processes, and tools to the management and employees through various channels, such as GRC Newsletter, knowledge sharing session and workshop for project based staff at, e.g., S1, Sinphuhorm, Bongkot and Arthit Project. In addition, the Company continues to develop and publish booklets to be used as a communication tool to provide the information relevant to our risk management, business continuity management and internal control to ensure the Company's business objectives achievement.
- PTTEP manages risks throughout the organization based on the four risk categories, namely, Strategic Planning and Management, Investment and Divestment Decision Making, Operations and Business Process, and Capital Project Management. In addition, the Company develops the Risk Profile to identify and assess risks at all levels, ranging from the corporate, function groups, divisions, and departments down to the asset/project levels. This includes specific emerging risks, such as Operational Risk Profile, and Legal and Compliance Risk Profile.
- PTTEP clearly defines business objectives which allow the Company to conduct risk assessment for both internal and external risk factors to evaluate the impact and likelihood of those risks. Risk mitigation plans meanwhile are developed, executed, and monitored to reduce the risk levels through various measures. Key Risk Indicators (KRIs) are also developed to provide an early warning of risks to prevent as well as to develop mitigation plans for risks that can potentially prevent the Company from achieving the business objectives. In 2017, the Company continuously improves the Business Continuity Management System, allowing our headquarters in Bangkok and the Petroleum Development Support Base (PSB) in Songkhla to maintain their ISO 22301:2012 certification.
- PTTEP appoints the Operational Risk Committee (ORC) to continuously manage operational risks which has potential impacts to projects in the technical, contractual and operational support aspects. In 2017, ORC convened four times. The Company also establishes the Business Continuity Management Committee (BCMC) to provide strategic directions and assist the management to obtain the resources required to support the Business Continuity Management program. In 2017, BCMC convened three times.
- At the corporate level, PTTEP assesses business activities with high exposure to fraud risk, such as asset misappropriation, corruption, and misstatement of financial reporting. The Company considers historical information, incentives and/or pressure, opportunities, and rationalization of fraud to evaluate the likelihood and develop the Corporate Risk Profile. At the process level, process owners are responsible for management of both fraud and operational risks potentially arising from the processes under their responsibilities as well as development of the internal controls responding to those risks.
- PTTEP has the Internal Audit Division to carry out audits with regard to high risk areas which can lead to fraud. The Internal Audit Division is also responsible for undertaking a preliminary investigation of suspected frauds upon receipt of a report or as requested by the Audit Committee and/or the CEO.

- PTTEP regularly monitors and reviews strategic plan to ensure that the business goal remains reasonable and consistent with the changing situations. In 2017, the Company closely monitored changes of the key factors, such as world and domestic economy, oil price, exchange rate, geopolitics, laws and regulations to respond to those changes in a timely manner. In addition, the Company has continued the SPEND SMART campaign in response to the ongoing low oil price, while continuing to study the possibility of new business opportunities by taking into account clean energy and ending of the oil era.

3. Control Activities

PTTEP has adequate and efficient control activities to appropriately manage and mitigate risks to an acceptable level. Our key control activities can be summarized below.

- PTTEP has extensive sets of written regulations and policies which the management and employees have to strictly comply, while the management and supervisors are responsible for governing and monitoring such compliance. In 2017, to ensure higher level of work efficiency within the organization, the Company developed and updated corporate policies, standards and guidelines such as Internal Control Standard, Risk Management Standard in regard to Safety, Security, Health and Environment (SSHE) and Business Continuity Management.

- PTTEP recognizes significance of control activities at the process level, including segregation of duties and review and authorization of transactions, to ensure that the Company's business operations are efficient and able to prevent fraudulent acts. In 2017, the Company carried out a number of business process improvements to achieve higher level of work efficiency and effectiveness as well as to develop and revise process controls in regard to control self-assessment, such as Maintenance Planning Process, Technology Screening Process and Investment Process.

- PTTEP develops general controls over technology and physical security, including data backup and recovery to ensure the business continuity from disruptions. IT security policy, when revised, will be acknowledged organization-wide according to the good corporate governance. In 2017, the Company conducted an annual disaster recovery exercise with relevant parties, such as the Risk Management Department, the Internal Audit Division, and the Safety Management Department to ensure that critical applications shall continue their operations during disruption. Digital Security Awareness E-Learning was also carried out to build staff's awareness and understanding of the corporate IT security policy, regulations, and Thailand's Computer-related Crime Act B.E. 2550 (2007) by which they must abide.

