

7. Securities and Shareholders

7.1 Capital Structure

As of December 31, 2019, PTTEP's capital structure consisted of USD 3,442 million in interest-bearing debt and USD 11,841 million in shareholders' equity, amounting to an interest-bearing-debt-to-shareholders' equity ratio of 0.29x. Details of the capital structure are as follows:

7.1.1 Securities

Capital Stock

As of December 31, 2019, 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 BBB+ from reputable international credit-rating agencies, namely, Moody's Investors Service ("Moody's"), Standard & Poor's Ratings Services ("Standard & Poor's"), and Fitch Ratings ("Fitch") 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 credit-rating agency in Thailand.

In 2019, PTTEP Group redeemed, issued, offered and sold debentures per the following details:

- On May 29, 2019, the Company redeemed in full, its THB 5,000 million unsecured and unsubordinated debentures on the maturity date, and on June 6, 2019 the company redeemed in full, its THB 8,200 million unsecured and unsubordinated debentures on the maturity date.
- On June 18, 2019, the Company redeemed in full on the first call date, its USD 145 million subordinated capital debentures issued on June 18, 2014, and PTTEP Treasury Centre Company Limited (PTTEP TC), a wholly-owned subsidiary of the Company, redeemed in full on the first call date, its USD 355 million subordinated capital debentures issued on July 26, 2017. No subordinated capital debentures were issued during the second quarter of 2019.
- On June 19, 2019, PTTEP TC issued Senior Guaranteed Debentures to institutional and high net-worth investors for a total amount of THB 15,000 million. The debentures, due in 2022, have a tenor of 3-years, bear a fixed interest rate of 2.26% per annum and are fully guaranteed by the company. The proceeds from the debentures issuance were used for working capital and refinancing of senior debt.
- On December 6, 2019, PTTEP TC carried out a liability management exercise on its USD 500 million subordinated perpetual capital debentures issued on July 17, 2017, repurchasing USD 469 million of these debentures, and leaving USD 31 million outstanding. Concurrently, PTTEP TC issued 40-year senior guaranteed debentures to foreign institutional investors for a total amount of USD 650 million, which mature on December 6, 2059, have a fixed coupon of 3.903% per annum, payable semi-annually, and are fully guaranteed by the Company. PTTEP TC subsequently exercised its rights to redeem all of the remaining subordinated perpetual capital debentures in January 2020 at a redemption price in accordance with the terms, conditions and methods prescribed in the bond indenture.

As of December 31, 2019, PTTEP had the following outstanding debentures;

(1) Details of THB debentures (total outstanding amount: THB 26,400 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit: THB million)	Rate per Annum	Credit Rating ¹
						TRIS
THB debentures, unsecured, unsubordinated	June 6, 2014	June 6, 2029	15 years	11,400 ²	Fixed 4.82%, coupon payment: semi-annually	AAA
	June 19, 2019	June 19, 2022	3 years	15,000 ³	Fixed 2.26%, coupon payment: semi-annually	AAA

¹ The debentures were last rated by TRIS on March 13, 2019 on the company, May 24, 2019 on PTTEP TC.

² 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.

³ Issued by PTTEP TC, and fully guaranteed by PTTEP; and in 2019 PTTEP entered into a CCS to swap THB 15,000 million for USD 480 million with an interest rate of 2.79% per annum.

(2) Details of USD debentures (total outstanding amount: USD 1,840 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit: USD million)	Rate per annum	Credit Rating ¹		
						Moody's	Standard & Poor's	Fitch
USD debentures, unsecured, unsubordinated	April 5, 2011	April 5, 2021	10 years	700 ²	Fixed 5.692%, coupon payment: semi-annually	Baa1	BBB+	BBB+
	June 12, 2012	June 12, 2042	30 years	490 ³	Fixed 6.350%, coupon payment: semi-annually	Baa1	BBB+	BBB+
	December 6, 2019	December 6, 2059	40 years	650 ⁴	Fixed 3.903%, coupon payment: semi-annually	Baa1	NA	BBB+

¹ The latest credit ratings were issued by Moody's on March 28, 2019, Standard & Poor's on October 9, 2019 and Fitch on May 28, 2019.

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

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

⁴ Issued by PTTEP TC, and fully guaranteed by PTTEP.

(3) Details of THB Hybrid Bonds (total outstanding amount: 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 13, 2019.

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 31 million)

Debt Security	Issued Date	Maturity Date	Tenor	Outstanding (Unit: USD Million)	Rate per annum	Credit Rating ¹	
						Moody's	Standard & Poor's
USD Hybrid Bonds, subordinated perpetual capital securities with the issuer's right to defer the distribution at its sole discretion	July 17, 2017	No maturity date <ul style="list-style-type: none"> • payment upon liquidation or • early redemption subject to terms & conditions 	Perpetual	31 ^{2,3}	<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+

¹ The latest credit ratings were issued by Moody's on March 28, 2019 and Standard & Poor's on October 9, 2019.

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

³ PTTEP TC was the issuer and repurchased of USD 469 million in 2019, leaving the principal amount of USD 31 million from USD 500 million.

7.1.2 Number of Shares and the Effects of NVDR Issuance on Shareholders' Voting Rights

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 treated as listed securities (Automatic Listing) on the SET. The objective of NVDRs is to promote trading activities 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 NVDRs are designed mainly to ease foreign investment barriers; the SET does not prohibit Thai investors from investing in the instrument.

As of February 14, 2020, as published on the official website of the SET, PTTEP had a total of 275,585,608 NVDRs outstanding, representing 6.94 % of the Company's total issued and paid-up capital of 3,969,985,400 shares.

7.2 Shareholders

7.2.1 Major Shareholders

As of February 14, 2020, top 10 shareholders of PTTEP were as follows:

Rank	List of Major Shareholders	Number of Shares	% of Total Number of Shares
1.	PTT PUBLIC COMPANY LIMITED ¹	2,572,020,489	64.79
2.	THAI NVDR COMPANY LIMITED	275,585,608	6.94
3.	STATE STREET EUROPE LIMITED	77,630,594	1.96
4.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	69,123,299	1.74
5.	THE BANK OF NEW YORK MELLON	42,279,734	1.06
6.	SOCIAL SECURITY OFFICE	41,893,277	1.06
7.	EGAT SAVING AND CREDIT COOPERATIVE LIMITED	28,131,100	0.71
8.	THE BANK OF NEW YORK (NOMINEES) LIMITED	24,603,351	0.62
9.	SIAM MANAGEMENT HOLDING COMPANY LIMITED (A wholly owned subsidiary of PTT)	19,840,000	0.50
10.	SE ASIA (TYPE B) NOMINEES LLC	15,147,300	0.38
	Total number of shares held by major shareholders	3,166,254,752	79.76
	Total fully-paid capital as of February 14, 2020	3,969,985,400	100

Remarks: ¹The Ministry of Finance, Thailand, is the major shareholder of PTT Public Company Limited.

7.2.2 NVDR Holders*

Rank	NVDR holders (as of February 14, 2020)	Number of NVDR issues	% of total outstanding shares in underlying stock
1.	STATE STREET BANK AND TRUST COMPANY	38,328,863	0.97
2.	STATE STREET EUROPE LIMITED	36,596,852	0.92
3.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	27,802,494	0.70
	Total shares	102,728,209	2.59

Source: <https://www.set.or.th/set/companyholder.do?symbol=PTTEP-R&language=en&country=US>

7.2.3 Major Shareholder with Significant Influence over PTTEP's Policies or Operations

PTT, a major shareholder of PTTEP, takes part in determining PTTEP's policy and operations under the Board's approval. As of December 31, 2019, 2 out of the Company's 15 directors were either directors or executives 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 payment of not less than 30% of the net income after tax. The Board of Directors, as appropriate, may also resolve to pay interim dividends and subsequently inform the shareholders accordingly in the next shareholders' meeting. For the Company's subsidiaries, the dividend policy is subject to cash flow, future investment plans, and other factors necessary for the continuity of their operations, and must be in compliance with related laws and regulations.

However, under the terms and conditions therein, the Company will not declare or make any dividend payments if the Company defers an interest payment or has deferred interest payments outstanding on the subordinated perpetual capital debentures No. 1/2555 of THB 5,000 million, issued in June 2012, and outstanding subordinated perpetual capital debentures of USD 31 million, issued by PTTEP Treasury Center Company Limited (PTTEP TC) in July 2017 and guaranteed by PTTEP.

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

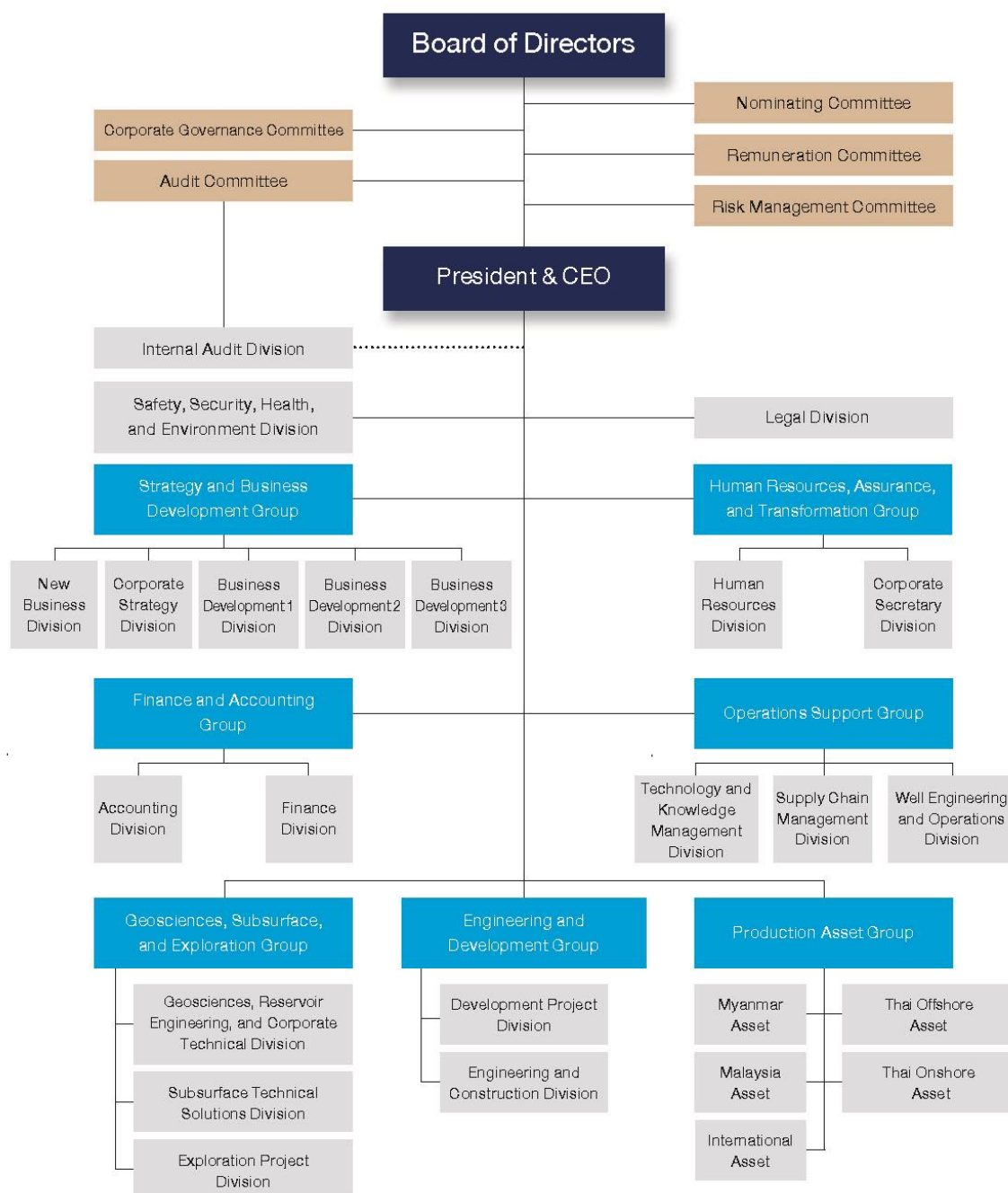
Year	2015	2016	2017	2018	2019
Earnings per Share (THB)	-8.24	2.76	4.54	8.69	11.72
Dividend per Share (THB)	3.00	3.25	4.25	5.00	6.00
Dividend Payout Ratio	N/A**	98%	90%	55%	49%

* 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, 2020



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 an appropriate mix of skills suitable for the E&P industry. In 2019, PTTEP reviewed the Board's Skill Mix to reflect company's strategic direction by classifying it to 12 subject matters under two categories.

(1) Core Skills: basic expertise which is necessary for directors to govern the Company, namely business judgment, management skills & corporate governance, and business strategy.

(2) Specific Skills: specific expertise or experience which is useful for 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.

Directors must not be over 70 years old and shall possess the qualifications according to the Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE), Public Limited Companies Act and Securities and Exchange Act as well as rules and regulations of the Securities Exchange Commission (SEC), the Capital Market Supervisory Board (CMSB), the Stock Exchange of Thailand (SET), and relevant resolutions of the Cabinet. Directors shall also commit and dedicate their time to fully perform their duties and responsibilities. Directors, for example, would be regarded as unqualified if absent from Board meetings for more than three consecutive times without 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 comprise independent directors numbering not less than half of the incumbent members. As of December 31, 2019, the Board consisted of 15 directors including:

- 14 non-executive directors (93.33% of total members)
- 1 executive director: the President and Chief Executive Officer (CEO)
- 8 independent directors (53.33% of total members, a ratio which is not less than half of the incumbent members as required by the Company's CG&BE, and more than the number required by law)
- 2 female directors.

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

The names, biographies, qualifications, experiences, and numbers of shares 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 Company 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 their roles and responsibilities, and required to perform them strictly in line with those stipulated by laws, objectives, Articles of Association of PTTEP, and resolutions of the shareholders' and Board meetings. The scope of the authority and responsibilities of the Board are 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 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 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 an 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 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 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 work processes to ensure appropriate checks and balances for efficient internal control. In such case, reports of vested interests of oneself and/or those of related parties 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, standardized and reliable financial reporting, an efficient internal control system, and 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 fairly and equitably.
- (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 matters which can significantly affect the financial position 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 President and Chief Executive Officer (CEO), as well as to evaluate performance and determine his or her remuneration. The Board is also responsible for ensuring that the Company has an effective performance evaluation process for 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 information and seek advice and services in regard to the Company's business operation from the management. In addition, if deemed necessary and appropriate, directors may seek advice from external and independent advisors at the Company's expense.

8.1.3 Sub-Committees

8.1.3.1 Corporate Governance Committee

The Corporate Governance Committee has the duties and responsibilities according to its charter as follows:

(1) To establish Good Corporate Governance and Business Ethics of 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 policies and 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, and review shareholders' proposals on corporate governance before proposing them to the Board for approval and corresponding them with the shareholders.

(4) To ensure that PTTEP carries 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, the majority of whom must be independent directors. The Company Secretary serves as the Committee's secretary. As of December 31, 2019, the Committee comprised three members as follows:

Admiral Tanarat Ubol	Chairman of the Committee and Vice Chairman of the Independent Directors Committee
Mr. Pitipan Tepartimargorn	Member
Mrs. Angkarat Priebjrivat	Member and Independent Director

Mrs. Angkarat Priebjrivat was appointed as a member of the Committee in place of Ms. Panada Kanokwat on October 1, 2019.

According to its charter, the Committee must meet at least four times a year. In 2019, the Committee held five meetings, attended by all incumbent directors. The Committee disclosed its annual performance in the Corporate Governance Committee Report for 2019.

8.1.3.2 Audit Committee

The Audit Committee has the duties and responsibilities according to its charter as follows:

- (1) To establish the audit committee charter compatible with the Company's scope of work and responsibilities. The charter must be approved by the Board and revised at least once a year.
- (2) To review the Company's financial reports with the external auditor on a quarterly basis to ensure accuracy, credibility and adequacy.
- (3) To ensure that the Company's activities are performed in compliance with the Securities and Exchange law, SET requirements, other laws, regulations, procedures, cabinet resolutions related to the business, including the Company's rules and regulations.
- (4) To review connected transactions or transactions with potential conflicts of interest to ensure that these transactions are complied with the laws and SET's regulations and that they are reasonable as well as in the best interests of the Company, and review transactions with potential fraud which may affect the Company's operations.
- (5) To review the efficiency and effectiveness of internal control, risk management, and governance processes.
- (6) To oversee and monitor the internal audit process to ensure that the process is appropriate and efficient as well as ensure independence of the Internal Audit Division in order to enhance internal audit performance.
- (7) To evaluate Internal Audit Division performance including audit problems and difficulties at least once a fiscal year and report the results and its suggestions for improving the performance to the Board.
- (8) To consider, select and propose the appointment including removal of an external auditor, and to propose the auditor's remuneration to the Board as well as attend a meeting with the external auditor from the State Audit Office of the Kingdom of Thailand (SAO) or the external auditor endorsed by SAO at least once a year, in the absence of the management, to review audit findings and other issues, and recommend reviews or audit of any items, if necessary.
- (9) To endorse appointment, transfer, removal, promotion, and performance appraisal of the Head of the Internal Audit Division by seeking comments from the President and Chief Executive Officer. The Audit Committee will appoint an investigation committee to investigate the case that the Head of the Internal Audit division is suspected of

noncompliance with laws, the Company's rules and regulations, and the Good Corporate Governance and Business Ethics of PTTEP Group.

(10) To approve the risk-based internal audit plan.

(11) To endorse the budget, division structure and manpower of the Internal Audit Division for the management to propose to the Board.

(12) To approve the charter of the Internal Audit Division.

(13) To approve the Conflict of Interest Declaration Form when the Head of the Internal Audit Division has to personally conduct audit field work.

(14) To endorse the results of audits which were approved in the annual audit plan as well as special audit requests.

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

(16) To review the accuracy of self-assessment and related documents in regard to anti-corruption measures in reference to Thailand's Private Sector Collective Action Coalition Against Corruption (CAC).

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

(18) To report the Audit Committee's performance on internal audit to the Board at least on a quarterly basis, within 60 days from the end of each quarter, except for the fourth-quarter report, which is required as an annual report. Such reports must be submitted to the regulating ministry of the Company's parent company and the Ministry of Finance within 90 days from the end of the accounting year for acknowledgment. The committee's annual report must also be disclosed 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, 2019, the Committee comprised four members, and all members were capable with knowledge, expertise, and experience in auditing financial statements. One of the members, Mrs. Angkarat Priebjivat, holds a degree in accounting. Details are as follows:

Director's Name	Position	Financial Statements Audit Experience
Mr. Achporn Charuchinda	Chairman of the Audit Committee	<ul style="list-style-type: none"> 2013 - 2017 Board Member, The Bank of Thailand 2013 - 2016 Director, Thai Smile Airways Co., Ltd. 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

Director's Name	Position	Financial Statements Audit Experience
Mr. Sethaput Suthiwart-Narueput	Member of the Audit Committee	<ul style="list-style-type: none"> • 2017 - Present Member of the Board of Directors, The Bank of Thailand Board • 2016 - Present Director, Osotspa Plc. • 2011 - 2012 Member of the Audit Committee, TMB Bank Plc. <p>Experiences in financial statements analysis for investment:</p> <p>(1) 2008 - 2009 President, SCB Asset Management Co., Ltd.</p> <p>(2) 2007 - 2008 Managing Director, Head of Research, SCB Securities Co., Ltd.</p>
Mr. Dechapiwat Na Songkhla	Member of the Audit Committee	<ul style="list-style-type: none"> • 2017 - Present Director of the Budget Bureau • 2015 - 2017 Deputy Director of the Budget Bureau • 2012 - 2015 Senior Advisor of the Budget Bureau • 2010 - 2012 Director of the National Security Budget Preparation Office 1 • 2009 - 2010 Director of the Special Public Organizations and State-Owned Enterprises Budget Preparation Office • 2008 - 2009 Budget Analyst, Expert Level, Budget Bureau
Mrs. Angkarat Priebjrivat	Member of the Audit Committee	<ul style="list-style-type: none"> • 2018 – Present Member of the Audit Committee, TOT Corporation Plc. • 2018 – Present Member of the Technical Advisory Committee for Financial Reporting Standards, Office of the Securities and Exchange Commission • 2018 – Sep 2019 Member of the Finance and Accounting Subcommittee, State Railway of Thailand • 2016 – Present Member of the Audit Committee, TSFC Securities Plc. • 2013 – Present Chairman of the Audit Committee, TISCO Bank Plc. • 2012 – Present Member of the Audit Committee, Thai Public Broadcasting Service (Thai PBS) • 2008 – Present Chairman of the Audit Committee, TISCO Financial Group Plc. • 2008 – Present Chairman of the Audit Committee, COL Plc. • 2014 – 2018 Member of the Audit Committee, Tourism Authority of Thailand

Mrs. Angkarat Priebjivat was appointed as a member of the Committee in place of Ms. Panada Kanokwat on October 1, 2019.