- PTTEP establishes IT infrastructure control and clear policy for implementation of digital technology to ensure the Company's ICT system effectiveness according to COBIT 5 which is a business framework for the governance and management of enterprise IT, and ISO 27001 which is an information security standard.

- PTTEP highly emphasizes on technology risks and security policy to prevent the Company from security breach. The Company implements general controls through various channels, such as establishing of ICT Security Plan and Procedure, and Business Continuity Plan. The Company also puts the controls in place at personal level through, for example, Access Control and Devices Usage Rule, registration of personal devices (BYOD – Bring Your Own Device) used to access corporate IT system (Air Watch), Data Center Security Procedure, and data backup and recovery plan.

- PTTEP appoints the IT Steering Committee to provide IT strategic directions, goals, strategies, policies and standards, including investment direction of IT Master Plan and Roadmap to mitigate IT Risks to an acceptable level.

- PTTEP governs the Company's subsidiaries, associated companies, and joint ventures by assigning the Company's management and employees to manage these entities. The Company develops the Subsidiary Directors Guideline for the appointees to ensure standardized subsidiary directors' role and responsibility. The Internal Audit Division also has the responsibilities to audit Assets/Projects in which the Company has invested.

4. Information and Communication

PTTEP has effective and efficient information and communication systems for internal and external stakeholders which can be summarized below.

- PTTEP analyzes data and information from internal and external sources after they are reviewed by responsible units to make appropriate decisions. In addition, the Company imposes the confidentiality of use and protection of information to prevent the disclosure of sensitive or confidential information of the Company.

- PTTEP has developed Corporate Reference Document Center or "FindMe" as the information technology infrastructure to store and manage important business documents through a single access channel. In 2017, PTTEP enhanced FindMe's storing of legal and business documents.

- For internal communication, PTTEP has effective and efficient internal channels developed to ensure that the management and employees can quickly and accurately gain access to the information required for the task at hand, while the objectives and responsibilities of internal controls are continuously reiterated through internal meetings and emails. The Company has also set up the "Call Tree" network for communication especially in case of urgencies. In 2017, the management has been tasked with communicating GRC to their staff at least two times a year to ensure that they can appropriately integrate this concept into their work responsibilities. GRC is an integration of the Company's assurance processes, comprising corporate governance, risk management, compliance, and internal control, aiming to improve the business efficiency and effectiveness.

- For external communication, PTTEP establishes business units which are responsible for communicating with each specific group of stakeholders. These units are, such as the investor relations, corporate communication, and corporate secretary units. This is to ensure that information disclosed to external stakeholders is accurate, complete, sufficient, and timely. In 2017, the Company provided business-related information, such as expiration of the Bongkot concession, and decommissioning of the E&P Business and the numbers in regard to petroleum Reserves/Resources in Thailand. The Company also provided "Investor Tool Kits" for collecting of information for investors on the Company's website, as well as publications for analysts, fund managers, and shareholders to better understand the E&P business. The Anti-corruption Policy and Safety, Security, Health and Environment (SSHE) Policy are also provided for the suppliers/vendors through various communication channels, such as Vendor Symposium and PTT Group CG Day.

- PTTEP establishes whistleblowing channels for employees and external stakeholders to accurately, completely, and timely report wrongdoings committed by the Company's directors, the management, employees, or third parties acting on our behalf. According to our Reporting and Whistleblowing Regulation, complaints can be reported through, for example, letter, facsimile, email, and the Company's official website.

5. Monitoring Activities

PTTEP has adequate and efficient monitoring systems which can be summarized below.

- PTTEP regularly monitors and assesses internal controls to ensure that they are able to respond to dynamic business environments in terms of corporate and technical risks. In 2017, the Company monitored GRC-related activities through annual GRC Plan for a better understanding and practice organization-wide.
- PTTEP employs two levels of Control Self-Assessment (CSA), namely, at the corporate level, and at the process level. For the corporate level, the CSA is performed based on the Internal Control Self-Assessment Form provided by the Office of the Securities and Exchange Commission of Thailand (SEC) as well as the internal control questionnaires which are assessed by management at all levels. For the process level, process owners of business processes with significant impact on the Company are required to assess the controls. Findings from the two levels of CSA are subsequently used to develop improvement plans and follow-ups. In 2017, the controls assessment process has been strengthened, in addition to being regularly updated and followed up.
- The Compliance Department (CCC) is responsible for monitoring, reviewing, and reporting two types of non-compliance within an organization, namely, (1) non-compliance with external laws and regulations to be reported to the Chief Executive Officer and the Audit Committee on a monthly and semi-annually basis, respectively, and (2) non-compliance with internal regulations and policies to be reported to the Management Committee on a quarterly basis. CCC shall report all non-compliances with a significant impact on the PTTEP Group to responsible parties immediately.
- The Internal Audit Division (CIA) is responsible for auditing and providing recommendations for improvements to ensure adequacy and effectiveness of the Company's internal control system. CIA is also responsible for development of improvement plans to resolve the issues identified and subsequently communicate with responsible parties, while regularly reporting the findings and improvement progress to the Audit Committee.