According to the Audit Committee Charter, the Committee must hold at least one meeting on a quarterly basis. In 2019, the Committee held 15 meetings which included a meeting that was conducted together with the Risk Management Committee. The Committee also considered the reviewed financial statements for the second and third quarter without physical meeting, since the financial statements had not changed from the unreviewed version. The majority of incumbent directors attended all meetings. The Committee disclosed its annual performance in the Audit Committee Report for 2019.

8.1.3.3 Nominating Committee

The 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 President and Chief Executive Officer (CEO) when there is a vacancy or to replace those whose terms 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's 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 and propose the opinions to PTT's Board of Directors for acknowledgment and to supplement the nomination selection decision before submission to the Board for consideration and to the Annual General Shareholders' Meeting (as applicable).

(4) To consider the annual Board Performance Target and Performance Agreement of the CEO, 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.

(5) To consider and propose qualified directors to be members or the chairmen of sub-committees when there are vacancies as well as to propose restructuring of the sub-committees as deemed appropriate.

(6) To consider organization restructuring to support corporate growth and changes in the business environment.

(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, and the Chairman and the majority of the members must be independent directors. The Company Secretary serves as the Committee's secretary. As of December 31, 2019, the Committee comprised four members with three independent directors as follows:

Mr. Bundhit Eua-arporn	Chairman and Independent Director
Major General Nimit Suwannarat	Member and Independent Director
Mr. Sethaput Suthiwart-Narueput	Member and Independent Director
Mr. Pitipan Teparimargorn	Member

Mr. Pitipan Teparimargorn was appointed as a member of the Committee on October 30, 2019.

According to its charter, the Committee must meet at least two times a year. In 2019, the Committee held eight meetings, and the majority of incumbent directors attended all meetings. The Committee disclosed its annual performance in the Nominating Committee Report for 2019.

8.1.3.4 Remuneration Committee

The Remuneration Committee has the duties and responsibilities according to its charter as follows:

(1) To consider the remuneration of the Board and sub-committees prior to proposing it at the Annual General Shareholders' Meeting for approval, using fair and reasonable criteria or principles, while ensuring that the remuneration is in line with the individuals' performances, the Company's performance, industry practices, as well as the scopes of duties and responsibilities.

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

(3) To evaluate performance of the Remuneration Committee and report it 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, and the Chairman and the majority of the members must be independent directors. The Company Secretary serves as the Committee's secretary. As of December 31, 2019, the Committee comprised three members, two of whom 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. Patchara Anuntasilpa	Member

According to its charter, the Committee must meet at least two times a year. In 2019, the Committee held four meetings, and all incumbent directors attended all meetings. The Committee disclosed its annual performance in the Remuneration Committee Report for 2019.

8.1.3.5 Risk Management Committee

The Risk Management Committee has the duties and responsibilities according to its charter as follows:

- (1) To define PTTEP's risk management policy and framework, and provide recommendations on corporate risk management to the Board and Management.
- (2) To consider risk appetite prior to proposing it to the Board for approval as well as to determine risk metrics and limit and regularly monitor the results.
- (3) To oversee and support the implementation of risk management to achieve objectives at both corporate and asset/project levels (Enterprise-Wide Risk Management), with a focus on enhancing the level of risk awareness in order to support the decision-making in using appropriate resources and risk responses.
- (4) To consider the entity's corporate risks in line with the corporate direction of the businesses PTTEP invests in, including E&P, related and other businesses, as well as to recommend mitigation strategy to manage the risks to keep them within the acceptable levels according to clause (2) and to continuously monitor, assess and improve the mitigation strategy in response to the changing business environment.
- (5) To support the risk management function in assessing key risk factors and provide advice on other potential risks facing the Company for a continuous and efficient risk management comparable to other leading companies as well as to directly assign tasks related to PTTEP's risk management to the risk management function.
- (6) To report risk management results to the Board on a regular basis. For any matter with a significant impact on PTTEP, it shall be reported immediately to the Board for consideration.
- (7) To disclose the Committee's performance in the Company's annual report.
- (8) To regularly review and update its own charter to ensure its appropriateness.
- (9) To perform other duties relating to PTTEP'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. The Head of the Risk Management Unit acts as the Committee's secretary. As of December 31, 2019, the Committee comprised six members, two of which were independent directors as follows:

Mr. Sethaput Suthiwart-Narueput	Chairman and Independent Director
Major General Nimit Suwannarat	Member and Independent Director
Mr. Pitipan Teparitarmagorn	Member
Mr. Twarath Sutabutr	Member
Ms. Penchun Jarikasem	Member
Mr. Atikom Terbsiri	Member

Mr. Atikom Terbsiri assumed the membership in place of Mr. Wirat Uanarumit on October 1, 2019.

According to its charter, the Committee must hold at least four meetings a year. In 2019, the Committee held 14 meetings, which included one meeting that was conducted together with the Audit Committee. The majority of incumbent directors attended all meetings. The Committee disclosed its annual performance in the Risk Management Committee Report for 2019.

8.1.3.6 Independent Directors Committee

The Independent Directors Committee has the duties and responsibilities according to its charter as follows:

- (1) To propose to the Board and/or the President and Chief Executive Officer (as applicable) 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 the benefit 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 independent directors according to the CG&BE are considered independent directors without any appointment from the Board of Directors. As of December 31, 2019, the Committee comprised eight members as follows:

Mr. Prajya Phinyawat	Chairman
Admiral Tanarat Ubol	Vice Chairman
Mr. Achporn Charuchinda	Member
Major General Nimit Suwannarat	Member
Mr. Sethaput Suthiwart-Narueput	Member
Mr. Bundhit Eua-Arporn	Member
Mr. Dechapiwat Na Songkhla	Member
Mrs. Angkarat Priebjrivat	Member

According to its charter, the Committee must meet at least four times a year with the Company Secretary serves as the Committee's secretary. In 2019, the Committee held four meetings, and the majority of incumbent directors attended all 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 2019.

PTTEP's Definition of Independent Directors

The Good Corporate Governance of PTTEP has defined the qualifications of the Company's independent directors more strictly than those defined by the Capital Market Supervisory Board, specifically in the area of shareholding as clarified in (1) below. The definition of an independent director, whose qualifications are annually reviewed, is 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, sister subsidiary companies, major shareholders, or controlling persons, unless the foregoing status has ended for not less than two years prior, 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 the 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 person 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 a 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 prior.

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, guarantees, collaterals, 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 prior.

(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 prior.

(7) Not undertaking any businesses in the same nature and in competition with the business of PTTEP or its 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 with that of the Company or our subsidiaries.

(8) Not being a director appointed as a 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 deprive him or her of the ability to express independent opinions in regard to PTTEP's business operations.

An independent director with the qualifications under (1) to (9), may be assigned by the Board to take part in the business decision of PTTEP, our parent company, subsidiary companies, associated companies, sister 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 in line with the Notification of the Securities and Exchange Commission RE: Determination of Definitions in Notifications relating to Issuance and Offer for Sale of Securities.

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

– None –

8.1.4 Performance Appraisal of the Board

The Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE) stipulates that there should be an annual performance appraisal of the Board derived from the Board Performance Target and the Performance Appraisal Form. This allowed the Company's directors to review their performance, key issues, and obstacles which they had faced during the year as well as to enhance their directorship efficiency.

The 4 types of Board's performance appraisal comprises:

(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 and relationship, (4) Board meetings, (5) Board structure and qualifications, and (6) training and self-development.

(3) Appraisal of the sub-committees, which includes questions on each of the sub-committee's performance efficiency according to the roles and responsibilities stated in their individual charters.

(4) Appraisal of the Chairman, which includes questions on the efficiency of the Chairman's performance according to the roles and responsibilities of the Chairman as stated in the SEC's Corporate Governance Code for Listed Companies 2017 (CG Code) and the CG&BE of 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 agenda for the Board's meetings, and enhancing relationship between the Board and the management.

In 2019, Board Performance Target was established, encompassing three aspects, namely the Company's performance results, the Corporate Governance assessment results and directors' meeting attendances. The performance appraisal form was also reviewed according to the SEC's CG Code. The 2019 performance appraisal form included four parts as aforementioned with a scoring scale of 1 to 3 (1=need improvement, 2=meet standard, and 3=good). The scoring scale of the appraisal of the entire Board was adjusted by increasing the scoring scale of the two topics on corporate policies and strategic planning and Board performance from 20% to 30% and decreased the remaining topics to 10% to reflect performance of the Board with a focus on setting corporate policies and strategic planning, and roles and responsibilities as directors and members of sub-committees.

The questions were also adjusted as follows: 1) Training and Self-development Appraisal – adjusted a question to cover broader aspects of learning and self-development, 2) The Corporate Governance Committee Appraisal – added a question on providing constructive suggestions to promote the PTTEP Group's Corporate Governance and Sustainable Development and 3) The Risk Management Committee Appraisal - adjusted a question to focus on monitoring the performance of new assets to ensure its achievements as planned.

Details of the 2019 Board performance appraisal can be summarized as follows:

(1) The self-appraisal average score was 2.88, increasing from 2.84 in 2018 (total score = 3). The individual cross-appraisal by other directors average score was 2.91, decreasing from 2.92 in 2018 (total score = 3).

(2) The average scores from the self-appraisal of the entire Board was 2.93, increased from 2.92 in 2018 (total score=3).

In addition, the 2019 self-appraisal of the entire Board included an assessment part on the relationship between the Board and management. This was also evaluated by the same set of questions to further develop their relationships and to promote two-way communication.

(3) The 2019 appraisal scores of the five sub-committees were within the "good" range as follows:

(3.1) The appraisal score of the Audit Committee was 3.00, same as 2018 (total score = 3).

(3.2) The appraisal score of the Remuneration Committee was 2.92, same as 2018 (total score=3).

(3.3) The appraisal score of the Nominating Committee was 2.97, increasing from 2.94 in 2018 (total score=3).

(3.4) The appraisal score of the Corporate Governance Committee was 2.89, increasing from 2.87 in 2018 (total score=3).

(3.5) The appraisal score of the Risk Management Committee was 3.00, increasing from 2.98 in 2018 (total score=3).

(4) The 2019 appraisal of the Chairman by the Board was 2.98, same as 2018 (total score=3).

PTTEP reports the scores to the Board for acknowledgement. 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 Board meetings, review of human resource management, and succession plan development for critical positions. The directors will also put more emphasis on self-development by attending applicable training and studying business trends and technologies from seminars and business visits in order to enhance the Board's performance efficiency and initiation to further promote the Company's long-term sustainable growth.

8.1.5 Performance Appraisal of the President and Chief Executive Officer

The Board assigned the Remuneration Committee to be responsible for conducting the President and Chief Executive Officer (CEO)'s performance appraisal according to the CEO's Performance Agreement as determined by the Nominating Committee. The appraisal was measured by the Company's KPIs. The appraisal outcome must also be approved by the Board to ensure checks and balances as well as to allow the Company to monitor the performance of the CEO. In addition, it helps promoting the Company's Good Corporate Governance and greater operational efficiency in the future.

8.1.6 The Board's Meetings

The Board's monthly meetings and agenda are scheduled and set in advance each year by the Board itself. There are normally 12 meetings annually on the last Thursday of every month. The Board members have been informed of the 2020 meeting schedule since September 2019. Meetings related to the Company's strategic planning, to which the Board has greatly committed its time and priority, are commonly held off-site, whereas additional meetings will be held when deemed appropriate. In 2019, there were 20 Board meetings. The Board usually receives meeting invitations from the Company Secretary, along with agenda and important documents related to the meetings, for review at least for five working days prior to the meeting date, except in those urgent cases with insufficient information. In addition, the meeting documents are delivered to the directors through dedicated software to facilitate and speed up their reviews as well as to promote a paperless process.

Generally, the Company's Chairman, the CEO, the Secretary to the Board of Directors, and the Company Secretary are responsible for agenda proposals for Board meetings; however, in practice, the Company's directors are also eligible to make the proposals.

The Board's meeting agenda items are clearly classified, including monthly items of performance review as well as budget execution. The standing agenda items are as follows:

Month	Standing Agenda Items
January	<ul style="list-style-type: none"> Annual General Shareholders' Meeting Documents Preparation, namely:

Month	Standing Agenda Items
	(1) Unaudited Annual Financial Statements (2) Dividend Payment (3) Auditor Appointment and Auditor's Fees (4) Board of Directors' and Sub-committees' Remuneration ● PTTEP's Board Performance Target
February	● Annual Registration Statement and Annual Report
March	● Annual General Shareholders' Meeting Preparation
April	● Appointment of Sub-committee Members ● Assessment of the Annual General Shareholders' Meeting
May	● Strategic Direction and Annual Strategic Planning
July	● Interim Dividend Payment (if any)
September	● Board Meeting Schedule
November	● Business Plan, 5-Year Investment Plan, and Annual Budgeting ● Corporate Key Performance Indicators (KPIs) and CEO's Performance Agreement ● Annual Procurement Plan
December	● Annual Performance Appraisal of the Board of Directors, Sub-committees, and the Chairman ● Corporate Performance and Budget for Employees' Merit Increase and Annual Special Payment

During each of the meetings, which usually lasts approximately three to four hours, the Chairman allocates an adequate period of time to each agenda to provide an opportunity for directors to express their opinions independently. The Company's executives are also invited to attend the meetings to provide necessary information as well as to acknowledge the policies and issues being raised. The Secretary to the Board of Directors and the Company Secretary administer and provide advice to the Board on related rules and regulations for proper practices, to take minutes of the meetings, as well as to keep complete filing of all the necessary meeting information and documents.

The Board's resolutions are based on a majority vote, where one director has one vote. Should 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 on the particular issue. In the circumstance where the voting is tied, the Chairman of the meeting is entitled to cast the decisive vote.

The issues which require an approval of no less than three-fourth of the total vote of the Company's eligible shareholders attending the meeting are as follows:

- (1) The sale or transfer of whole or important parts of business of the Company to other persons.
- (2) The purchase or acceptance of transfer of businesses of other public limited companies or private companies to the Company.

(3) The making, amending or concealing of contracts relating to the leasing out of the businesses of the Company, wholly or certain important parts, the assignment to any other persons to manage the businesses of the Company or the amalgamation of the businesses with other persons with an objectives towards profit and loss sharing.

(4) To amend the Memorandum or Articles of Association

(5) To increase or reduce the registered capital, issue debentures, amalgamate and dissolve the Company.

(6) In case where the Company or one of the subsidiaries agrees to enter connected transactions, or disposition or acquisition of the Company's or the subsidiary's assets, as determined by the Securities and Exchange law and Notifications in relation to such transaction.

The minutes of the Board's meetings cover all significant matters. For issues seeking approval, all resolutions are unanimous. The names of the persons attending or absent from the meetings, names of the meetings' attendants, and names of those who state his or her opinions, questions, answers, or clarifications are recorded in detail, while the minutes are systematically filed and kept safety. All directors of the Board usually attend all of the meetings unless an absence is deemed necessary, in which case the director in question must provide the Board's Chairman with an application for leave, which must be communicated to all of the Board members prior to the meeting and will be subsequently recorded in the report of individual directors' meeting attendance.

In 2019, non-executive directors held two meetings in the absence of the management. The purpose of the meetings was to discuss and clarify ongoing issues from corporate performance of 2019. The results were summarized for and acknowledged by the CEO for further evaluation.

8.1.7 Meeting Attendance of PTTEP Directors in 2019

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 2019
	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:
	20 Times	4 Times	2 Times	5 Times	15 Times	4 Times	8 Times	14 Times	1 Time
1. Mr. Prajya Phinyawat	20/20	4/4	2/2	-	-	-	-	-	1/1
2. Mr. Achporn Charuchinda	20/20	4/4	2/2	-	15/15	4/4	-	-	1/1
3. Admiral Tanarat Ubol	20/20	4/4	2/2	5/5	-	4/4	-	-	1/1
4. Mr. Sethaput Suthiwart-Narueput	19/20	4/4	2/2	-	14/15	-	8/8	14/14	1/1
5. Major General Nimit Suwannarat	13/20	4/4	1/2	-	-	-	8/8	12/14	1/1
6. Mr. Twarath Sutabutr	18/20	-	2/2	-	-	-	-	13/14	1/1
7. Mr. Pitipan Tepartimargorn	20/20	-	2/2	5/5	-	-	1/1	14/14	1/1
8. Mr. Bundhit Eua-arporn	18/20	3/4	2/2	-	-	-	8/8	-	1/1
9. Ms. Penchun Jarikasem	20/20	-	2/2	-	-	-	-	13/14	1/1
10. Mr. Chansin Treenuchagron	15/20	-	2/2	-	-	-	-	-	1/1

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 2019
	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:	Total number of meetings:
	20 Times	4 Times	2 Times	5 Times	15 Times	4 Times	8 Times	14 Times	1 Time
11. Mr. Patchara Anuntasilpa	19/20	-	2/2	-	-	3/4	-	-	1/1
12. Mr. Dechapiwat Na Songkhla ¹	11/19	3/4	1/2	-	9/15	-	-	-	1/1
13. Mr. Atikom Terbsiri ²	4/4	-	-	-	-	-	-	3/4	-
14. Mrs. Angkarat Priebjivat ³	4/4	2/2	-	2/2	4/4	-	-	-	-
15. Mr. Phongsthorn Thavisin	20/20	-	-	-	-	-	-	-	1/1
Former Directors Retiring by Rotation or Resigning During 2019									
1. Mr. Wirat Uanarumit ⁴	15/15	-	2/2	-	-	-	-	8/9	1/1
2. Ms. Panada Kanokwat ⁵	11/11	2/2	1/1	3/3	8/8	-	-	-	1/1

¹ Mr. Dechapiwat Na Songkhla was elected as a director and appointed as a member of Audit Committee on January 16, 2019.

² Mr. Atikom Terbsiri was elected as a director and appointed as a member of Risk Management Committee on October 1, 2019.

³ Mrs. Angkarat Priebjivat was elected as a director and appointed as a member of Audit Committee and Corporate Governance Committee on October 1, 2019.

⁴ Mr. Wirat Uanarumit resigned from the positions of director and member of Risk Management Committee on September 1, 2019, and the number of ordinary shares indicated above was the information as at the effective resignation date.

⁵ Ms. Panada Kanokwat resigned from the positions of independent director, member of Audit Committee and Corporate Governance Committee on July 7, 2019, and the number of ordinary shares indicated above was the information as at the effective resignation date.

8.1.8 Number of PTTEP Shares held by the Directors, their Spouse/Cohabiting Couple and Minor Child as of December 31, 2019

Director's Name	Number of Ordinary Shares		
	As of December 31, 2018	As of December 31, 2019	Increase / (Decrease) During the Year
1. Mr. Prajya Phinyawat	15,000	15,000	-
2. Mr. Achporn Charuchinda	-	-	-
3. Admiral Tanarat Ubol	-	-	-
4. Mr. Sethaput Suthiwart-Narueput	-	-	-
5. Major General Nimit Suwannarat	-	-	-
6. Mr. Twarath Sutabutr	-	-	-
7. Mr. Pitipan Tepartimargorn	-	-	-
8. Mr. Bundhit Eua-arporn	-	-	-
Spouse/Cohabiting Couple	4,587	4,587	-
9. Ms. Penchun Jarikasem	10,000	10,000	-
10. Mr. Chansin Treenuchagron	-	-	-
11. Mr. Patchara Anuntasilpa	-	-	-
12. Mr. Dechapiwat Na Songkhla ¹	N/A	-	N/A
13. Mr. Atikom Terbsiri ²	N/A	-	N/A
14. Mrs. Angkarat Priebjrivat ³	N/A	-	N/A
15. Mr. Phongsthorn Thavisin	81,037	101,037	20,000
Former Directors Retiring by Rotation or Resigning During 2019			
1. Mr. Wirat Uanarumit ⁴	-	-	-
2. Ms. Panada Kanokwat ⁵	30,000	30,000	-

¹ Mr. Dechapiwat Na Songkhla was elected as a director and appointed as a member of Audit Committee on January 16, 2019.

² Mr. Atikom Terbsiri was elected as a director and appointed as a member of Risk Management Committee on October 1, 2019.

³ Mrs. Angkarat Priebjrivat was elected as a director and appointed as a member of Audit Committee and Corporate Governance Committee on October 1, 2019.

⁴ Mr. Wirat Uanarumit resigned from the position of director and member of Risk Management Committee on September 1, 2019, and the number of ordinary shares indicated above was the information as at the effective resignation date.

⁵ Ms. Panada Kanokwat resigned from the positions of independent director, member of Audit Committee and Corporate Governance Committee on July 7, 2019, and the number of ordinary shares indicated above was the information as at the effective resignation date.

8.2 The Management

As of January 1, 2020, PTTEP's management, according to the definition of management as defined by the Capital Market Supervisory Board (CMSB), consists of 19 members. Details of their biography, qualification, and past experience are disclosed in the "Information of the Board of Directors, Management, Controlling Persons and Company Secretary" section.

List of Names and Number of Shares held by the Management, their Spouse/Cohabiting Couple and Minor Child.

Name	Number of Ordinary Shares		
	As of January 1, 2019	As of January 1, 2020	Increase/(Decrease) During the Year
1. Mr. Phongsthorn Thavisin ¹	81,037	101,037	20,000
2. Mr. Montri Rawanchaikul ²	19,550	32,050	12,500
3. Mr. Vuthiphon Thuampoomngam ³	60,050	15,650	(44,400)
4. Mr. Kanok Intharawijitr	40,231	41,531	1,300
5. Mr. Chayong Borisuitsawat ⁴	55,096	55,096	-
6. Mr. Sumrid Sumneing	2,500	7,000	4,500
7. Mrs. Suchitra Suwansinpan	106,465	106,465	-
Spouse/Cohabiting Couple	300	300	-
8. Mr. Yongyos Krongphanich	106,445	106,445	-
9. Mrs. Natruedee Khositaphai ⁵	107,457	107,457	-
Spouse/Cohabiting Couple	10,000	10,000	-
10. Mr. Suksant Ongvises ⁶	27,681	27,681	-
11. Ms. Jaroonsri Wankertphon	73,228	73,228	-
12. Mrs. Chanamas Sasnanand	45,411	45,411	-
13. Mrs. Netrsuda Pokkasorn	86,005	66,005	(20,000)
14. Mr. Anutra Bunnag	-	-	-
15. Ms. Pratamaporn Deesrinthum	53,249	53,249	-
16. Mr. Sermsak Satchawannakul	45,215	45,215	-

¹ Appointed as Chief Executive Officer and Acting President, Exploration and Production on October 1, 2018. Since January 1, 2019, the work scope of President, Exploration and Production was combined with Chief Executive Officer and the title was renamed to President and Chief Executive Officer.

² Appointed as Executive Vice President, Production Asset Group effective from January 1, 2020.

³ Appointed as Executive Vice President, Human Resources, Assurance and Transformation Group effective on January 1, 2020.

⁴ Appointed as Executive Vice President, Engineering and Development Group effective on January 1, 2020.

⁵ Appointed as Executive Vice President, Strategy and Business Development Group effective on January 1, 2020.

⁶ Appointed as Executive Vice President, Operations Support Group effective on January 1, 2020.

Name	Number of Ordinary Shares		
	As of January 1, 2019	As of January 1, 2020	Increase/(Decrease) During the Year
17. Mrs. Monsalai Tongsari ⁷	N/A	100,480	N/A
18. Ms. Nuchanong Sangkeaw ⁸	N/A	4,605	N/A
19. Mrs. Yada Vudhivorn ⁹	N/A	50	N/A
Management Who Retired or Rotated During 2019			
1. Ms. Kanchanan Panananda ¹⁰	56,604	56,604	-
2. Mrs. Maneeya Srisukhumbowornchai ¹¹	-	-	-
3. Mr. Chatchawal Eimsiri ¹²	40,078	19,287	(20,800)

8.3 Secretary to the Board of Directors and Company Secretary

8.3.1 Secretary to the Board of Directors

The Board of Directors resolved to appoint Mrs. Pranot Tirasai, Former Executive Vice President, attached to the President and Chief Executive Officer, and assigned as Secretary to the Board of Directors, effective from October 1, 2018. The Secretary of the Board of Directors serves as the focal point for the Board and the management, and is responsible for providing advice to the Board on legal compliance regarding the duties and responsibilities of the Board and the management. The Secretary of the Board of Directors is also accountable for reviewing the agenda and minutes of the Board's meetings prior to their submission to the Board, and managing documentation of the Shareholders' meeting as well as making preparation for the Board for the Shareholders' meeting. Mrs. Pranot Tirasai holds a degree in law and is highly knowledgeable, capable and experienced, allowing her to appropriately support the Board in carrying out of its fiduciary duties.

8.3.2 Company Secretary

The Board of Directors resolved to appoint Mrs. Maneeya Srisukhumbowornchai, Acting Senior Vice President, Corporate Secretary Division, as the Company Secretary and the Corporate Governance Committee's secretary, the Nominating Committee's secretary, the Remuneration Committee's secretary, and the Independent Directors Committee's secretary since September 1, 2019. Mrs. Maneeya holds a degree in accounting. She is highly knowledgeable, capable and experienced in

⁷ Appointed as Vice President, Accounting Policy and Solutions Department, Accounting Division, Finance and Accounting Group effective on July 1, 2019.

⁸ Appointed as Acting Vice President, Capital and Investor Relations Department, Finance Division, Finance and Accounting Group effective on July 11, 2019. The position title was changed to Acting Vice President, Capital Market and Financial Planning Department, Finance Division, Finance and Accounting Group on 1 January 2020.

⁹ Appointed as Acting Vice President, Tax Department, Accounting Division, Finance and Accounting Group effective on September 1, 2019.

¹⁰ Retired from the position of Vice President, Capital and Investor Relations Department, Finance Division, Finance and Accounting Group from July 11, 2019.

¹¹ Retired from the position of Vice President, Tax Department, Accounting Division, Finance and Accounting Group from September 1, 2019.

¹² Retired from the position of Executive Vice President, attached to President and Chief Executive Officer from December 31, 2019

corporate secretarial functions. In addition, she attended seminars and completed trainings which were beneficial to her performance. Details of the Company Secretary are disclosed in the “Information of the Board of Directors, Management, Controlling Persons, and Company Secretary”.

The Company Secretary has performed roles with fiduciary duties by having responsibility, and duties of care and loyalty, as required by the Securities and Exchange Act, including preparing and safeguarding the Company's important documents, namely the director registry, notice of the Shareholders' meetings, notice of the Board's meetings, minutes of the Shareholders' meetings, minutes of the Board's meetings, and Annual Reports; safeguarding the Conflicts of Interests Report submitted by the members of the Board 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 Company 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, resolutions from the Board's and shareholders' meeting.
- Organizing meetings of the Board, sub-committees, and shareholders.
- Providing orientation and giving advices to new members of the Board.
- Recommending necessary and appropriate training programs to members of the Board.
- Coordinating with the Company's functional units to ensure that the Company's business operations are in line with the direction set by the Board and shareholders and with external regulatory bodies overseeing listed companies.
- Governing the Company's subsidiaries, including preparing and safeguarding their important documents.
- Promoting and educating the directors, management, and employees about the Good Corporate Governance and Business Ethics of PTTEP Group, which is regularly being revised to be in compliance with related laws and in line with international practices of leading organizations.
- Ensuring that all shareholders are treated fairly, ethically and lawfully as well as promoting good relationship with minority shareholders.
- Acting as a focal point, which is responsible for managing reports or complaints submitted through the Whistleblowing System of PTTEP Group.
- Performing other duties as required 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 2019 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 50,000 per person per a meeting attendance
- (3) Bonus for the Board if there is a dividend in that year, totaling 0.2% of the Company's consolidated net profit in that year, but no more than THB 60 million per year.
- (4) 25% increase in all of the above for the Chairman

Remuneration Rates for Members of the Sub-Committees

The Company's sub-committees received the following remuneration:

- (1) Meeting allowance of THB 45,000 per person per a meeting attendance
- (2) 25% increase for the sub-committee's Chairman

Other Remuneration for PTTEP Directors

- None -

Remuneration of Members of the Board and Sub-Committees in 2019.

Director's Name		Remuneration							2019 Bonus Paid in 2020	Total
		Board of Directors		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
1. Mr. Prajya Phinyawat		600,000	1,250,000	-	-	-	-	-	4,918,033	6,768,033
2. Mr. Achporn Charuchinda		480,000	1,000,000	843,750	-	225,000	-	-	3,934,426	6,483,176
3. Admiral Tanarat Ubol		480,000	1,000,000	-	281,250	180,000	-	-	3,934,426	5,875,676
4. Mr. Sethaput Suthiwart-Narueput		480,000	950,000	585,000	-	-	360,000	787,500	3,934,426	7,096,926
5. Major General Nimit Suwannarat		480,000	650,000	-	-	-	360,000	540,000	3,934,426	5,964,426
6. Mr. Twarath Sutabutr		480,000	900,000	-	-	-	-	585,000	3,934,426	5,899,426
7. Mr. Pitipan Tepartimargorn		480,000	1,000,000	-	225,000	-	45,000	630,000	3,934,426	6,314,426
8. Mr. Bundhit Eua-arporn		480,000	900,000	-	-	-	450,000	-	3,934,426	5,764,426
9. Ms. Penchun Jarikasem		480,000	1,000,000	-	-	-	-	585,000	3,934,426	5,999,426
10. Mr. Chansin Treenuchagron		480,000	750,000	-	-	-	-	-	3,934,426	5,164,426
11. Mr. Patchara Anuntasilpa		480,000	950,000	-	-	135,000	-	-	3,934,426	5,499,426
12. Mr. Dechapiwat Na Songkhla		480,000	550,000	405,000	-	-	-	-	3,772,737	5,207,737
13. Mr. Atikom Terbsiri		120,000	200,000	-	-	-	-	135,000	991,691	1,446,691
14. Mrs. Angkarat Priebjrivat		120,000	200,000	180,000	90,000	-	-	-	991,691	1,581,691
15. Mr. Phongsthorn Thavisin		480,000	1,000,000	-	-	-	-	-	3,934,426	5,414,426

Director's Name		Remuneration							2019 Bonus Paid in 2020	Total
		Board of Directors		Audit Committee	Corporate Governance Committee	Remuneration Committee	Nominating Committee	Risk Management Committee		
		Monthly Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance	Meeting Allowance		
Former Directors Retiring by Rotation or Resigning During 2019										
1. Mr. Wirat	Uanarumit	320,000	750,000	-	-	-	-	360000	2,619,358	4,049,358
2. Ms. Panada	Kanokwat	280,000	550,000	360000	135000	-	-	-	2,015,720	3,340,720
Total		7,200,000	13,600,000	2,373,750	731,250	540,000	1,215,000	3,622,500	58,587,916	87,870,416

Remarks:

- (1) The 2019 Annual General Shareholders' Meeting (AGM) approved bonus for the Board if there is dividend payment in that year, totaling 0.2% of the Company's consolidated net profit in that year, but no more than THB 60 million per year.
- (2) Mr. Chansin Treenuchagron have returned their PTTEP directorship remuneration in 2019 to PTT Public Company Limited (PTT) according to PTT's President and Chief Executive Officer 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 of the Company in carrying out E&P and related businesses in order to optimize the Company's benefits, taking into account of the business and investment conditions. PTTEP assigns the Company's management to hold a directorship position in our subsidiaries and/or associated companies in order to ensure that they are managed in compliance with the business direction and strategy of PTTEP.

PTTEP had set up a policy for directors' remuneration of subsidiaries and associated companies. The directors' remuneration policy is based on the roles and authorities of the Board of the directors of such subsidiaries and associated companies, their size of investment and business risks. The management who are assigned to be directors of subsidiaries or associated companies are entitled to an additional remuneration with subject to the remuneration policy of such subsidiaries or associated companies.

8.4.3 Remuneration of the President and Chief Executive Officer

Remuneration of the President and Chief Executive Officer (CEO) is determined using fair and appropriate procedures and defined under the principles which are unbiased, reasonable, justifiable, and transparent. The 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.

The ratio of annual compensation of the CEO comparing to the average annual compensation of the Company's executives is approximately 1.5 : 1, while the ratio of annual compensation of the CEO comparing to the average annual compensation of the Company's employees is approximately 10 : 1.

8.4.4 Remuneration of the Executives

The 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 President and 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 7.4 : 1.

Remuneration of the Executives

	2018		2019	
	Number	Total Amount (THB)	Number	Total Amount (THB)
Salary	16 ¹	105,475,290	11 ¹	98,178,140
Bonus		75,388,087 ²		67,328,586 ³
Other compensation ⁴		14,474,373		13,481,237
Total		195,337,750		178,987,963

In 2019, compensation (salary, bonus, and contribution to the provident fund) of PTTEP's and the subsidiaries' employees, including wages of the seconded employees, totaled THB 9,942,200,332.

8.5 Personnel

As of December 31, 2019, PTTEP and our subsidiaries had a total workforce of 4,449 employees.

Number of Employees¹

Employee Type	Total (Persons)
Thai Permanent Employees	2,077
Thai Contracted Employees	1,292
Non-Thai Contracted Employees	77
Local Employees in Overseas Subsidiaries	998
Seconded Employees from PTT Group Companies and Joint Venture Partners	5
Total	4,449

Remarks: ¹ Based on the Company's database as of December 31, 2019

The list is exclusive of outsourced staff hired through services contracts e.g. maid, drivers, etc. and third-party service providers.

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

² Bonus for 2018 was paid in January and February 2019.

³ Bonus for 2019 was paid in January 2020.

⁴ Provident Fund

Number of Employees in Each Function Group¹

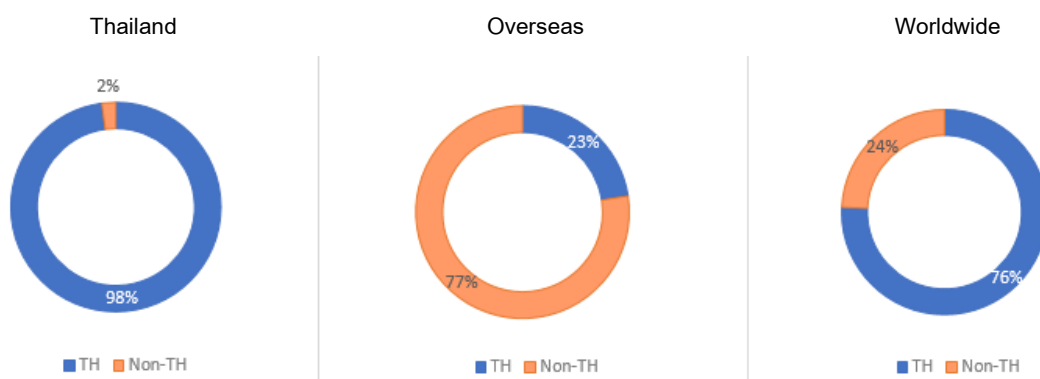
Function Group ²	Thai Permanent Employee	Thai Contracted Employee	Non-Thai Contracted Employee	Local Employee	Seconded Employee
President and Chief Executive Officer	54	8	2	2	-
Business and Organization Transformation Group	72	54	2	1	-
Corporate Affairs and Assurance Group	91	27	-	1	-
Engineering, Development and Operations Group	373	265	15	35	-
Finance and Accounting Group	146	128	-	-	-
Geosciences, Subsurface and Exploration Group	227	47	21	8	-
Production Asset and Supply Chain Management Group	948	701	34	948	5
Strategy and Business Development Group	79	10	2	1	-
Internal Audit Division	13	1	-	-	-
Safety, Security, Health, and Environment Division	3	9	-	-	-
Human Resources Division	71	42	1	2	-
Total	2077	1292	77	998	5

Remarks: ¹ Based on the Company's database as of December 31, 2019.

² Based on the Company's organization structure as of December 31, 2019.

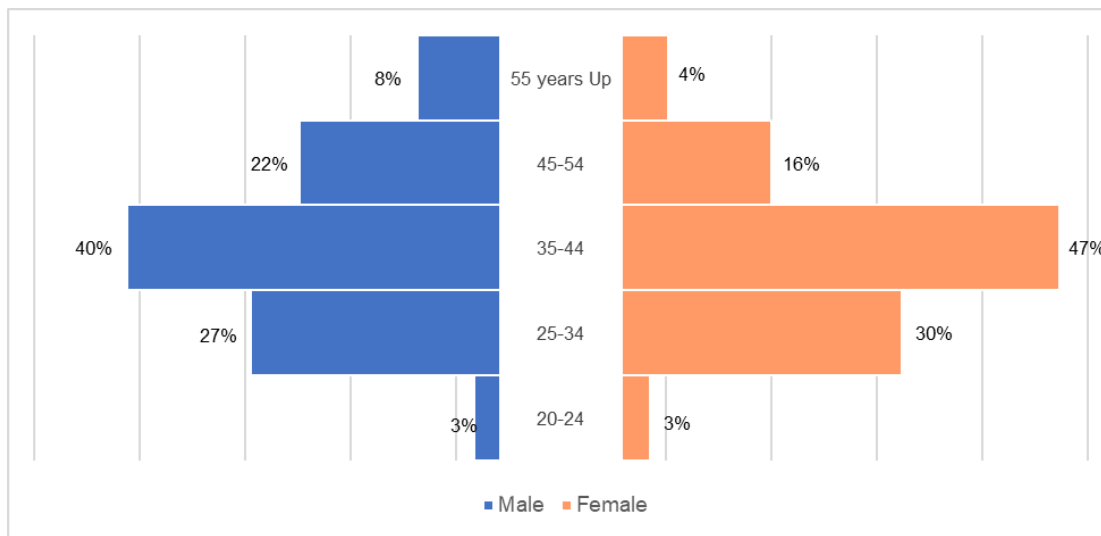
The list is exclusive of outsourced staff hired through services contracts e.g. maid, drivers, etc. and third-party service providers.