11.2 Head of the Internal Audit Division and Head of the Compliance Department

11.2.1 Roles and Responsibilities of Head of the Internal Audit Division

PTTEP has established the Internal Audit Division which has a direct reporting line to the Audit Committee and an administrative (dotted-line reporting) reporting line to the Chief Executive Officer. Key roles, responsibilities and scopes of work of the Internal Audit Division include the followings.

(1) In-house and Subsidiary Audits

The purpose of the audits is to ensure that the operations achieve the Company's target. The auditors evaluate and, in turn, aim to improve the effectiveness of risk management, internal controls, and corporate governance in a continuous effort to detect and prevent all types of deceptive schemes with potential for frauds, or schemes which can potentially lead to illegal wrongdoings. The audits and the processes involved are also developed to identify control weaknesses which could potentially create opportunities for frauds as well as to provide recommendations for enhancement of the internal controls.

(2) Joint Venture Audits

The auditors conduct audits on the operators for projects that PTTEP has invested in to ensure that the operators comply with the joint venture agreements and other related contractual arrangements, that they possess appropriate internal controls, and that the expenditures incurred and reported are equitable, reasonable, and accurate for benefits of all the parties involved.

(3) Consulting Services

The auditors pre-determine the scope of the consulting services prior to the engagement, ensuring that they will result in an improved efficiency and effectiveness of the existing processes as well as useful recommendations in regard to risk management, internal controls, and corporate governance.

(4) Fraud Investigation

The Head of the Internal Audit Division is responsible for undertaking the investigation of all reported or suspected frauds, according to the Reporting and Whistleblowing Regulation B.E. 2556. Investigation team members must not have any conflicts of interest in regard to complaints under the investigation. Prevention, detection, further investigation, and prosecution of fraud offenders are however under responsibility of the management.

(5) Special Audit Requests

Special audit requests are not included in the annual audit plan. The Internal Audit Division performs special audits as requested by the Company's management and/or the Audit Committee to prevent and mitigate risks which may arise.

According to the Audit Committee Charter, the Audit Committee has a duty to determine the Company's internal audit unit's independence as well as to endorse the appointments, transfers, performance appraisal or punishments of the Head of the Internal Audit Division.

In 2017, Mrs. Chaveeporn Chamsang held the position of the Senior Vice President of the Internal Audit Division and the Head of the Internal Audit Division. Since her retirement on January 1, 2018, Mrs. Chanamas Sasnanand has assumed this position in replacement. The Audit Committee deems that both aforementioned executives are qualified to undertake the responsibility based on their educational background, necessary knowledge, skills, and work experience. They both have also been up-to-date in terms of professional knowledge and expertise, primarily through extensive trainings on internal auditing methodologies, management programs, and internal auditor competency development. Such stringent attention to the person holding the title and the supports provided to the entire team highlight the importance which the Company has placed on the efficiency and effectiveness of the Internal Audit Division and performance of the Audit Committee.

Details of the Head of the Internal Audit Division are disclosed in Attachment 3: Details of Head of the Internal Audit Division and Head of the Compliance Department.

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 the Senior Vice President of the Legal Division, the Executive Vice President of the Corporate Affairs and Assurance Group, and the Chief Executive Officer. The key responsibilities are to encourage the PTTEP Group to fully comply with applicable laws as well as to support the management in managing compliance risk efficiently through various compliance programs, including providing of communication and training programs, developing and maintaining of the legislation database and compliance monitoring system, identifying and conducting compliance risk assessment, providing advice upon new issuance or amendment of the PTTEP Group's internal regulations, coordinating with regulators, and reporting the performance of the compliance programs to the Audit Committee and the management.

Mr. Verasak Manchuwong has been appointed as the Vice President of the Compliance Department, having already functioned in this position since October 1, 2013. More details of the Head of the Compliance Department are disclosed in Attachment 3: Details of Head of the Internal Audit Division and Head of the Compliance Department.