Staff Demography by Nationality and Work Location¹



Remarks: ¹ Based on the Company's database as of December 31, 2019.

Staff Demography by Gender and Age¹



Remarks: ¹ Based on the Company's database as of December 31, 2019.

Employee Turnover

	IN ¹	OUT ¹
Thai Permanent Employees	55	34
Thai Contracted Employees ²	81	53
Non-Thai Contracted Employees	7	10
National Employees	127	68
Seconded Employees	0	0

Remarks: ¹ Based on the Company's database as of December 31, 2019.

² The turnover was exclusive of outsourced staff hired through services contracts e.g. maid, drivers, and third party service providers. M&A and Divestment conditions are excluded.

In 2019, the Company's total employee turnover rate¹ was 3.7%, while the voluntary resignation rates in 2015 through 2019 were as shown below.

Voluntary Turnover Rate

2015	2016 ²	2017 ²	2018	2019
6.3%	5.9 %	3.9 %	3.7%	2.5%

Remarks: ¹ Including voluntary resignation, dismissal, early retirement, retirement, death

² Resignation and early retirement in 2016, 2017

M&A and Divestment conditions are excluded.

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 2019, 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 staff and management at all levels. These trainings comprise a wide variety of courses, including technical and functional training, and Safety, Security, Health and Environment (SSHE) training, such as computer skills, foreign language, business administration, and leadership skills. Moreover, in 2019 PTTEP has continuously been implementing the staff development program to support transformation towards digital organization, changing the way of working to be more agile, more efficient, faster, and exploring for new business opportunities in preparation for future growth. Examples of the program included the new learning and development programs for executives, promotion of four core behaviors, digital literacy, and agile way of working.

(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 the technical areas, mentors are also assigned to assist and coach the employees along their development journeys.

(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) Digital and Information Technology

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

In 2019, the Company invested in human capital development programs at the total amount of THB 267,478,109 and provided more than 190,000 training and development hours for our employees with the average of 43 training and development hours per person per annum. 100% of employees took development actions to fulfil their Individual Competency Development Plan (ICDP). As a result, our employees' competency increased by approximately 4.15% which was higher than the set target of 3%.

The Company calculated 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's Board of Directors (Board) recognizes how crucially significant it is to successfully implement Good Corporate Governance and Business Ethics of PTTEP Group (CG&BE). The Board is confident that strict adherence to CG&BE will successfully lead the Company to achieving its goals of "Growth, Prosperity, Stability, Sustainability and Dignity" as well as to enhancing the confidence of our shareholders and other stakeholders. The Board has assigned the Corporate Governance Committee to oversee, supervise, and monitor implementation of the necessary measures (CG&BE Program) to assure that the Company's operations are in line with the CG&BE Principles and that good corporate governance is maintained at the level of international standards. Also, compliance to CG&BE is periodically monitored to ensure that CG&BE has been integrated into everyone's work. In 2019 the Board of Directors paid keen attention to the expansion in corporate governance to embrace new investment projects acquired by PTTEP. A plan was made with the Transition Team, a work plan was spelled out, and progress was to be regularly updated for the Board. A strategic plan with long-term sustainable development goals was submitted to the Board, the outcomes of which were also regularly updated. Thanks to its commitment to ongoing development of corporate governance, PTTEP's Board of Directors won the Board of the Year Award 2018 (Silver) for listed companies with over THB 100 billion in market capitalization, presented by the Thai Institute of Directors. As a result, the Company earned various recognitions for our good corporate governance, domestically and internationally. Details are disclosed in the "Awards and Recognitions for Good Corporate Governance" section.

The Board has reviewed the implementation of the Corporate Governance Code 2017 (CG Code), which was established by the Securities and Exchange Commission through means that are suitable to the company's business. The Board fully understands the CG Code's leadership role and the overall usefulness in business applications. The Board assigned the Corporate Governance Committee to ensure CG Code compliance and its appropriate implementation, so as to maximize value in regard to the Company's future and sustainable growth. PTTEP has continued to develop and apply the CG Code principles together with internationally recognized best practices as follows:

9.1.1 Shareholders' Rights and Equal Treatments

PTTEP's understanding of the importance of shareholders' rights and equal treatment has given rise to the enactment of the Company's Good Corporate Governance principles. They include a number of guidelines to assure the Company's shareholders of their basic rights which, among others, allow them to trade and transfer shares, declare share ownership, and attend shareholders' meetings in person or through their proxies. In addition, the shareholders and their proxies are allowed to participate and vote on significant issues at the Company's shareholders' meetings. These issues could be, for example, election of new members of the Board to replace those due to retire by rotation, determination of the Board's remuneration in all forms, appointment and approval of the external auditor and the auditor's fees, approval of connected transactions, acquisition or disposition of assets which, based on relevant laws, could be sizeable, and other issues which are of significance to the Company. The shareholders are also entitled to profit sharing in the form of dividends as well as to receiving adequate and timely information from the Company. The Company has only one class of shares, namely ordinary shares, where one share is equal to one vote. Our efforts to ensure and enhance the shareholders' rights also include the followings:

(1) **Annual General Meeting of Shareholders:** In 2019, PTTEP respected and promoted shareholders' rights in its Annual General Meeting of Shareholders (to be known hereafter as AGM or the Meeting) through the following actions:

Before the Meeting

(1.1) Shareholders were invited to propose agenda items and nominate qualified candidates for the election of PTTEP directors prior to the AGM from September 14 to December 17, 2018. The criteria were announced publicly through The Stock Exchange of Thailand (SET) and the Company's website. The shareholders' proposals would be considered based on the Company's established criteria to ensure that the proposed agenda items were relevant and truly beneficial to the business. The Nominating Committee was to be responsible for short-listing the nominated candidates for the Board's consideration. Afterwards, the Board would inform the shareholders of the resolution together with the rationale for each of the proposals at the AGM. In 2019, no such agenda or any director candidates were proposed.

(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 30, 2019. In addition, the Company disclosed the date on which the shareholders would have the right to attend the Meeting as well as to receive dividends (on February 13, 2019).

(1.3) The AGM invitation letter and supplementary documents, in both Thai and English, were published on the Company's website on February 27, 2019, at least 30 days prior to the Meeting. The invitation letter included necessary details of each agenda item, which clearly stated the types of agenda items, be they for acknowledgement or approval. The Board's opinions on each agenda item are clearly stated along with other rules and regulations related to the Meeting. A proxy form, which was stipulated by the Ministry of Commerce, was also enclosed with 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 enclosures included instructions of the Meeting and a map of the venue. The AGM invitation letter and supplementary documents were distributed to the shareholders by post 21 days prior to the Meeting.

(1.4) PTTEP provided the names of 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 on each of the agenda items, for instance, to elect new directors replacing those due to retire by rotation, an independent director whose term was completed but re-nominated for another term would be considered as having vested interests (but not a special one). However, on the agenda item to approve remuneration of the Board, all of the directors would be considered as having a special interest and therefore were excluded from the voting regardless of the percentage of their shareholding. The Company also recommended that the shareholders use the proxy form, through which they could specify their votes on each agenda item.

(1.5) The Company also invited the shareholders to submit questions related to the Meeting or other information relevant to the Company prior to the Meeting. This action helped to make the meeting more efficient and beneficial to the shareholders. Such questions were consolidated and answered at the AGM as well as recorded in the minutes of meeting.

At the Meeting

(1.1) The Meeting was held on March 29, 2019, at 14.00 hrs. at the Bangkok Convention Center, 5th Floor, Central Plaza Ladprao, Bangkok. The meeting date, time, and venue were determined by considering convenience for the shareholders. Barcode and electronic systems were used for the registration, vote counting, compilation, and display of resolutions 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 duty stamps to the shareholders who intended to vote through proxies.

(1.2) All 15 PTTEP directors attended the Meeting. The Company's Chairman presided over the Meeting, while the sub-committee chairmen, the President and Chief Executive Officer, senior executives from the Finance and Accounting Group, and other function groups also participated to respond and provide clarifications to inquiries from the shareholders. The external auditor, external legal advisors (inspectors) from Weerawong, Chinnavat & Partners Ltd., shareholders' right protection volunteers from the Thai Investors Association, and volunteers from shareholders to witness vote counting, also participated in the Meeting. The Chairman ensured that the Meeting was carried out in accordance with the Company's Articles of Association and the agenda items as per sequence stated in the invitation letter, without adding any other agenda item. The Chairman efficiently allocated time to each agenda item and provided adequate time and opportunities 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 agenda items prior to each vote casting and resolution.

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

The Company permitted shareholders who arrived at the Meeting after it had commenced to cast their votes on the agenda item that was in the consideration process or had not been considered or voted on at the time of their arrival. The Company was also to count these shareholders as participants in the Meeting, starting from the agenda item when they registered and entered into the meeting.

(1.4) All information presented at the Meeting was available in both Thai and English, while a translator 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 and in accordance with the

Articles of Association and meeting procedures informed by the Chairman of the Meeting. Responsibilities of the inspectors included verification of the documents and the proxy examination process, ensuring a quorum as well as assuring the Meeting that none of shareholders with potential conflicts of interest cast votes on such agenda items, and making sure that the voting procedure and vote counts were in line with the Articles of Association or as stated by the Chairman of the Meeting. The inspectors were also responsible for ensuring ballot collection from the attending shareholders and auditing of the vote-tallying.

After the Meeting

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

(1.2) Minutes of the Meeting, in both Thai and English, were accurately and completely recorded. They covered explanations of the Meeting's voting and vote-tallying procedure, details of agenda items, questions, and opinions related to PTTEP's business operations and the Meeting's agenda, as well as clarifications of each agenda item made by the Company's directors and top executives. The Company also recorded the resolution on each agenda item, categorized as agreed, disagreed, abstained, and voided (if any) as well as the names and positions of the directors and executives who attended the meeting. Furthermore, within 14 days after the Meeting, the final version of the Minutes of the Meeting was delivered to the Ministry of Commerce, SET, and the Office of the Securities and Exchange Commission (SEC). The minutes of the Meeting were also delivered to the Company's shareholders for their reference and consideration, and for verifying that any shareholders who wished to make objections did so within the timeframe enforced by relevant laws. In 2019, the Company did not receive any objections or inquiries from the shareholders in regard to vote-tallying results and minutes of meeting. The approved minutes, video and audio clips of the Meeting were also published in both Thai and English on 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 for other information which the Company considers as necessary for the shareholders to have. These disclosures are publicized through various channels, such as the SET and the Company's website, and media or printed media.

The Company clearly discloses the shareholding structures in our subsidiaries and associated companies as well as with the controlling shareholder, namely PTT, to ensure the shareholders that our organization's structure is transparent, verifiable, and does not comprise any form of cross or pyramidal shareholding structures.

(3) **Fostering Understanding of Business Operations and Long-Term Engagement with Shareholders:** PTTEP continuously organizes various activities for the benefits of shareholders and society. The main objectives of such activities are, for shareholders and other persons interested in PTTEP, to enhance the knowledge and understanding of E&P business which owns special characteristics as well as get to know and participate in our CSR program. Aside, we aim to foster the level of confidence of investors to maintain long-term investment with PTTEP. In 2019, key activities were as follows:

(3.1) The visit to operation sites and CSR projects, provided equal opportunities for all interesting shareholders to participate in such activities.

(3.1.1) PTTEP, on June 12 and 13, 2019, organized activities for 100 shareholders, divided to two groups of 50 people, to visit the PTTEP Petroleum Development Support Base located in Singhanakhon district, Songkhla province and our supported CSR project at the Crab Hatchery Learning Centre at Ban Hua Khao in Singhanakhon district, Songkhla province which is the development model of crab hatchery learning center of the Company.

(3.1.2) PTTEP organized trips to visit our Sirikit Oil Field in Kampheng Phet Province, on November 5, 6, 19 and 20, 2019, for 241 shareholders, divided to 4 groups of about 60 people. The participants of the trips included not only shareholders who had never joined such visits, but also shareholders who previously had joined the visit and were willing to be responsible for the travelling expenses themselves. This is in accordance with the suggestion given by the shareholders at the 2018 Annual General Meeting of Shareholders.

(3.2) PTTEP published a quarterly newsletter to provide an additional means of communication between the Company and the shareholders or investors or any other persons interested in the Company's performance. The newsletter included information on operational performance, progress of key projects, Corporate Social Responsibility (CSR) activities, and corporate governance activities. The Company also published other useful information; for example, the Transformation strategy of PTTEP, the development of technology knowledge by establishing the AI and Robotics Ventures Company Limited, and the whistleblowing as a mechanism to prevent corruption and misconduct in the organization. The quarterly newsletter 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 shareholders and independent directors through e-mail at IndependentDirector@pttep.com. The Company's shareholders, for example, are able to access 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 Company Secretary at CorporateSecretary@pttep.com or Investor Relations Unit at IR@pttep.com 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 relationships 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 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 Board of Directors has assigned the Governance, Compliance, and Internal Control Department 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 management 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 communication as well as training to ensure that they understand and strictly follow them to prevent them from misusing such information directly or indirectly for his or her personal gain. 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 2019, there was no report of any misuses of internal information.

(5.3) PTTEP requires a group of personnel to abstain from trading the Company's securities during the blackout periods, when material information is being disclosed which may affect the securities price. These are, for example, the release of the Company's financial statements or operating results as well as investment in new projects. The prohibition is announced in advance by the Governance, Compliance and Internal Control 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 PTTEP's securities during the periods. Violation of this prohibition is considered a disciplinary offense.

PTTEP also requires all of the Company's directors, the management holding positions of SVP 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 Governance, Compliance and Internal Control Department two days in advance if necessary.

(5.4) The directors, the management holding positions of SVP and above, and VPs of FNA must disclose complete information in regard to the change of their securities holding to the Governance, Compliance and Internal Control Department, aside from reporting to the SEC, to report to the Board on a monthly basis for CG&BE compliance monitoring purposes. 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.

9.1.2 Roles of Stakeholders

The Board has approved PTTEP's mission which puts an emphasis on the rights of and value creation for stakeholders. The Company's mission is to operate globally to provide a reliable energy supply and sustainable value to all stakeholders. 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, societies and environment, suppliers, creditors, competitors, customs and traditions groups, and human rights groups. 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, contact details, whistleblowing channels are disclosed in the Company's website.

9.1.2.1 Anti-Corruption Efforts

Importance

Valuing transparent and fair work performance under corporate governance, the PTTEP Board of Directors adopts zero tolerance on any form of corruption. Proper mechanisms are in place to steer each related sector under the Good Corporate Governance and Business Ethics of PTTEP Group or CG&BE, the PTTEP Group's regulations binding all across the organization, from the directors, the management, to all employees of PTTEP and subsidiaries, who are required to sign a commitment form agreeing to observe and conform such regulations. Also, our measures encourage those related to the PTTEP Group, including suppliers and joint-venture partners, to abide by the CG&BE and uphold similar best practices for anti-corruption on a par with PTTEP's standards.

It is PTTEP's conviction that efficient anti-corruption measures require a sound governance structure together with a clear management system, adequate and proper risk management and internal controls, monitoring for strict and ongoing compliance, and independent audit. The explicit guidelines stated in the CG&BE requires all directors and the management to be CG leaders. The PTTEP Board of Directors assigned the Corporate Governance Committee to monitor compliance with the CG&BE as well as the anti-corruption policy. Corporate Governance and Shareholder Engagement section, under the Corporate Governance, Compliance, and Internal Control Department, Corporate Secretary Division, is centralized function to support and drive the compliance with the CG&BE and PTTEP Group's anti-corruption measures. At least every quarter, updates are to be provided to the Corporate Governance Committee and the Board of Directors. To this end, the CG&BE has been defined in writing under the internal control principles and published and distributed to all relevant stakeholders in Thai, English, and Burmese, as well as distribution on the Company's website for interested parties' downloading. Finally, a "Standard of Practice for Anti-Corruption" was rolled out for the management and employees to conduct themselves properly under various circumstances where corruption risks exist - another internal control measure of PTTEP.

In addition, to establish a sound standard for transparent business execution and reduce the risk of conflicts of interest, the PTTEP Group constantly adheres to the No-Gift Policy and explicitly announced the policy to outsiders that PTTEP Group personnel will not accept gifts, entertainment, or any other benefit on any occasion. Integrity & Ethics has also been made a corporate value for cultivation across the organization.

Scope of PTTEP Group's Anti-Corruption Policy

PTTEP requires that the CG&BE should represent the PTTEP Group's anti-corruption policy. Its contents embrace the principles, guidelines, and clear examples on all matters related to anti-corruption measures. These include the definition of a governance structure stated under Corporate Governance; guidelines for conflicts of interest, procurement and contracts; anti-money laundering; political neutrality; use and protection of information and assets; and specific guidelines for anti-corruption practices under Business Ethics. The CG&BE is clearly imposed on the directors, the management, and employees of PTTEP and subsidiaries, as well as their business partners, all of whom agreed in writing to comply with the CG&BE and encourage joint-venture partners to adopt suitable corporate governance and a suitable business ethics.

PTTEP defined corruption based on applicable rules and legislation, domestic and international. It focuses on intention as a prime consideration: a given action must be taken in the interests of the PTTEP Group and must not accompany an intention to use one's or others' authority for undue personal gain, which is unlawful or against the PTTEP Group's regulations. This includes all corrupt practices undertaken as a giver or recipient or through an agent. PTTEP recognizes that certain activities, including not-for-profit donation, sponsorship, and facilitation payment, pose vulnerability for corruption. Therefore, in defining corrupt practices, these activities are mentioned so that practitioners may exercise extra precaution. PTTEP does not make donations to support political parties for election campaigns, both at the local and national levels.

Measures and Principles for Implementation

Implementation of anti-corruption measures involves the internal control system, risk management, compliance oversight, audit, and promotion of a corporate culture and ethics, each of which is under the responsibility of a functional unit. Therefore, PTTEP defined models of internal control and risk management by the “Three Lines of Defense”:

(1) The First Line of Defense is made up of various functional units charged with overseeing their respective work characterized by proper risk management and internal control together with compliance with all applicable laws and regulations. The people in this line of defense are trained to ensure that they are adequately knowledgeable and ready to perform duties in their respective jobs and efficiently confront various situations.

(2) The Second Line of Defense is made up of those units responsible for overall legislation, regulations, and policies adopted by the Company and for defining regulations and criteria as well as steering compliance with them. For instance, the units in charge of governance, risk management, internal control, and compliance (GRC) come under the Human Resources, Assurance, and Transformation Group. In place is proactive and explicit integration of management as stated in the Governance, Risk Management, and Compliance Management System Manual (GRC MS Manual) to enable goal achievement. Such achievement is to be marked by proper risk management and under the scope of applicable corporate regulations and code of ethics. At the same time, business processes are improved for efficiency and adequate internal control through reduced redundancy. The work scope contains the following 9 key components: leadership and commitment; policies, objectives, and plans; organization and resources; GRC assessment; controls and response; monitoring and assurance; audit; continual improvement; and communication and culture.

(3) The Third Line of Defense is made up of audit units and external auditors, responsible for independently auditing the overall performance of various management systems under the first and second lines.

The Internal Control Section regularly conducts internal control assessment on potential fraud risks, which include risks of asset misappropriation, corruption, and fraudulent financial reporting in order to evaluate and ensure the adequacy of the Company’s internal control system in accordance with the Office of the Securities and Exchange Commission (SEC)’s regulations. The Company’s Vice Presidents, from each of the function groups, assess our fraud risks 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 these 3 considerations and adjusted their measures so that they are timely and appropriate.

Continuous Communication and the Provision of Knowledge and Training

The Corporate Governance Committee has defined a clear plan for cultivating the CG&BE and business ethics of the PTTEP Group and the anti-corruption policy for everyone across the organization through various ongoing activities encompassing target groups at all levels and of all age groups. Activities were designed to match target groups’ interests and knowledge levels, and their implementation expanded to external stakeholders, including suppliers. Performance indicators of target groups inside and outside PTTEP were clearly defined to ensure proper policy implementation for the most concrete results. This year relevant actions included the following.

Measures for internal parties

(1) Organized Induction sessions for new directors, management, and employees to introduce an overview of governance, risk management, and compliance (GRC) for acknowledgment and compliance. A VDO on GRC Induction was prepared to educate employees operating at various sites to make it convenient for them and cover all bases to watch it.

(2) Organized quarterly GRC promotion for the Board before Board meetings to inform them of information and case studies helpful for the performance of directors and the management. The Chairman of the meeting stressed that the directors and management should also carry these out. The topics of 2019 were:

- 5 Trends that the Boardroom Should Know
- Cybersecurity and Data Privacy Laws
- Critical Success Factors in a GRC Implementation
- Environmental, Social, and Governance (ESG) Related Risks.

(3) Organized refresher GRC training courses (GRC 101) for those that had previously undergone inductions. Contents had to do with corporate governance and business ethics, risk management, internal control, and compliance, with an emphasis on anti-corruption and relevant matters so that employees may master these and duly implement them.

(4) Instituted CG&BE communication for the Malaysia Asset's executives and employees transferred from Murphy Oil, acquired by PTTEP, at its Kuala Lumpur office, including operation site supervisors at Bintulu and Labuan Island in Malaysia. The GRC program for Malaysia Asset has been developed and rolled out for their implementation.

(5) Developed a CG&BE E-Learning course for executives and employees in English with Thai and Burmese subtitles to expand the access to training, while a post-test immediately assessed employees' understanding.

(6) Jointly organized the PTT Group CG Day 2019, an annual activity of the PTT Group's flagship companies for all personnel of the PTT Group and representatives of entities dealing with governance and anti-corruption, suppliers, and customers of the PTT Group. Known this year as "PTT Group CG Day 2019: Digitization ... Challenge for the Governance", the activity was held on September 11, 2019, as an illustration of unity and commitment among the PTT Group in carrying out transparent businesses, ready to support the drive for all sectors (business, society, and the country as a whole) to adopt a work culture that is proper, transparent, fair, and corruption-free in a sustainable way.

(7) Established communication on conflicts of interest and the complaint handling together with the provision of protection so that management and employees may recognize their importance and confidently file complaints via the Company's defined channels with a good understanding of relevant procedures and protection. The number of complaints was disclosed as a summary along with each year's punished cases for all. (Details are shown under "Whistleblowing Reporting and Protection Procedures" part.) This is part of the campaign for all to nurture this corporate culture, marked by transparency and corruption-free practices.

(8) Instituted other ongoing communications to educate all across the organization and solicit employees' participation in activities on anti-corruption at the Headquarters and field sites e.g. the Anti-Corruption Day. Examples were PR signboards and a newsletter.

Measures for external parties

PTTEP has a clear 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. The Company has continued to encourage these external parties to conduct businesses that are ethical and corruption-free through the following activities.

(1) Notifying all suppliers about the No-Gift Policy and request cooperation on stopping the giving of presents, tokens, or other benefit on any occasion to the directors, management, and employees of the PTTEP Group. Also, informing and inviting suppliers with the top 100 contract values to engage in online training (including test-taking) on anti-corrupt practices, with 70 percent in actual attendance and successful passing of the test.

(2) Announcing to external parties the No-Gift Policy explicitly on PTTEP's website and installing PR signboards on office premises, near spots where visitors can clearly see, in Thailand and other countries.

(3) Advocating to society a culture of good governance and anti-corruption. This year PTTEP took actions and participated in various key activities. (Details are shown under "Collective Efforts with the Public to Counter Corruption" section.)

(4) Establishing channels for external parties to inquire in case of questions or recommendations on corporate governance and business ethics by emailing corporatesecretary@pttep.com.

Whistleblowing Reporting and Protection Procedures

PTTEP's Board of Directors has established its Reporting and Whistleblowing Regulation for the PTTEP Group to ensure that the complaint-handling process is effective, transparent, fair, and comparable to international standards. This regulation is meant to provide protection for whistleblowers and those cooperating with the Company in good faith. This mechanism allows an opportunity for both internal and external parties of the organization to report any suspicious misconduct or wrongdoing that might be in violation of laws, CG&BE, anti-corruption policies, and other related regulations, as committed by the Board, management, employees, or representatives of the PTTEP Group.

Investigation of complaints is conducted strictly and in an orderly way, in a proper manner, and within the timeframe and procedure prescribed in the regulation to ensure the transparency and fairness of the complaint-handling process. Examples are as follows:

- The Corporate Governance Section, Corporate Secretary Division, preliminary evaluates the information and adequacy of the 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 of the CEO. Each extension must not exceed seven working days.

• The investigators prescribed in the regulation must complete the investigation within 30 working days in every case. If the period is extended due to necessity, the extension can be made only with the approval of the authorized person (not more than seven working days at a time for non-complex cases and not more than 30 working days at a time for complex cases). The investigator cannot have vested interests in the complaint. Every complaint coming through the whistleblowing channels is summarized and reported to the Corporate Governance Committee and/or Audit Committee, depending on the case, and subsequently report 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) E-mail to the supervisor or the Corporate Governance Section of the Corporate Secretary Division (cghotline@pttep.com)

(3) Report through the whistleblowing system, which is available on PTTEP's website (www.pttep.com). 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 make inquiries. This system serves as a necessary tool for preventing and monitoring the risks of corruption.

In 2019, PTTEP received a total of seven complaints through the whistleblowing channels. After reviewing the clarity and adequacy of these complaints, three cases were accepted for further investigation, and all investigations were completed. A summary of complaints is shown in the table below.

Topic	2017	2018	2019
Number of whistleblowing cases	8	10	7
Whistleblower			
- External reporter	4	2	2
- Internal reporter	2	7	2
- Anonymous reporter	2	1	3
Number of accepted cases after considering evidence and witnesses	7	6	3
Number of wrongdoing cases	3	4	1
Type of wrongdoing			
- Use and protection of information and assets	-	1	-
- Human resources (e.g. being late at work, inappropriate behaviour)	1	-	1
- Non-compliance with policy, regulation, and procedure	1	-	-
- Conflict of interest and corruption	1	3	-

After completing the investigation of these three accepted cases, there were no offenses regarding fraud or non-compliance with policies, procedures have been found for two reports. While, another report regarding inappropriate behavior of staff, i.e., drinking alcohol while performing duties, carrying a weapon into a working area, and displaying inappropriate behavior toward a subordinate has been considered serious disciplinary offense pursuant to the Human Resources Management Policy and Business Ethics on Human Resources. The offenders were subsequently terminated without severance pay. The Corporate Governance Section reported the results of the complaint investigation to related parties. The findings of the cases were used to carry out further improvements of the Company's internal control measures.

For more details of the Reporting and Whistleblowing Regulation and Whistleblowing System, please visit the PTTEP website at <https://www.pttep.com/th/Aboutpttep/Corporategovernance/ReportingAndwhistleblowingregulations.aspx>.

Monitoring the Implementation of Anti-Corruption Measures

The Board of Directors has assigned the Corporate Governance Committee to monitor actions concerning anti-corruption measures, which is part of the CG&BE. The Company Secretary, as this committee's secretary, gathers such outcomes to report to the committee at least quarterly. Besides, since the oversight of compliance with anti-corruption measures of the PTTEP Group is jointly done by several functional units (Second Line of Defense and Third Line of Defense), reports are made to the applicable Board sub-committees, including the Risk Management Committee and the Audit Committee. All actions are submitted to the Board of Directors and summarized for the shareholders in the annual report.

The Corporate Governance Committee monitors the outcomes of the annual CG&BE plan and assesses such outcomes against relevant KPIs to ensure goal achievement.

Audit

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

PTTEP has implemented its Continuous Control Monitoring System to monitor and inspect any irregular issues that occur in PTTEP's work processes. The system has initially been conducted on the Procure to Pay process, and currently expanded to cover warehousing and inventory management, targeting the risk of non-compliance to regulations or work procedures that may possibly lead to fraud. When an issue has been detected, the system will send a notice directly to management, enabling them to promptly resolve the matter.

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, whose major shareholder is the government, has a responsibility to lead by example and to encourage society to adopt better anti-corruption standards. In 2019, the Company proactively took several measures and participated in several activities to counter corruption. These were, for instance, Thailand's National Anti-Corruption Day which was organized at BITEC Bangna by the Anti-Corruption Organization of Thailand (ACT) on September 6, 2019, where our management and employees

pledged to combat 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 Exhibition and Convention Center, Muang Thong Thani on December 9, 2019.

PTTEP was re-certified as a member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) on May 17, 2018. This re-certification confirms our dedication and commitment to fight all forms of corruption, as well as affirming our effort to expand and encourage anti-corruption measures among 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 sustainability and create optimal value for shareholders. Details are disclosed in the "Shareholders' Rights and Equal Treatments" section.

(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.

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 2019, our employees attended training and development programs such as ISO 14001 Environment Awareness Course at an average of 43 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 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 fraud. 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 with an objective to understand the factors relating to our employees' engagement with the Company to improve the policies and practices. The past results confirmed that staff engagement is continuously improving. 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. The Company continued to regularly monitor the progress of such plan and will continue to conduct the Employee Engagement Survey again in 2020.

(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 spot markets. The Company assesses clients' suitability against the four following criteria, namely, economic returns of product prices, financial stability, safety standards, and compliance with local laws and regulations of each client. The Company treats all buyers equally for the optimal long-term 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 and is dedicated to exploring and supplying petroleum domestically and internationally. The Company strictly complies with the laws applicable to our operations in all locations where 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, also 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 Society

PTTEP Corporate Social Responsibility Policy emphasizes sustainable social development and stakeholder engagement at all levels. Social responsibility has been integrated with each business decision-making and execution process. This Corporate Social Responsibility Policy is adopted by all PTTEP operations.

In this regard, PTTEP uses the Issue and Stakeholder Management System (ISMS) as a tool to analyze social risks and mitigate impacts as well as to promote good relations with communities in every operating area. ISMS has been set as a KPI for the relevant managers and External Relations staff to ensure effective implementation. An ISMS workshop is organized for the executives and staff of all domestic and international assets on a regular basis. External Relations staff revisit ISMS to update the information every year.

(7) Environment

With PTTEP's Vision for being the "Energy Partner of Choice" through competitive performance and innovation for long-term value creation, creating shared values and benefits for all stakeholders, the Company engages stakeholders for shared values and mutual benefit. The Company continually strives to achieve excellence and become a leadership 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 and implemented throughout the operations in order to achieve our vision and commitment to SSHE. The Company continues to publicly disclose the SSHE performances indices, such as the lost-time injury frequency rate, total recordable injury rate, and hydrocarbon and chemical spill rates on the website. The information is routinely communicated with the Company's external and internal stakeholders, including staff and the Department of Mineral Fuels, through the annual Sustainability Report.

PTTEP implements an 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 (currently, called SOCOTEC Certification (Thailand) Co., Ltd.) 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 (Songkhla and Ranong Province), and in Block M9, Zawtika Operation Center and Office of the Zawtika Project in the Republic of the Union of Myanmar.

PTTEP continues implementing the Green Practice Roadmap, which is aimed to mitigate environmental impacts from the operations. The roadmap also aims to increase efficiency and create value-adding processes to the Company's business by reducing greenhouse gas emission, studying energy efficiency, increasing the biodiversity of our operating sites, CO₂ sequestration by reforestation, reducing operating costs through improving resource efficiency, and reducing waste. 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 logistics, green offices and carbon-neutral events 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) Vendors

According to the Procurement Regulation and the Good Corporate Governance and Business Ethics of the PTTEP Group (CG&BE), vendors play a crucial part in the sustainability of our business. We therefore employ a policy which aims to treat our vendors as equal business partners. PTTEP's procurement system is based on fair competition, compliance with the laws and regulations as well as other legal obligations, and takes into account Safety, Security, Health, and Environment (SSHE). Vendors must follow the Company's work safety standards. Their employees meanwhile are also required to have good business ethics and respect for human rights. In addition, under the Company's new vision, PTTEP leverages "Energy Partner of Choice" through competitive performance and innovation for long-term value creation.

PTTEP Vendor Guide

PTTEP developed a Vendor Guide to provide our vendors with the necessary information for contacting and conducting business with PTTEP. The information contained includes the CG&BE, procurement process, contract management, and PTTEP Vendor Sustainable Code of Conduct and compliance, as well as several vendor communication channels for enquiries and complaints. Details of the PTTEP Vendor Guide are available on our website at www.pttep.com > E-Service > Procurement and Contract > PTTEP Vendor Guide.

Vendor Registration

PTTEP is deeply committed to free and fair business competition without trade barriers. There are three channels for interested vendors to register with the Company.

(1) PTTEP website: Vendors can register their profiles through our website at www.pttep.com > E-Service > Procurement and Contract > Vendor Registration.

(2) The Category & Vendor Management Section: Vendors can contact the Category & Vendor Management officers or Procurement & Contract officers during business hours to register their profiles.

(3) PTTEP Users: Vendors can directly register their profiles with PTTEP users who may, in turn, provide the vendors' names to the Category & Vendor Management Section for a preliminary review of their qualifications.

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, which comprises 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 vendors to ensure that they possess the qualifications to deliver the products or provide the services needed. In addition, we also carry out background checks concerning any wrongdoings related to bribery and corruption. If the record shows any involvement in such practices and the vendor is not able to clarify the matter, the selection process will be terminated.

Vendor SSHE Contractor Management Procedure and Plan

PTTEP introduced new measures to monitor and improve the management of vendors regarding SSHE, which is one of our core values. The SSHE Contractor Management Procedure and Plan document was issued to ensure better understanding as well as to encourage appropriate operational planning. The SSHE Contractor Forum with the vendors is organized annually to promote better understanding about our policies, standards, manuals, operational procedures, and work safety plans on petroleum exploration and production operations in all of the locations in which we operate.

Government Procurement and Supplies Management Act B.E. 2560

As a state enterprise, PTTEP must comply with the Government Procurement and Supplies Management Act B.E. 2560. PTTEP has communicated to all vendors to be prepared for the new process should they wish to submit a supply proposal to PTTEP. The communication draws their attention to, for example, study the procurement process under the Act; register themselves on the e-Government Procurement (e-GP) system; be aware of the vendor registration requirements of the Comptroller General's Department; and be aware of the anti-corruption policy and the requirement to put in place appropriate anti-corruption directions in relation to procurement. This is to ensure that our procurement procedure conforms to the objectives of the Act, namely value for money, transparency, efficiency and effectiveness, and verifiability.

Procurement Sourcing Strategy

PTTEP prepares an analysis to review overall procurement performance by using historical procurement data. This data is used to analyze operational and market risks, classify products and services into categories (Category Management), and analyze spending by region in order to identify critical product categories based on their values and risks.

Upon identifying the critical product categories based on their values and risks, we use the information to prepare a procurement strategy, a contract of each product and service category, market analysis in support of future procurement planning, and a supplier relationship management plan. The procurement strategy and contract, including a list of bidders, will then be submitted to the Procurement Committee (PC) and joint-venture partners (if any) for approval prior to proceeding with the bidding. (For transparency, the procurement strategy, contract, and list of bidders must be internally approved by the three functions, namely operations, assets, and procurement prior to being submitted to the PC and joint-venture partners, in order to ensure checks and balances as well as verifiability.)

In addition, under the Production Sharing Contract (PSC), PTTEP is required to submit an Annual Master Procurement Plan (AMPP) in order to obtain endorsement from the Department of Mineral Fuels (DMF) for procurement valued over THB 10 million prior to sourcing process. For any procurement transactions which have a Procurement Strategy, DMF's endorsement is required 30 days in advance of the procurement process.

Vendor Selection

In the process of vendor selection for high-value and high-risk procurement, two sealed envelopes are required (one for a technical proposal and the other for a price proposal). The technical envelope is opened first for technical and SSHE evaluation, followed by the opening of the price envelope. Subsequently, the result of the bidding process will be submitted to the Procurement Committee (PC), joint-venture partners (if any), and the Board (for high-value procurement) for endorsement prior to the stage of contract drafting with the selected vendor. Furthermore, PTTEP is required to inform bid results to DMF, and in the event that an awarded contract value is 10 percent higher or lower than the Procurement Strategy, DMF's endorsement is required prior to awarding the contract. The Company only selects vendors with the required technical and SSHE qualifications, and those which offer the lowest price or are in the best interests of the PTTEP Group. Additionally, PTTEP has adopted a weighted technical and price scoring method in the vendor selection process with a view to engaging qualified vendors offering competitive prices through a process that is transparent and verifiable.

Contract Management and Assessment

Contract management and Supplier Relationship Management (SRM) is an important component of the petroleum exploration and production business. A contract holder coordinates between vendors and all relevant parties to ensure that they fully understand and comply with PTTEP's work plans, contract objectives, SSHE standards, and risk mitigation plans, as well as key performance indicators (KPIs). The contract holder also needs to assess and follow up periodically on the performance to ensure that the vendors operate according to the contractual terms. At the end of the contract, the contract holder must also complete the Contract Closed-out Report to identify areas of improvement regarding the operations and long-term sustainable relationship with the vendor.

Vendor Collaboration Initiatives

In 2019, PTTEP continued to develop an effective supply chain management and support vendor collaboration initiatives to maintain a good relationship with vendors. Contractor meetings were held with vendors under critical work categories, e.g. Offshore Drilling Rig, in order to communicate Company policy and direction as well as receiving feedback from vendors. The objectives of the meeting were to enhance and improve work efficiency and foster collaboration between PTTEP and vendors. Additionally, PTTEP organized Management Visits to potential vendors' operational premises in order to seek cooperation from new potential vendors in the future.

In addition, PTTEP organized the "2019 SSHE Contractor Forum" with the key objective of demonstrating PTTEP's strong commitment to continuously improving Safety, Security, Health, and Environment in our operations. Practical guidelines for reducing supply chain risk in social, environmental, and governance (ESG) were also communicated to our key vendors at workshops to nurture understanding and encourage them to adopt the same approach.

Local Content

To enhance the capability of domestic vendors to compete internationally, PTTEP supports sourcing of local products and services. Not only does it promote domestic employment and income distribution, it also reduces the outflow of capital to other countries. As a result of our commitment to fostering a long-term relationship with the communities where we operate, we have been entrusted by the respective communities with licenses to operate. Meanwhile, we also encourage our vendors to operate with care and responsibility wherever they work, and to increase their local sourcing to save on costs as well as to support the local communities.

Vendor Sustainability Management

PTTEP is committed to operating our business to achieve sustainable growth and adhering to good corporate governance for the community, society and environment. To concretely achieve these goals, we give priority to the supply chain management and the monitoring of our vendors.

The "PTTEP Vendor Sustainable Code of Conduct" was drafted with its contents and scope adhering to relevant rules, regulations and laws. The vendors are encouraged in all of their activities to be ethical, respect human rights, look after their employees' occupational health and safety, and take environmental management seriously. An example of PTTEP's environmental management plan is the "Green Procurement Roadmap" that we have collaborated with the Thailand Environment Institute since 2017. The Company also encourages our vendors to apply the Vendor Sustainable Code of Conduct with their vendors to scale up sustainable supply chain management.

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

For more effective supply chain management in vendor management, in 2019 PTTEP and PTT Group conducted a Supplier On-site Audit by External Party for four of our key suppliers in Drilling-Related and Well Services categories. All four suppliers passed the ESG assessment. Consistent with our policy and that of PTT Group, a workshop held by an external party was organized to promote better understanding among our vendors about sustainability assessment criteria and to encourage improvement in the sustainability capability in their respective organizations.