12. Connected Transactions

12.1 Connected Transactions between Related Companies

Connected transactions at PTTEP and/or our subsidiaries with other entities that may result in conflicts of interest in the fiscal year ending December 31, 2017 are as follows:

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTT Public Company Limited (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. PTT's executives who serve as PTTEP's directors are: <ul style="list-style-type: none"> (1) Mr. Tevin Vongvanich (2) Mr. Wirat Uanarumit (3) Mr. Somporn Vongvuthipomchai 	Petroleum product sales: crude oil; natural gas; liquefied petroleum gas; and condensate <ul style="list-style-type: none"> Total income Accounts receivable 	3,727.50 541.66	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis 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 testing from South Bongkot's central processing platform to PTT's third gas transmission pipeline 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 rental at Songkhla base Income from maintenance of natural gas meters Income from charge to PTT for working area at Arthit Project's production platform according to the Gas Sales Agreement 		<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.

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Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
		Purchase of petroleum product, manpower charge for PTT personnel seconded to the Company and subsidiaries, and other expenses <ul style="list-style-type: none"> Purchasing petroleum products, equipment and services Personnel expenses Other expenses; fuel for helicopter, advisor, training, and laboratory rental Total income Accounts payables 	38.49 3.53	<ul style="list-style-type: none"> The condition and price setting for the purchase of petroleum product, related equipment, related services, and other expenses follows normal business operations at an arm's length basis for non-related persons or operations. Manpower rates are based on the actual rates PTT pays to employees seconded to PTTEP.
		Deferred compensation which is the Company's obligation, in accordance with the Arthit Project's Gas Sale Agreement	1.76	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
Energy Complex Company Limited (EnCo)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 50% of EnCo's registered and paid-up capital. PTTEP, EnCo's major shareholder, holds 50% of EnCo's registered and paid-up capital. The Company's executives who serve as EnCo's directors are: <ol style="list-style-type: none"> Mr. Thiti Mekavichai Ms. Pannalin Mahawongtikul Mrs. Kesara Limmeechokchai Mr. Anusorn Wuthijaroen 	The Company has signed a three-year lease contract with EnCo to rent the office building, storage and common areas at the Energy Complex Center. The Company is eligible to extend its lease contract for another three years. <ul style="list-style-type: none"> Total lease and service expenses Accounts payable 	17.25 0.0037	<ul style="list-style-type: none"> The leasing rate refers to the rate appraised by independent evaluators, based on the market rate of the office building lease.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
		<p>The Company signed a loan contract with EnCo under the following conditions:</p> <ul style="list-style-type: none"> Contract period of 13 years and 6 months Expiration date is October 2, 2022 Reference interest rate follows a loan contract between EnCo and Krung Thai Bank Public Company Limited, dated April 2, 2009 (contract amendment is included). The interest rate as of December 31, 2017 is FDR+2% per year 		<ul style="list-style-type: none"> The mentioned contract follows the conditions of the loan contract signed by EnCo and Krung Thai Bank Public Company Limited, dated April 2, 2009 (contract amendment is included) with the financial support of all EnCo's shareholders proportionately.
		<ul style="list-style-type: none"> Loans outstanding Interest receivable 	17.75 0.58	
		<p>Income from the Company's personnel seconded to EnCo</p> <ul style="list-style-type: none"> Total income Accounts receivable 	0.25 0.03	<ul style="list-style-type: none"> Manpower rates are based on the actual rates the Company pays to employees seconded to EnCo.
PTT Digital Solutions Company Limited (PTT Digital) (Formerly is PTT ICT Solutions Company Limited)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 20% of PTT Digital's registered and paid-up capital. PTTEP holds 20% of PTT Digital's registered and paid-up capital. The Company's executive who serves as PTT Digital's director is Mr. Thiti Mekavichai. 	<p>The Company and subsidiaries have signed a contract with PTT Digital for IT services and communications.</p> <ul style="list-style-type: none"> Total expenses Accounts payable 	18.98 1.71	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<p>Income from the following services:</p> <ul style="list-style-type: none"> Income from the Company's personnel seconded to PTT Digital Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) Total income Accounts receivable 	3.48 0.50	<ul style="list-style-type: none"> Manpower rates are based on the actual rates the Company pays to employees seconded to PTT Digital.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTT Energy Resources Company Limited (PTTER)	<ul style="list-style-type: none">▪ PTT, the Company's major shareholder, holds 100% of PTTER's registered and paid-up capital.▪ Co-director is Mr. Pitipan Tepartimargorn.	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none">▪ Total income0.14▪ Accounts receivable0.0011		<ul style="list-style-type: none">▪ Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