Whistleblowing

To give confidence and protection to vendors and related parties from possible retaliation as a result of their reporting in good faith of suspicious misconduct or wrongdoing by directors, the management, employees, or persons acting on behalf of the Company which might be in violation of the law, CG&BE, or other regulations of PTTEP Group, the Company established the CG Hotline to handle the matters. Vendors can email cghotline@pttep.com or report through "PTTEP Whistleblowing System" at www.pttep.com.

Digital Transformation in Vendor Management

PTTEP leverages digital technology in managing our vendors in order to enhance efficiency and comprehensively managing risks. Various operations have been digitized under the Transformation strategy, covering the entire supply chain from the procurement process, contract management, purchasing, to goods and service delivery.

In 2019, PTTEP focuses on system and process integration throughout supply chain management by integrating supply chain and supplier data analysis with external sources of data into the Company's system. Additionally, we have integrated the annual procurement planning process, sourcing, logistics and payment process in order to make the entire process agile and support the electronic procurement process.

(9) Creditors

PTTEP recognizes the importance of the Company's internal and external stakeholders including creditors. This is based on our policy of equitable treatment for all stakeholders, an integral part of 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, is reviewed and audited by an external independent auditor in compliance with the Generally Accepted Accounting Principles (GAAP). The information is also endorsed by our Audit Committee as well as the Board of Directors prior to public disclosure.

Regarding debenture holders and other creditors, PTTEP's debenture issuance 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 debenture and loan agreements and to ensure that the information is accurately and adequately disclosed to all stakeholders. The Company also maintains all of the necessary measures to remedy losses which may arise as a result of PTTEP's non-compliance with the requirements for debenture issuers' rights and duties as well as borrowing terms.

(10) Competitors

PTTEP treats our competitors with professionalism, equality, fairness and transparency. The Company, in our best effort, does not slander competitors. The Company is also committed to complying with local laws and regulations regarding 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 the fifth consecutive year. Additionally, PTTEP received the winning award for the state enterprise sector as the 2019 Role Model Organization on Human Rights from the Department of Rights and Liberties Protection, the Ministry of Justice.

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 we operate. The Board sets forth the matters relating to the compliance with applicable laws and regulations 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 Governance, Compliance, and Internal Control 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 Corporate Secretary Division, the Executive Vice President of the Human Resources, Assurance, and Transformation Group, and the President and 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 the roles of all managers and employees in promoting compliance. The Compliance Program, on the other hand, has continuously been developed to enhance awareness of compliance-related matters among the employees. In 2019, the Company developed a Compliance Manual as a guidebook for ensuring a consistent and effective approach to operating/working, with compiled applicable laws, Company's regulations, as well as contractual obligations to enhance employees' awareness on internal and external compliance.

9.1.3 Information Disclosure and Transparency

9.1.3.1 Disclosure of Financial and Non-Financial Information

Information disclosure is a key aspect of good corporate governance. PTTEP gives importance to the information disclosed to The Stock Exchange of Thailand (SET) as well as to the shareholders. At the very least, the information must be accurate, sufficient, timely, and equally available to all parties. The information is prepared according to the Company's Business Ethics guidelines. 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 Communications Department.

Our information disclosure consists of financial information and non-financial information. In 2019, financial information is disclosed through financial statements which are reviewed and audited by the external auditor to confirm that they are presented accurately, in all material respects, according to 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 the PTTEP Annual Report. In addition to the SET's requirements, the Company also releases unreviewed quarterly and 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 the Securities and Exchange Commission (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 Company's shareholders, 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, analyst coverage, and news releases. The Company also reports our safety, security, health and environment (SSHE) 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 on the fundamentals of the exploration and production business. The newsletter is bi-lingual, Thai and English, and available in both hardcopy and electronic formats. The latter can also be downloaded from the Company's website and subscribed to receive our e-newsletter. Besides, The Company also launched PTTEP Investor Relations Mobile Application and Chatbot, effectively serving as additional communication channel between the Company and shareholders for news and updates.

In 2019, PTTEP disclosed a total of 43 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
Analyst, Shareholders' and investors' site visits	8
Knowledge sharing events for investor	7
Company visits and conference calls	40

Apart from the activities above, the Company also participated in a number of events organized by the SET for retail investors, such as "SET in the City", and interacted with the investors through daily telephone correspondence. The IR team also sets up a booth at the Company's AGMs, and readily provides information and answers to questions raised by the Company's 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 this 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 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: +66-2537-4868, +66-2537-5983, +66-2537-5843, +66-2537-5522
and +66-2537-4891
- (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 Group'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 Division are assigned to periodically and regularly review and monitor the internal controls as well as to submit the results directly to the Audit Committee, including establishment of the Internal Control Section for conducting annual assessment of adequacy and appropriateness of internal control system, 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. 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 Governance, Compliance, and Internal Control Department is assigned by the Board to be responsible for this matter.

9.2 Sub-Committees

The PTTEP Board is responsible for the appointment of the directors who have expertise and knowledge in certain areas as members of the sub-committees as specified by the Company's Articles of Association. Each of the Company's sub-committees is responsible for a specific set of tasks as determined 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 assume any chairmanship or directorship in the sub-committees. In addition, the Chairman of each sub-committee, with only the exception of the Risk Management Committee, must be an independent director. Applying to 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 to be 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. Names of the directors, duties and responsibilities, numbers of meetings, 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" section.

9.3 Nomination of Directors, the President and 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 and strategic directions 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. In 2019, PTTEP Board comprises of 8 independent directors and 2 female directors from 15 directors.

Moreover, the Nominating Committee conducts 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 2019 – 2020 consisted of the 3 following priorities;

(1) Organization Change and Development: To push PTTEP's operations to align with "Execute" Strategy specially to set up internal control and compliance systems for newly acquired projects internationally according to the post-merger integration, the experienced director nominee who keen on business integration in multinational organizations is necessary for PTTEP.

(2) Technology: In the rapid changes of technology, PTTEP has to adapt and be ready to cope with Disruptive Technology by developing its own enterprise technology capability to support the operations not only in E&P core business but also the investment opportunity in new businesses that may arise with the aim to become Digital Transformation excellence organization. The director nominee who has skill on wide spectrum of technology to be used to transform the organization is desirable.

(3) Legal: To support legal risk management and compliance which are corporate-level risks with direct impact to the Company's license to operate. New laws in responding to new technologies and dynamic environment change especially for new businesses investment needed to be monitored regularly.

The process begins with the Committee considering the alignment between the aforementioned Target Skill Mix and the candidates', where the Board has been able to fulfill the Target Skill Mix in Organization Change & Development and Technology in 2019 while still placing importance in future candidate nomination with the skill mix in Legal. In addition, the Nominating Committee also hold the process of 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 President and Chief Executive Officer

The Nominating Committee has included in its Charter the role to consider the President and 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 President and Chief Executive Officer to prepare the Company for the time when the President and Chief Executive Officer is unable to perform his or her duties or when the serving term is completed. The plan helps to minimize the risks and the impacts, potentially resulting from the discontinuity, on the management. The succession planning procedure is as follows:

(1) PTT Group Management Committee (PTTGMC), a committee in which the Company's 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 President and 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 President and Chief Executive Officer.

9.3.3 Nomination of Management and Succession Plan

The Board grants the President and 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 President and Chief Executive Officer 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.

Development and 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) and other leading organizations as well as attending seminars and business visits to enhance the ability to perform their roles. To continuously provide knowledge and share opinions with the directors, the Company's management delivered lectures and exchange opinions with the Board. In 2019, five sessions were arranged by the Company's management which were "Strategy Review" and the other four sessions related to Governance, Risk Management and Compliance (GRC). The Company always updates the directors with best practices of good corporate governance for an even better understanding on a regular basis. The followings are details of the trainings, seminars and lectures attended by the Company's directors during 2019.

Directors	Courses
(1) Mr. Prajya Phinyawat	<ul style="list-style-type: none"> - Annual international energy conference "CERAWEEK 2019", Texas, U.S.A. - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(2) Mr. Achporn Charuchinda	<ul style="list-style-type: none"> - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(3) Admiral Tanarat Ubol	<ul style="list-style-type: none"> - 2019 The Annual Petroleum Outlook Forum : "Sustainable Energy...Shaping a Better Future" arranged by PTT - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(4) Mr. Sethaput Suthiwart-Narueput	<ul style="list-style-type: none"> - Annual international energy conference "CERAWEEK 2019", Texas, U.S.A. - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation
(5) Major General Nimit Suwannarat	<ul style="list-style-type: none"> - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management

Directors	Courses
	(2) Cybersecurity and Data Privacy Laws (3) Environmental, Social and Governance (ESG) Related Risks
(6) Mr. Twarath Sutabutr	<ul style="list-style-type: none"> - Annual international energy conference “CERAWEEK 2019”, Texas, U.S.A. - Executive Program in International Management by Stanford – National University of Singapore (NUS) - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(7) Mr. Pitipan Teparitarnorn	<ul style="list-style-type: none"> - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(8) Mr. Bundhit Eua-arporn	<ul style="list-style-type: none"> - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(9) Ms. Penchun Jarikasem	<ul style="list-style-type: none"> - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management (2) Cybersecurity and Data Privacy Laws (3) Critical Success Factors in a GRC Implementation (4) Environmental, Social and Governance (ESG) Related Risks
(10) Mr. Chansin Treenuchagron	<ul style="list-style-type: none"> - Internal Lecture and Discussion Session on 2020 Strategy Review - Internal Lecture about GRC on the following topics: <ul style="list-style-type: none"> (1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management

Directors	Courses
	<p>(2) Critical Success Factors in a GRC Implementation</p> <p>(3) Environmental, Social and Governance (ESG) Related Risks</p>
(11) Mr. Patchara Anuntasilpa	<p>- Senior Executive Program on Justice Administration (Class 23) by Judicial Training Institute</p> <p>- Internal Lecture and Discussion Session on 2020 Strategy Review</p> <p>- Internal Lecture about GRC on the following topics:</p> <p>(1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management</p> <p>(2) Cybersecurity and Data Privacy Laws</p> <p>(3) Critical Success Factors in a GRC Implementation</p> <p>(4) Environmental, Social and Governance (ESG) Related Risks</p>
(12) Mr. Dechapiwat Na Songkhla	<p>- Internal Lecture about GRC on the following topics:</p> <p>(1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management</p> <p>(2) Cybersecurity and Data Privacy Laws</p> <p>(3) Critical Success Factors in a GRC Implementation</p> <p>(4) Environmental, Social and Governance (ESG) Related Risks</p>
(13) Mr. Atikom Terbsiri	<p>- Public Lecture on “Global Oil & Gas Markets in Turmoil - Implications for Thailand” by The Petroleum Institute of Thailand (PTIT)</p> <p>- Internal Lecture about GRC on the following topics:</p> <p>(1) Environmental, Social and Governance (ESG) Related Risks</p>
(14) Mrs. Angkarat Priebjivat	<p>- DCP Series 4/2019 : How to Develop a Winning Digital Strategy by Thai Institute of Directors (IOD)</p> <p>- Understanding Thailand Data Protection Law and Its Unintended Consequence by Acis Professional Center Co., Ltd.</p> <p>- Internal Lecture and Discussion Session on 2020 Strategy Review</p> <p>- Internal Lecture about GRC on the following topics:</p> <p>(1) Environmental, Social and Governance (ESG) Related Risks</p>
(15) Mr. Phongsthorn Thavisin	<p>- Annual international energy conference “CERAWEEK 2019”, Texas, U.S.A.</p> <p>- Internal Lecture and Discussion Session on 2020 Strategy Review</p> <p>- Internal Lecture about GRC on the following topics:</p> <p>(1) 5 Trends that Boardroom Should Know; Disruption, Cyber Security, Consumer Engagement, Environment, Social and Governance (ESG) and Crisis Management</p> <p>(2) Cybersecurity and Data Privacy Laws</p> <p>(3) Critical Success Factors in a GRC Implementation</p>

Directors	Courses
	(4) Environmental, Social and Governance (ESG) Related Risks

Currently, 12 of 14 of the Company's directors have participated in IOD's Director Certification Program (DCP), while 4 has attended the IOD's Director Accreditation Program (DAP). As a result, there are 13 out of 15 directors (86.67%) who have attended the two mentioned courses. In addition, the Company 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 Company Secretary" section.

9.5 Authority of the President and Chief Executive Officer

9.5.1 Authority under Resolutions from the Shareholder Meetings

The President and Chief Executive Officer is the authorized signatory who may sign to bind PTTEP with external parties under clause 9, paragraph 6, of the Company's Articles of Association registered with the Ministry of Commerce.

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

The Board authorizes the President and Chief Executive Officer to act and conduct, on the Company's behalf, normal course of business operations under the stated objectives in our Memorandum of Association, petroleum concessions, and other agreements, including other businesses in which the Company has interests. In addition, the President and Chief Executive Officer is also authorized to be the acting body, 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 Procurement for PTT Exploration and Production Public Company Limited and Affiliate B.E. 2561, 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 President and 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. 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 Company Secretary" part. As of December 31, 2019, 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 President and Chief Executive Officer

The Board is authorized to elect one director to be the Chairman of the Board as well as to appoint a person to be the President and Chief Executive Officer where the Chairman and the President and Chief Executive Officer of PTTEP are of two different directors. The Chairman does not participate in the daily management of the business, providing that conducting and monitoring of the business policies are entirely separated from the daily operational management. Duties and responsibilities of 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 President and 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 2019 was 2.98 out of 3. 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 President and Chief Executive Officer, and Executives with Directorships in Other Companies

PTTEP clearly states in the CG&BE in regard to the holding of a directorship position in other companies or organizations which are not of their own or families by the President and Chief Executive Officer and executives. The

individuals must be given an approval from the Company's authorized personnel, on only-if-necessary and no-harms-done basis, 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 Company 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, the management, and employees shall treat the interests of the PTTEP Group with priority and shall not participate or be involved in all activities which may lead to any conflicts of interest.
- (2) Directors, the management, and employees shall review and disclose, at least on an annual basis, their transactions that have led to a conflict of interest with the Company.
- (3) Directors, the management, and employees shall not participate in considering or voting on any matters in which they have a stake or stakes, and, if such matters exist, all relevant information shall be completely disclosed.
- (4) Directors, the management, and employees shall strictly adhere to the laws and regulations as required by the SET, particularly in relation to connected transactions.

The Company has established preventive measures for conflicts of interest as follows:

- (1) Directors, the 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, the management, and employees who may have a potential conflict of interest in regard to procedures relating to a bidding process, and selection and awarding of the transaction, must report to their supervisors 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 process.
- (3) Directors, the management, and employees must notify the Company immediately should there be any suspicion or uncertainty that what they or their related persons are involved in, or that their shares in the business with transactions with the Company, may lead to a conflict of interest.

Directors, management, and employees must review their possible involvement in conflicts of interest on an annual basis. To review their conflicts of interest related to any particular matter in the procurement process, management and employees who are directly involved in the procurement process must disclose their transactions which may lead to a conflict of interest at least every six months. This is in order for the supervisors to consider a re-assignment of duty to prevent such conflicts of interest from occurring.

9.12 Business Ethics

PTTEP is committed to operating ethically primarily because the Company's Business Ethics is regarded as the crucial behavioral framework and guidance for all 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 by stakeholders in the efficiency and transparency of the Company's business operations, creating a long-term sustainable value and fairness for everyone concerned.

Business Ethics of the PTTEP Group is part of the CG&BE. The Board first established its Business Ethics in 1989, and it has been revised every year. The current version of the CG&BE was approved by the Board on January 30, 2019, and it is regarded as the highest regulation for business operations within the PTTEP Group. The CG&BE is available for downloading from the Company's website.

PTTEP's Business Ethics as a whole consists of principles, guidelines for good practice, samples of questions and answers, information for further study, and a list of the departments responsible for each of the principles. There are 10 ethical issues which reflect our organizational values and to which the Company's directors, the management, and employees must adhere.

- (1) Compliance with Laws, Regulations and Rules, and Respect for Different Customs and Cultures
- (2) Political Neutrality
- (3) Human Resources
 - Workplace Environment
 - Privacy, Equal Treatment and Anti-Harassment
 - Illegal Drugs, Substance Abuse and Alcohol
 - Outside Employment, and Executives' and Employees' Participation in Outside Activities
- (4) Use and Protection of Information and Assets
 - Record Keeping, Use, Disclosure and Safeguarding of Information
 - Use and Storage of Electronic Data and Information Technology Resources
 - Utilization 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 has distributed its CG&BE booklets to all the directors, management, and employees for their reference and adherence. Everyone is also required to sign their names, thus committing themselves to apply the CG&BE to the highest working standards. In addition, the booklets are sent 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, the contents of the CG&BE booklets can also be found at 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 company 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 uphold and comply with the policy accordingly. Communications also extend to external parties, for example, vendors, joint-venture companies, and agents of the PTTEP Group in order to encourage ethical cultures among their groups and society in general. Details are explained in the "Continuing to Provide Communication, Knowledge and Training" subsection under the "Anti-Corruption" section.

The Board's role involves monitoring and evaluation of CG&BE activities. The Corporate Secretary Division 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 targeted performance. The Corporate Governance Committee has already reviewed the 2020 plan by taking into account the 2019 evaluation results related to CG&BE and anti-corruption measures to ensure continuity and efficiency for the development of the following annual plan for this year's operations.

9.13 Internal Controls

PTTEP values continual improvement of the internal control system based on the international standard under COSO 2013 Internal Control – Integrated Framework, issued by The Committee of Sponsoring Organizations of the Treadway Commission, to reasonably assure that three business objectives can be accomplished. These objectives are (1) *operations* with efficient, effective, and prudent use of resources and safeguarding of assets, (2) *reporting* with 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 promotes ethical work attitudes and the work atmosphere where the Company's internal control system is conducted according to PTTEP principles of Good Corporate Governance and Business Ethics (CG&BE) as well as our main corporate objectives: Growth, Prosperity, Stability, Sustainability, and Dignity. The Board is responsible for governing and enhancing this internal control system, and the Company has correspondingly designed an appropriate organizational structure, reporting lines, and delegation of work authority.

In addition, PTTEP also focuses on human resource management by establishing an extensive set of human resource management regulations and policies which attract, develop, and retain competent individuals who are deemed in line with the corporate objectives. The management and employees are also held accountable for their internal control responsibilities to ensure achievement of the corporate objectives.

(2) Risk Assessment

PTTEP values risk management by appointing the Risk Management Committee, which is responsible for setting a policy, risk appetite and risk metrics & limits, as well as overseeing the effectiveness of company-wide risk management. The Company has also applied the ISO 31000 Risk Management concept company-wide and assessment of key risks related to our businesses, including fraud risk or risks which may arise as a result of significant changes to the Company, to appropriately manage such risks in a timely manner.

(3) Control Activities

PTTEP has adequate control activities which are able to mitigate risks to acceptable levels for their respective business environments or business units. Control activities have been established to mitigate risks and also periodically reviewed and improved. For instance, deployment of control is done through policies and work procedures, or usage of technology. The Company also encourages employees to be constantly aware of the importance of conformance to the control activities and 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 to support business operations and make effective decisions, particularly information processing systems that are accurate, complete, up-to-date, accessible, protected, verifiable, and stable, and permits only authorized persons to access confidential information. Additionally, The Company also implemented Data Classification policy to ensure that sensitive information is properly protected.

PTTEP has effective internal and external communication systems in place to support the functioning of the internal control system as well as a special communication channel to allow our stakeholders to confidentially report their concerns or complaints. Moreover, the Reporting and Whistleblowing Regulation 2013 offers protection to those who report actual or suspected misconduct and collaborate with the PTTEP Group in good faith from any form of retaliation.

(5) Monitoring Activities

PTTEP regularly monitors and 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. Subsequently, once the deficiencies are identified, improvement plans will be developed and responsible parties will be assigned to respond with timely resolutions. For separate evaluations, the Company has developed control self-assessment evaluations on an annual basis at both corporate and business process levels. In addition, the Internal Audit Division, which has a direct reporting line to the Audit Committee, has the responsibilities to perform independent audits correspondingly.

Details of the 2019 internal control adequacy evaluation results 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 Governance Framework, Risk Appetite Statement as well as Risk Metrics and Risk Limit as the guidelines. Enterprise Risk Management Policy requires the directors, the management, employees, suppliers and contractors to manage risks thoroughly and systematically to ensure our target achievement.

The Company applies risk management guidelines in accordance with the ISO 31000, an international standard for risk management, throughout the Company. Risk management practices are applied throughout the organization, including strategic planning and management, investment and divestment decision-making, capital project management, and operations and business processes. The company also manages risks at all levels, including the corporate, asset/project, and working units. PTTEP's Board of Directors appointed the Risk Management Committee to play a vital role into overseeing that

PTTEP's risk management is in line with PTTEP's Board of Directors' directions. The Risk Management Department is responsible for ensuring risk management framework implementation and its effectiveness across the organization as well as regularly reporting the results to the management, the Risk Management Committee, and the Board for acknowledgement. The Risk Management Department is also responsible for fostering culture in managing risks throughout the organization.

9.15 Remuneration of Auditor

9.15.1 Remuneration of Auditor

(1) Audit Fee: In 2019, PTTEP and the subsidiaries, both domestic and overseas, had paid audit fees to the State Audit Office of the Kingdom of Thailand (SAO) and other auditing firms for a total of USD 1.7 million.

(2) Non-Audit Fee*: In 2019, PTTEP paid a non-audit services fee to the SAO for a total of USD 0.5 million. This fee was charged for the preparation of Comfort Letters supporting liability management of the Group for US dollar denominated debt which issued and entirely offered to offshore investors.

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

9.15.2 Summary of the Auditors' Report for the Past Three Years (2017-2019)

The SAO expressed an unqualified opinion in the Auditors' Report on the PTTEP's consolidated financial statements for the past three years.

9.16 Other Good Corporate Governance Practices

PTTEP values and strictly abides by the CG&BE and international best practices, which are applied with due regard for our circumstances, business, and the best interests of the Company, shareholders, and stakeholders as a whole. Below is PTTEP's additional compliance with best practices:

(1) Since PTT holds 65.29 percent shares in PTTEP, the free-float proportion of shares is less than 40 percent of the total paid-up shares. Yet, the current free-float proportion is enough for minor shareholders to exercise their rights to veto significant transactions. PTTEP strictly values compliance with SEC and SET rules and criteria while taking seriously the perennial stewardship of minor shareholders' rights. Our assorted activities are regularly organized to convey useful data and information to these shareholders, winning acceptance from relevant external agencies.

(2) PTTEP values advance delivery of meeting notices to shareholders to allow them enough time to duly examine the data. Shareholders' meeting dates are scheduled for March every year for shareholders' convenience of planned attendance; our meeting dates do not coincide with those of other listed companies. A March date also provides shareholders with early receipt of rights and benefits, including dividends. Still, since PTTEP operates in several other countries, it takes some time to audit our financial statements, which is in the overall interests of shareholders, hence PTTEP needs to plan various report preparation well. We are able to send meeting notices to shareholders 21 days ahead of the meeting and publicize the meeting notices on our website no less than 30 days ahead of the meeting to allow shareholders time to examine meeting data in advance.

(3) Under our Articles of Association, director election is done by a majority vote, with one share carrying one vote, and shareholders can vote for individual directors. Directors garnering the highest votes are elected along with those holding the next highest votes, and so on until the number of available director positions are filled. PTTEP therefore does not rely on cumulative voting. Yet, all along, PTTEP has defined other methods of looking after the interests of minor shareholders, including allowing them to nominate director candidates for election in advance.

(4) Detailed and thorough verification of the rights of attending shareholders ensures that multiple proxy assignments are properly done without affecting the rights of other attending shareholders.

(5) Directors automatically retire at the age of 70; their qualifications become void when they reach this age.

(6) PTTEP defines a maximum of nine years for consecutive service by directors and independent directors. Those who completed consecutive terms totaling nine years are no longer eligible for director re-election. PTTEP also values similar consecutive periods for independent directors, for instance six years, and may take action when the time is right; the primary consideration is for suitably qualified directors for the exploration and production business in the best interests of PTTEP and its stakeholders.

(7) PTTEP requires that the number of independent directors should be no less than half of the Board of Directors.

(8) As always, PTTEP values independence of the Chairman of the Board, which is why we give a top priority to recruit the Chairman from the ranks of independent directors, except for other justification or suitability in other aspects. We also consider business expertise and proficiency, work records, and good leadership. PTTEP has adopted specific processes for this position, including Chairman assessment by the entire Board of Directors to ensure his genuine independence. Details appear under "Independence of the Chairman". The present Chairman is an independent director.

(9) The PTTEP Board of Directors annually revisits the suitability of the Skill Mix by explicitly defining each aspect's skills or proficiency and setting the annual target for the Skill Mix in line with prevailing business circumstances for director recruitment and development. The Board also values Board diversity by not discriminating against gender, nationality or race.

(10) PTTEP adopted best practices on defining a minimum quorum for meeting voting of no less than two-thirds of the entire Board's directors (excluding those with vested interests). PTTEP's corporate governance requires that those absent without good reason from Board meetings on more than three consecutive occasions should automatically lose qualifications as directors. PTTEP also set meeting attendance as an indicator of the Board Performance Target. PTTEP's practice is to, a year in advance, schedule Board and sub-committees meetings for the benefit of efficient planning by directors. This year more than two-thirds of the Board had perfect meeting attendance. Finally, before any voting, the Chairman gives all directors opportunities to ask questions and extensively discuss issues for a unanimous decision.

(11) Earnest appraisals of the Board of Directors and sub-committees are done through scoring on performance appraisal forms (self-appraisal and cross-appraisal), Chairman appraisal, and entire-Board appraisal; such scores complement Board Performance Target findings. Business performance and corporate governance aspects are assessed. Appraisal scores are discussed by applicable sub-committees in order to improve their performances. In addition, the Board of Directors undergoes appraisal by neutral external agencies, including IOD via its Board of the Year assessment, annual CGR survey among listed companies, and the ASEAN CG Scorecard assessment. Survey findings are applied to the Board's performance improvement.

(12) This year PTTEP held four meetings among the independent directors and two non-executive meetings for consultation and exchange of views on crucial, useful matters to the Company and shareholders (major and minor) and upgrading of corporate governance practices. The CEO was subsequently informed of the outcomes.

(13) PTTEP defined a policy on CEO and senior management compensation in agreement with their short-term and long-term performance as well as PTTEP's performance. The Company disclosed the ratio of the CEO's compensation to the average compensation of the Company's executives, as well as to the average of all employees.

(14) PTTEP has no project to award the management the right to buy PTTEP shares, but the Company instead defines a structure for suitable compensation for business, which is competitive and screened by the Remuneration Committee and the Board of Directors.

9.17 Awards and Recognitions for Good Corporate Governance

(1) Being selected to receive the NACC Integrity Award (No.8) from the Office of the National Anti-Corruption Commission (NACC). The Company has been recognized for its ethical practices, transparency, anti-corruption as well as its support for human rights and corporate social responsibility.

(2) Being selected to receive the top award in the state enterprise sector as the 2019 Role Model Organization on Human Rights from the Department of Rights and Liberties Protection, Ministry of Justice. PTTEP has been evaluated based on criteria of the United Nations Guiding Principles on Business and Human Rights, which recognizes organizations that have established guidelines for preventing human rights violations, have instilled awareness of and responsibility for human rights among personnel, have put systems in place to oversee internal departments in the company, and have created a mechanism for stakeholders to voice their grievances.

(3) Being selected to receive the Board of the Year Award 2018 (Silver) (for market capitalization over 100 billion baht) from the Thai Institute of Directors Association (IOD). This is the only award from the capital market that recognizes the top-performing boards of Thai listed companies based on their commitment to corporate governance, performance and board leadership.

(4) Being rated “Excellent” and receiving five of the National Corporate Governance Committee’s symbols, the highest level, based on the Corporate Governance Report of Thai Listed Companies (CGR) 2019 of the Thai Institute of Directors Association (IOD). PTTEP has continuously been rated and placed at this highest level since the first assessment in 2001.

(5) Being selected as a member of the 2019 Dow Jones Sustainability Indices (DJSI) in the DJSI World Oil and Gas Upstream & Integrated Industry for the sixth consecutive year. We have also been named the Industry Leader in this category for the second time, after our first in 2016. DJSI is a family of internationally recognized indices that evaluate the sustainability performance of the 2,500 largest global companies.

(6) Being selected as a member of the FTSE4Good Index Series for the fourth consecutive year by FTSE Russell. The FTSE4Good Index Series identifies companies that demonstrate strong Environmental, Social and Governance (ESG) practices measured against international standards. PTTEP has also ranked in the top 10 for both environmental and governance dimensions in the energy sector. The indices are used by various investors and funds for their investment decisions as well as by companies a scope for business participation in social responsibility.

(7) Being selected to receive the Best Sustainability Award and the Outstanding Investor Relations Award from SET Awards 2019, which was organized to honor listed companies with market capitalization over Baht 100 billion that presented outstanding performances. The awards were organized by The Stock Exchange of Thailand and the Money & Banking magazine. The criteria included assessment of operational performance of the preceding year and current business operations, together with responsibility for stakeholders (environment, society, and corporate governance).

Moreover, The Stock Exchange of Thailand has listed PTTEP in the 2019 Thailand Sustainability Investment (THSI) for the fourth consecutive year as a listed company that has operated its business with sustainability.

(8) Being recognized as an exemplary corporation in organizing the Annual General Meeting of Shareholders (AGM) for the year 2019 by successfully scoring 100 percent for the seventh year in the AGM checklist assessment conducted by the Thai Investors Association.

(9) Being selected to receive the Asia's Icon on Corporate Governance Award for the seventh consecutive year from the Corporate Governance Asia magazine, a financial journal on corporate governance in Hong Kong and Asia.

(10) Being selected to receive three awards from the Asian Excellence Awards 2019, namely Asia's Best CEO for the second consecutive year, Asia's Best CFO for the sixth consecutive year, and Best Investor Relations Company (Thailand) for the seventh consecutive year from the Corporate Governance Asia magazine. The Asian Excellence Awards are designed to recognize achievements and excellence in management acumen, financial performance, corporate social responsibility, environmental practices and investor relations.

(11) Being selected to receive the Thailand Energy Award 2019 in the category of energy conservation for transportation for its success on supply vessels logistics and transportation management which save more than 13.6 million litres of diesel fuel consumption per year during 2016 - 2018. This award was granted by the Department of Alternative Energy Development and Efficiency, Ministry of Energy.

(12) Being selected to receive the ISO 45001: 2018 certification for our Occupational Health and Safety Management System. This certificate recognized PTTEP's Petroleum Development Support Base (PSB) in Songkhla for implementing an effective Occupational Health and Safety Management System that meets international standards.

(13) Being selected to receive the Best Practice Award 2019 in the category of Natural Resources and Environmental Conservation from the Foundation for Thai Society. The award recognized PTTEP's excellent practices in its corporate social responsibility and the Forest Restoration for Eco-learning at Sri Nakhon Khuean Khan Park project that delivers benefit to the public and the country.

(14) Being selected to receive the PADMAMITR+ Award 2019 in the category of Partnership for Sustainability from Jakarta's Governor for the PTTEP-LKC Free Health Service Project in Rorotan Village. The project is aimed to provide underprivileged people with basic treatment and knowledge of healthy living in cooperation with Domphet Dhuafa (DD), an Indonesian non-profit organization foundation.

(15) Being selected to receive the BAZNAS award 2019 in recognition of the Best CSR Organizer from BAZNAS (The National Zakat Board) in the Republic of Indonesia. PTTEP has implemented corporate social responsibility projects and activities such as a free clinic in North Jakarta to provide medical treatment for underprivileged patients, and 15 pre-school development centers (Stimulation, Intervention, Optimization of Services for Children or SIOLA) in west Sulawesi that help develop and nurture children's health. The projects are aimed to help improve the quality of life for local communities.

(16) Being selected to receive the Best Community Development award from the Crab Hatchery Learning Center in Songkhla province, Thailand, and the Overall CSR category at the Gulf Sustainability and CSR Awards 2019, organized by the human rights independent organization of United Arab Emirates (International Humanitarian City). PTTEP is the first Thai company that wins the award.

(17) Being selected to receive the Stevie Award 2019 (Silver Class) in the category of Innovation in Community Relations for implementing a CSR Project, the H.T.M.S. Underwater Learning Site Project, at the Asia – Pacific Stevie Awards 2019, which is held in Singapore.

(18) Being selected to receive the CSR award in the category of Social Empowerment for the implementation of the Crab Hatchery Learning Center Project in Songkhla province. The award was presented at The Asia Responsible Enterprise Awards 2019 (AREA 2019) in Taipei, the Republic of China (Taiwan).

(19) Being selected to receive the Excellent Level (G-Gold) of Green Office Award 2018 from the Ministry of Natural Resources and Environment in recognition of PTTEP's Petroleum Development Support Base in Songkhla province for efficient energy and resources management. The activities were implemented under the Green Office project, initiated by the Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment of Thailand.

(20) Being selected to receive the 3G Best CSR Campaign 2019 award for the H.T.M.S. Underwater Learning Site Project at the Global Good Governance (3G) Awards 2019. The event was held in Jakarta, the Republic of Indonesia.

(21) Being selected to receive an Energy and Environment Foundation Global CSR Award 2019 as a Platinum Winner for the Waste to Energy Project. The event was held in New Delhi, India.

(22) Being selected to receive three CSR awards at the 11th Annual Global CSR Summit and Awards 2019 in Kuching, Sarawak, Malaysia, including the Platinum Award for Best Country Award for Overall CSR Excellence - Best in Thailand for the overall corporate social responsibility performance, the Gold Award for Best Environmental Excellence Award (among companies with market capitalization more than USD 1 Billion) for PTTEP Teenenergy Project, and the Gold Award for Best Community Programme Award (among companies with market capitalization less than USD 1 Billion) for PTTEP's Pre-school Development Project (SIOLA) in the Republic of Indonesia.

(23) Being ranked as one of the top five "Best Investor Relations in Global Energy Sector" by the IR Magazine at the IR Magazine Global Forum and Awards. The final selection was based on survey results from analysts and investors via the IR Magazine in Europe, Asia and North America.

(24) Being selected to receive "The Asset Best Investor Relations Team Award" from The Asset Magazine, Hong Kong.

(25) Being selected to receive an award for the Best Use of Multimedia for IR from the IR Magazine Awards & Conference South East Asia 2019. This award was presented to companies which demonstrate an outstanding performance in Investor Relations activities in Southeast Asia through innovative applications.

9.18 Reports of the Sub-Committees

9.18.1 The Corporate Governance Committee Report

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

In 2019, the Committee convened five times, with all incumbent directors attending every meeting and providing useful recommendations for improving the Company's performance. The duties and responsibilities of the Committee this year can be summarized as follows:

(1) Assessed and reviewed the CG&BE to check whether it was still in compliance with laws, practices of international standards and those of other leading companies, and recommendations of well-recognized institutions, as well as subsequently submitting the results for the Board's approval. Detailed results included the revision of the CG&BE related to the provision added for CG&BE training as a compulsory training for all employees in order to enhance their understanding of CG&BE principles and enable employees to comply with the Company's guidelines; revision of the Business Ethics related to the Use and Storage of Electronic Data and Information Technology Resources by adding an oversight measures to cover social media use and improving the Company's practice to align with the cybersecurity and personal data protection laws; revision of the Reporting and Whistleblowing Regulation related to the subsidiaries' case-handling process to put an appropriate measure on governing both existing and new investment projects and the handling of fraud cases; providing recommendations for and considering the issuance of Remedy Guidelines to set forth clear remedial measures for any person who has been affected by whistleblowing cases, which will reassure appropriate and fair protection for every related person in the handling process.

(2) Promoted business operations of the PTTEP Group and performance of the Board, management, and employees to be sure that they are in line with the CG&BE by monitoring and providing recommendations concerning CG&BE-related activities to enhance knowledge and understanding of the CG&BE. Recommendations included setting enforced measures for employees to participate in CG&BE E-learning to encourage them to enhance their knowledge of CG&BE in order to align their behaviors with the Company's ethical standard and then reflect the Company's culture and good image; providing recommendations on the management's role model behaviors to efficiently drive the CG&BE culture in the organization; setting targets and indicators of activities' achievements; and considering any complaints received through the CG Hotline on a quarterly basis. The Committee also supported and monitored the progress of driving Governance, Risk Management and Compliance (GRC) principles in PTTEP.

(3) Valued good governance across the PTTEP Group and provided useful recommendations for the quality assurance of CG&BE implementation in new investment projects and projects in foreign countries. This was to ensure that the implementation in every area is in line with the Company's direction and a smooth transition is in place in case there is a change in operatorship. This measure was emphasized for carrying out with the related units in advance such as preparation in the Malaysia Asset where PTTEP acquired the Murphy Oil Corporation's business in Malaysia, and the acquisition of Partex from Calouste Gulbenkian Foundation in the Netherlands which focused on investments in the Middle East.

(4) Governed to ensure that PTTEP maintains its efficient and adequate system that appropriately supports the Company's anti-corruption policy, practices, and internal control systems for everyone in the organization to cultivate and also expand its practices to vendors to ensure that they abide by the CG&BE of the PTTEP Group. Supported cooperating vendors to uphold their best practices on anti-corruption, e.g., communication regarding the No-Gift Policy, VDO presentation of CG&BE and the anti-corruption policy, primarily by sending emails to vendors, as well as anti-corruption online training and a post-training quiz for vendors.

(5) Provided recommendations to 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, taking into account efficiency and effectiveness in creating sustainable growth and growing trust by PTTEP's stakeholders. As a highlight of these efforts, the Company gives high priority to CSR project expansion, the efficiency and effectiveness of CSR project implementation, the empirical measurement of activities' achievements, the readiness and rapidness of communications to stakeholders and the public, as well as the extension of new communication channels which are modern and reach more of its targets.

(6) Considered and reviewed the implementation of the Corporate Governance Code (CG Code) by means that are deemed suitable to the PTTEP Group's businesses and conducive to strengthening long-term business values. The Company also established corporate governance reporting in accordance with the SEC's CG Code and international standards as well as incorporating the CG Report in the annual report for stakeholders.

The Corporate Governance Committee constantly reported the results of all meetings to the Board for its acknowledgement. In 2019, the Committee executed its assigned tasks in accordance with its charter and amendments with prudence, competence, and independence. The Committee properly provided straightforward opinions for the optimal benefit of PTTEP, the shareholders and stakeholders.

(Signed) *Admiral Tanarat Ubol*

(Tanarat Ubol)

Chairman of the Corporate Governance Committee

9.18.2 The Audit Committee Report

PTTEP is determined to conduct our E&P business with a long-term strategy to achieve sustainable growth while emphasizing the importance of fair and good corporate governance as well as benefit 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 to the Corporate Governance Code (CG Code) and Anti-Corruption policy to ensure that Governance, Risk management and Compliance (GRC) management remains 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 a sustainable future.