IRPC Public Company Limited (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. Tevin Vongvanich.	Expense for Advanced Fire Fighting training <ul style="list-style-type: none">▪ Total expenses0.03		<ul style="list-style-type: none">▪ Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		Income from the following services: <ul style="list-style-type: none">▪ Income from consulting service▪ Income from office building rental and services provided by EnCo (the subsidiary of PTTEP)▪ Total income1.42▪ Accounts receivable0.01		<ul style="list-style-type: none">▪ Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Maintenance and Engineering Company Limited (PTTME)	<ul style="list-style-type: none">▪ PTT, the Company's major shareholder, holds 40% of PTTME's registered and paid-up capital.	The Company and subsidiaries signed the contracts with PTTME for the following services: <ul style="list-style-type: none">▪ Rail tank wagons maintenance and repair for PTTEP Siam Limited (PTTEPS)▪ General maintenance, equipment inspection and other services for PTTEPS▪ General maintenance and services for the PTT Research and Technology Institute, Energy Application Lab (EAL) and Amazon Inspiring Campus in Wangnoi District, Ayutthaya Province in accordance with the agreement between PTTME and EnCo (the subsidiary of PTTEP)▪ Total expenses2.03▪ Accounts payable0.01		<ul style="list-style-type: none">▪ Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
Business Services Alliance Company Limited (BSA)	PTT, the Company's major shareholder, holds more than 10% of BSA's registered and paid-up capital.	Expenses from the following services: <ul style="list-style-type: none"> Expense for field trip arrangement Manpower charge for BSA personnel seconded to PTT GL Manpower charge for BSA personnel providing services at Energy Complex, PTT headquarters, PTT Research and Technology Institute in Wangnoi District, Ayutthaya Province and PTT Research and Technology Institute in Wang Chan District, Rayong Province in accordance with the agreement between BSA and EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total expenses 0.06 Accounts payable 0.03 		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.04 Accounts receivable 0.0001 		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
Dhipaya Insurance Public Company Limited (TIP)	PTT, the Company's major shareholder, holds 13.33% of TIP's registered and paid-up capital.	Expense for the Company and subsidiaries's assets insurance, and our employees' health and life insurance <ul style="list-style-type: none"> Total expenses 7.90 Accounts payable 0.02 		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		Income from the following services: <ul style="list-style-type: none"> Income recognized from the excess of insurance premium paid in 2016. Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.013 Accounts receivable 0.000023 		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
Thai Oil Public Company Limited (Thai Oil)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 49.10% of Thai Oil's registered and paid-up capital. 	Income from the following services: <ul style="list-style-type: none"> Income from meeting room rental at EnCo B building, 16th-18th Floor Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) Total income Accounts receivable 	0.97 0.0016	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Global Chemical Public Company Limited (PTTGC)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 48.89% of PTTGC's registered and paid-up capital. 	Fee for mercury analysis at Mercury Removal Unit for PTTEP SP GPP <ul style="list-style-type: none"> Total expenses 	0.0058	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	2.23 0.0020	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Natural Gas Distribution Company Limited (PTT NGD)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of PTT NGD's registered and paid-up capital. 	Income from the following services: <ul style="list-style-type: none"> Income from service charges for management's driver Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) Total income Accounts receivable 	0.18 0.0062	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Polymer Marketing Company Limited (PTTPM)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of PTTPM's registered and paid-up capital. 	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.44 0.000015	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Polymer Logistics Company Limited (PTTPL)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of PTTPL's registered and paid-up capital. 	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.08 0.0010	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTT Retail Business Company Limited (PTTRM)	PTT, the Company's major shareholder, holds more than 10% of PTTRM's registered and paid-up capital.	Expense for drinking water in accordance with the agreement between PTTRM and EnCo (the subsidiary of PTTEP)		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Total expenses 0.0048 Accounts payable 0.0005 		
		Income from office building rental and services provided by EnCo (the subsidiary of PTTEP)		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Total income 0.03 Accounts receivable 0.0010 		
PTT Tank Terminal Company Limited (PTT Tank)	PTT, the Company's major shareholder, holds more than 10% of PTT Tank's registered and paid-up capital.	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP)		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Total income 0.02 Accounts receivable 0.0001 		
Trans Thai-Malaysia (Thailand) Limited (TTM)	PTT, the Company's major shareholder, holds more than 10% of TTM's registered and paid-up capital.	Income from the following services:		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Income from warehousing rental in Songkhla Province Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) Total income 0.02 Accounts receivable 0.0074 		
PTT MCC Biochem Company Limited (PTTMCC)	PTT, the Company's major shareholder, holds more than 10% of PTTMCC's registered and paid-up capital.	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP)		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Total income 0.11 		
PTT International Trading Pte. Ltd. (PTTT)	PTT, the Company's major shareholder, holds 100% of PTTT's registered and paid-up capital.	Income and expense from oil price hedging contracts		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Total expenses 1.25 Total income 1.37 Accounts payable 0.55 		
PTT International Trading London Ltd. (PTTT LDN)	PTT, the Company's major shareholder, holds 100% of PTTT LDN's registered and paid-up capital.	Petroleum product sales: crude oil		Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
		<ul style="list-style-type: none"> Total income 14.14 Accounts receivable 14.14 		

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTT Regional Treasury Center ("PTT RTC")	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTT RTC's registered and paid-up capital. 	PTTGL Investment Limited (PTTGLI), the subsidiary of PTTEP, signed a loan contract with PTT RTC under the following conditions: <ul style="list-style-type: none"> Contract period of 6 years and 10 months Expiration date is July 2, 2024 Interest rates refer to the LIBOR plus Interest Rate Spread which is in line with market rates. Loans outstanding Interest expenses 	46.38 0.49	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations with the financial support of all PTTGLI's shareholders proportionately.
Global Power Synergy Company Limited (GPSC)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 30.10% of GPSC's registered and paid-up capital. Co-director is Ms. Panada Kanokwat 	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.30 0.0031	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Global LNG Company Limited (PTT GL)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 50% of PTT GL's registered and paid-up capital. PTTEP, PTT GL's major shareholder, holds 50% of PTT GL's registered and paid-up capital. The Company's executives who serve as PTT GL's directors are: <ol style="list-style-type: none"> Mr. Somporn Vongyuthipomchai Mr. Montri Rawanchaikul 	<ul style="list-style-type: none"> Income from service charges for management's driver Income from meeting room rental Income from the Company's personnel seconded to PTT GL Income from financial services provided by PTTEP Treasury Center Company Limited Income from accounting, tax and financial operations services provided by PTTEP Income from subleasing office area of approximately 320 sq.m. Income from providing utilities and other services Total income Accounts receivable 	0.23 0.06	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
PTTGL Investment Limited (PTTGLI)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 50% of PTT GL's registered and paid-up capital. PTTEP, PTT GL's major shareholder, holds 50% of PTT GL's registered and paid-up capital. PTT GL, the major shareholder of PTTGLI, holds 100% of PTTGLI's registered and paid-up capital. 	The Company's subsidiary signed a loan contract with PTTGLI under the following conditions: <ul style="list-style-type: none"> Contract period of 6 years and 10 months Expiration date is July 2, 2024 Interest rates refer to the LIBOR plus Interest Rate Spread which is in line with market rates. 	Loans outstanding 92.75 Interest income 0.99	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations with the financial support of all PTT GL's shareholders proportionately.
		The Company and subsidiaries signed the contracts with PTTGLI for the following services: <ul style="list-style-type: none"> Financial services provided by PTTEP Treasury Center Company Limited Accounting, Tax and Financial Operations services provided by PTTEP 	Total income 0.04 Accounts receivable 0.01	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT LNG Company Limited (PTTLNG)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTTLNG's registered and paid-up capital. 	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 	0.07	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
PTT Green Energy Pte. Ltd. (PTTGE)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTT Green Energy's registered and paid-up capital. 	Income from office building rental and services provided by EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 	0.0003	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis for non-related persons or operations.
Mrs. Suchitra Suwansinpan	<ul style="list-style-type: none"> Management of PTTEP 	Income from asset disposal (car) <ul style="list-style-type: none"> Total income 	0.03	<ul style="list-style-type: none"> Condition and price setting follows normal business operations at an arm's length basis 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, 2017 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 (Board) prior to execution.

12.3 Measures and Procedure of Connected Transactions

The Board reviews any 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 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 procedure of the conflict.

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 the making of any of the decisions or approvals related to the transaction. The transaction, in this case, also remains to be treated under an 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 be treated equally and in their interests, in accordance with 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 these 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.