The Audit Committee consisted of four independent directors, all of whom were designated financial experts who are able to review the accuracy and reliability of financial statements. In 2019, the Committee convened 15 times, and the majority of incumbent directors attended all the meetings to discuss related matters with the management, the Company's internal and external auditors. This included the meetings with the Risk Management Committee to share information to ensure that their duties on monitoring the Company's activities were appropriate for dynamic risk. In 2019, the Committee's principal activities are as follows:

(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 State Audit Office of the Kingdom of Thailand, 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's Discussion and Analysis (MD&A) to provide an analysis of the factors affecting the Company's operation and financial statements.

(2) Review of the Internal Control System

The Committee reviewed and endorsed the assessment results of the Company's internal control system. 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. The Committee promoted a proactive approach in internal auditing while taking into account the key risks and crucial lessons learned, and also continued to encourage a continuous implementation of the preventive controls which helped to prevent or reduce the business risks which may have an unfavourable impact on the Company.

(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 that they were reasonable and beneficial to the Company and the shareholders, particularly the minority shareholders. The Committee also reviewed the disclosure of the transactions and viewed that the transactions had been correctly and completely disclosed, that the prices and conditions were fair, and that the transactions had been 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' compliance with the securities and exchange laws, SET's regulations, including other related laws, both Thai laws and the laws of other countries in which the PTTEP Group operates or invests in. The Committee also acknowledged the compliance report relating to the Company's and our subsidiaries' business operations, as prepared by the Governance, Compliance, and Internal Control Department, in addition to the other compliance audit results 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 and reviews the performance according to the work plans and key performance indicators of the Internal Audit Division. It also regularly monitors the progress of the corrective or improvement actions plans in response to audit findings.

In addition, the Committee supported implementation of digitization methods to monitor and detect irregularities on a continuous basis in order to resolve matters in time, for example, the implementation of the Continuous Control Monitoring System on the Procure to Pay process. In 2019, PTTEP expanded the monitoring scope to the warehouse and the inventory management process.

The Committee promoted the adoption of digital technology to enable internal auditing to accommodate changes in the digital transformation organization, and therefore encouraged the Internal Audit Division to implement digital technology in the audit process to deliver more accurate results while also reducing time, as well as to analyze problems for more effective, direct solutions.

The Committee also considered the adequacy of manpower of the Internal Audit Division and agreed to increase the manpower in order to support the Company's business expansion and to ensure that the audit activities are carried out appropriately and effectively.

(6) Nomination of/Meeting with the External Auditor

The Committee considered the nomination of the State Audit Office of the Kingdom of Thailand as the Company's external auditor. For 2019, it determined that the external auditor had performed its duties with independence, continued to exhibit the required auditing experience, and ensured the accuracy and reliability of the Company's financial reports. In addition, the Committee proposed the audit remuneration for 2019 and met separately with the external auditor and the Internal Audit Division in the absence of the management to acknowledge and identify the auditor's approach and audit plan as well as to consider key audit matters in the auditor's report.

For the appointment of the external auditor for 2020, the State Audit Office of the Kingdom of Thailand (SAO) requested the Company to outsource the external auditor in accordance with the State Fiscal and Financial Disciplines Act B.E. 2561 (2018), Article 71, requiring the SAO or the external auditor endorsed by the SAO to audit the financial reports of the government agency. The Company then proposed PricewaterhouseCoopers ABAS Limited (PwC) to be the auditor. The Committee considered that PwC is a leading company with reliable performance and independence; furthermore, the audit fee is reasonable comparable to other companies in the same business. Therefore, the Committee agreed to propose PwC to be the Company's external auditor.

(7) Oversight of Fraud Prevention

The Committee encouraged improvement of the Company's internal control system to ensure optimal control over fraud prevention. For example, the Committee promoted procurement through a competitive bidding process and supported the management to provide an analysis of past procurement reports in order to get information for preparing annual procurement plans in advance. As a result, the proportion of bidding transactions is significantly higher than direct negotiation transactions every year. The Committee also supported reporting and whistleblowing procedures, which allow a person to raise a suspicious misconduct or a potential fraud. In addition, the Committee was responsible for verifying the results of the Company's self-assessment relating to the anti-corruption process required by CAC and the Corporate Governance Code for Listed Companies 2017. The Company has also become a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC), reflecting our determination to stand strongly and prominently against corrupt practices.

The Audit Committee reported the results of all meetings to the Board on a regular basis. In 2019, the 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 its follow-through ensured that the Company is able to deliver the best possible performance in comparison with our industrial peers. In addition, the Committee is confident in the competency of the Internal Audit Division, which consists of personnel with various qualifications, skills and experiences, enabling them to perform their duties in auditing to cover various aspects efficiently.

The Committee's overall opinion regarding the work in 2019 is that the Company's financial reports were accurate, in compliance with generally accepted accounting standards and with International Financial Reporting Standards. The Company also conducted the operations in compliance with the laws and all obligations by incorporating proper systems of risk management, internal controls, internal audit, and corporate governance.

The Audit Committee's performance was graded "Very Good" by itself, the Board of Directors, and related agencies.

(Signed) *Achporn Charuchinda*

(Mr. Achporn Charuchinda)

Chairman of the Audit Committee

9.18.3 The Nominating Committee Report

During the year 2019, PTTEP successfully won a significant bid round in the Gulf of Thailand covering the Bongkot and Erawan fields, acquired a producing asset in Malaysia, and built strategic partnership to expand investment opportunities in Southeast Asia and the Middle East under the “Expand” strategy. To enable the “Execute” strategy to succeed as planned, particularly transition of operations to ensure continuous production in order to serve domestic energy demand, the Nominating Committee has hence been focusing on organization readiness, organization restructuring, development of executives and employees’ competencies, and nomination of CEO and directors who are qualified, knowledgeable, and experienced fitting its core business to provide sustainable growth and long-term competitiveness.

In 2019, the Nominating Committee convened 8 times, and the essence of the meetings can be summarized below:

(1) Considered the principles for 2019 Board Performance Target in which the Board shall focus on monitoring and providing feedbacks to the management to best achieve PTTEP’s Corporate Key Performance Index (KPI) as well as measuring the stakeholders’ perspectives towards the Company including Board of the Year Awards, criteria and requirements of Dow Jones Sustainability Indices (DJSI), and the ASEAN CG Scorecard assessment.

(2) Set Target Skill Mix of the nominees in replacement of the directors who are due to retire by rotation in 2020 in the areas of Organization Change and Development, Technology, and Legal to accommodate business acquisition and internationalized business operations as well as increase technological potentiality in order to support E&P and new businesses.

(3) Nominated to the Board of Directors suitable candidates with appropriate Skill Mix for consideration on election of directors and sub-committee members when positions were vacated, with due consideration for Board composition, competency, experiences that useful to PTTEP, the number of companies they were serving, and potential conflicts of interest. Also, it reviewed the principles allowing shareholders to nominate qualified director nominees in accordance to the Company’s Target Skill Mix for considerations by the Board of Directors and consequently the Annual General Shareholder’s Meeting so that major and minor shareholders are treated fairly and suitably.

(4) Considered the Board, Sub-Committees and Chairman’s performance assessment and report the result of the assessment to the Board of Directors.

(5) Considered the qualifications and selection process for qualified candidates for the CEO to drive the organization’s business growth and pursuit of investment opportunities; also, reviewed the CEO’s short-term and long-term performance appraisal.

(6) Screened and commented to the Board of Directors on organization restructuring and work process to support long-term corporate growth.

(7) Developed a more concrete executive succession plan which also includes competency assessment and selection process to accommodate short-term and long-term organization growth.

The Nominating Committee prudently and freely executed their duties to the best of their ability by providing comments for the best interest of all shareholders and stakeholders. The results of all meetings were regularly reported to the Board of Directors throughout 2019.

(Signed) *Bundhit Eua-arporn*

(Mr. Bundhit Eua-arporn)

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 the President and Chief Executive Officer (CEO), as well as the salary structure of the Company's senior executives by adhering to fair and reasonable principles, procedures, and structure.

In 2019, the Remuneration Committee convened 4 times, summarized as follows:

(1) Reviewed the remuneration policy and the salary of the Company's organization on appropriate principle based on company business in order to maintain competitiveness and support of a high-potential of Thai and foreigner to perform their duties, and also to operate with the company's Expand and Execute strategies to be more efficiently and accomplish.

(2) Considered the CEO's performance appraisal and remuneration based on appropriate to the company's performance and consistent with the overall performance of the organization.

(3) Reviewed the remuneration policy and criteria of the Board and sub-committees on appropriate principles based on their responsibilities and consistent with long-term corporate strategy as well as being comparable to those of other companies in the same industry. Moreover, the Committee took business environment into account in considering appropriate remuneration principles to create incentives for the Board in directing the organization to achieve short and long-term goals together with being adaptive to the changing technology.

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. The results of all meetings were also regularly reported to the Board for acknowledgement.

(Signed) *Achporn Charuchinda*

(Mr. Achporn Charuchinda)

Chairman of the Remuneration Committee

9.18.5 The Risk Management Committee Report

PTTEP recognizes the importance of risk management and adheres to effective risk management to enable PTTEP to achieve its business goal and sustainable growth. In 2019, PTTEP revised its strategies to Expand and Execute and successfully implemented the new strategies. In the Expand strategy, PTTEP focused on investments in strategic areas within the region and other prolific areas with strategic alliances. The success of this strategy is reflected in the acquisition of Murphy's business in Malaysia, shares of APICO LLC in Thailand, and Partex, which has a major investment in the Middle East. In terms of the Execution strategy, PTTEP focused on maintaining production levels of existing assets, developing projects as planned as well as effectively executing Bongkot and Erawan transition. This has led to very challenging management of risks to the achievement of PTTEP's goals, especially smooth and effective transition from previous operators as well as post-merger integration. 2019 was also the year of oil price volatility, disruptive technology, a rise in environmental concerns, changes in laws and regulations relating to PTTEP's business and operation, and an increase in cyber security. As these factors could potentially affect the achievement of PTTEP's goals or strategies, PTTEP's Board of Directors appointed the Risk Management Committee. As of December 31, 2019, the Committee comprised six members, two of whom were independent directors. The Committee played a vital role in overseeing that PTTEP's risk management is in line with PTTEP's Board of Directors' directions to ensure that the risks are most effectively and efficiently managed.

In 2019, the Committee convened 14 times, which included a meeting with the Audit Committee. The duties and responsibilities of the Committee can be summarized as follows:

(1) Governed strategic risk management in response to the dynamically changing external environment. The Risk Management Committee assessed the risks associated with the Company's "Expand and Execute" strategies, starting from defining strategic plans in the Direction and Policy Review meetings to ensure they were in line with PTTEP's vision and mission as well as managed risks that may affect the success of the implementation of strategic plans and business plans within PTTEP's Risk Appetite and Risk Limit. In addition, in 2019, the Risk Management Committee drove more strategic risk management by monitoring assumptions used in strategy formulation to ensure mitigation plans were in place to respond to any change affecting PTTEP's strategies.

(2) Considered investment projects to expand E&P investments including Merger & Acquisition, new exploration, divestment projects and portfolio rationalization in line with the Company's growth strategies (Expand), including the acquisition of Murphy's business in Malaysia and shares of APICO LLC in Thailand according to the Coming-Home Strategy as well as the acquisition of Partex according to investment expansion in other prolific areas, including the Middle East with strategic alliances. The Risk Management Committee also advised PTTEP to consider both risks and potential opportunities for value creation as well as provide recommendations to mitigate risks, including competitor and counterparty risk analysis, and post-merger & acquisition management.

(3) Considered managing risks of large development projects such as the Algeria Hassi Bir Rekaiz Project and the Mozambique Area 1 Project according to the implementation of the Execute strategy. Additionally, the Risk Management Committee raised the risk of transition execution of Bongkot and Erawan as well as post-merger integration of Murphy in Malaysia and Partex to the corporate level to closely monitor and provide recommendations, e.g. applying lessons learned from past mergers and acquisitions (M&As), assigning personnel from Corporate to supervise key tasks, and providing suggestions on risk mitigation of operations transferred from previous operators to ensure that the operations can be carried out smoothly with safety, security, health and environment (SSHE).

(4) Proactively managed risks to prevent unidentified risks from turning into problems, for instance, supporting meetings with the Audit Committee to exchange views and provide consistent guidelines, conducting lessons learned from past investments to improve investment and merger processes and be more cautious, improving corporate risk reporting to be more comprehensive and enhancing risk management performance indicators at the department and project levels.

In addition, the Risk Management Committee consistently oversaw enterprise risk management to ensure businesses were operated within PTTEP's risk appetite, particularly risks related to exploration and production operations, market, oil price, finance, and legal. The outcomes of Risk Management Committee meetings were reported to the Board on a monthly basis. The Risk Management Committee continuously promoted awareness of risk management for employees in order to foster a risk management culture as well as enhanced the level of organization readiness to cope with emerging risks, in addition to the existing corporate risks. In this regard, PTTEP has been selected as a member of the 2019 Dow Jones Sustainability Indices (DJSI) in the DJSI World Oil and Gas Upstream & Integrated Industry and maintained a DJSI score in the area of Risk and Crisis Management in the top quartile for the sixth consecutive year.

In summary, during the year 2019, the Committee independently performed its duties relating to PTTEP risk management systematically, prudently, and competently for PTTEP to efficiently manage risks within acceptable levels in order to achieve our objectives and goals for fair and maximum benefit of PTTEP, shareholders, and other stakeholders for long-term sustainability.

(Signed) *Sethaput Suthiwart-Narueput*

(Mr. Sethaput Suthiwart-Narueput)

Chairman of the Risk Management Committee

9.18.6 The Independent Directors Committee Report

Independent directors represent a crucial mechanism for corporate governance, playing a key role in ensuring corporate management transparency in the best interests of shareholders for fair distribution of benefits among all shareholders, investors, and stakeholders. PTTEP has therefore set a requirement to have independent directors more than half of the Board of Directors, a more stringent requirement than that set by the Office of the Securities and Exchange Commission (SEC), that is, a minimum of one-third of the Board.

In 2019, PTTEP successfully grew its businesses under the “Expand” strategy with the acquisition of a producing asset in Malaysia, the victorious bid round in the Gulf of Thailand, and the additional investment in exploration for sustainable growth. The independent directors gave their recommendations and comments on these to enable PTTEP to proceed with “Execute” as planned and to achieve its goals. This year, the Independent Committee convened 4 times, and the essence of the meetings can be summarized below:

(1) Reviewed to ensure that the Committee’s roles and responsibilities were in line with PTTEP’s Independent Directors Committee Charter as well as the international best practice so as to achieve best-in-class performance. PTTEP’s independent directors have performed their duties according to international best practices.

(2) Considered the outcomes of corporate governance appraisal related to independent directors in accordance with domestic and international best practices so as to review and drive PTTEP for better corporate governance.

(3) Reviewed Human Resources management guidelines for the positions of corporate leaders for suitability and readiness to accommodate corporate sustainable growth.

(4) Set a frame for independent directors’ meeting standing agendas in full alignment of PTTEP’s Independent Directors Committee Charter as well as other best practices; and reviewed their own reports for distribution to all stakeholders in the annual report.

(5) Provided comments and useful enquiries with independency when considering agenda items 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 conflicts of interest to the substance in each agenda item were abstained from the meeting and voting for the best interest of the Company, shareholders, and stakeholders.

The independent directors executed their duties through their beneficial recommendations to PTTEP and all shareholders to assist the Board of Directors 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 an energy partner of choice through competitive performance and innovation for long-term value creation. The vision is to create sustainable values for all stakeholders. The Company aligns our sustainability practices with international standards, such as the United Nations Sustainable Development Goals (SDGs), which are globally accepted and implemented by both public and private sectors; the United Nations Global Compact Advanced Level Principles, 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 7, 8, 12, 13 and 14, 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 with 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, and investors.

In 2019, PTTEP conducted an in-depth stakeholder engagement survey for both internal and external stakeholders to identify and prioritize material issues with respect to PTTEP. For 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, please see the PTTEP 2019 Sustainability Report.

10.2 Operation and Reporting

PTTEP has adopted the Global Reporting Initiative (GRI Standards), using sector-specific guidelines of the GRI such as the Sustainability Reporting Guidelines & Oil and Gas Sector Disclosures (OGSD) – core level, which is one of the world's most prevalent guidelines for sustainability reporting to provide information regarding the Company's economic, environmental, and social and governance performance. Information on the Company's capability to reduce greenhouse gas emission, for example, is also 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, to 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 MapTM of Sustainability Accounting Standards Board (SASB), UNGC - Advanced Level, IPIECA's Oil and Gas Industry Guidance on Voluntary Sustainability and SDG Compass to support the UN Sustainable Development Goals. In 2019, the Company was able to implement the actions required to address these issues as planned.

For more details, please see the PTTEP 2019 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)

PTTEP believes that support and trust from all relevant parties are key to sustainable organization growth. Besides business, social and environmental development projects get priority at PTTEP Operations areas, both domestic and international ones.

PTTEP social development activity and project are implemented under four themes, i.e. Basic Needs, Education, Environment and Culture.

The 5-Year CSR and Communication Roadmap (2016 - 2020) has been initiated as guidance with an emphasis on social and environmental stewardship and stakeholder value creation. The Company has been focusing on Environment and Basic Needs projects for significant positive impacts on community, environment and the Company. Sample of the projects include Crab Hatchery Learning Center Project, H.T.M.S. Underwater Learning Site Project, Technical Capability Building and Development Project, Parasite-Free Project and School-Based Integrated Rural Development Project.

For more details, please see the PTTEP 2019 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 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 supports the Company's effective and efficient operations, provides accurate and reliable reporting, and is in compliance with relevant laws and regulations.

In 2019, 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. Moreover, when control deficiencies are detected, they are continuously corrected to support business operations to ensure that 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, which covers 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 an appropriate control environment which can be summarized below.

- PTTEP operates businesses under the principles of the Good Corporate Governance and Business Ethics (CG&BE), which is regularly updated to ensure 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 conflicts of interest annually against the principles of Good Corporate Governance, which are (1) responsibility, (2) accountability, (3) fairness and integrity, (4) transparency, (5) creation of long-term value for stakeholders, and (6) promotion of best practices. These principles also include an emphasis on the rights of shareholders, equal treatment of shareholders, roles of stakeholders, and information disclosure and transparency. PTTEP also determined Business Ethics to be the best practices for all employees, for example, procurement and contracts, conflicts of interest, trade competition, anti-money laundering, anti-corruption, etc.

- In 2019, the Company continues to communicate CG&BE and the consequential penalties to ensure that it is well understood by the management and employees through various training courses, workshops, e-learning, email communications and other activities such as on CG&BE training and on the topic of Insider Trading, as well as an induction program for new directors and employees. PTTEP also publicizes CG&BE principles on the Company's website to promote and emphasize the anti-corruption policy to our joint-venture partners, suppliers/vendors and company representatives to operate

their businesses with integrity and to avoid involvement in corruption of any kind. CG&BE promotions to external parties are also communicated through lectures on the principles of Governance, Risk Management, and Compliance (GRC). We also have a clear stance to join the public sector and civil society against corruption by continually joining related events such as being a certified company of Thailand's Private Sector Collective Action against Corruption (CAC), International and National Anti-Corruption Day, etc.

- PTTEP continues to monitor and assess that the code of conduct is being followed by the Second Line of Defense and the Third Line of Defense to ensure that the management and employees can effectively integrate ethical conduct into their work life. To exemplify, Procurement and Contract operations has the Supply Chain, Procurement, and Contracts Department as their Second Line of Defense, whereas the Internal Audit Division plays an independent role as the Third Line of Defense to ensure that the operations conform to internal regulations and that the related internal control system are efficient by international standards. Additionally, PTTEP is regularly evaluated by external independent parties such as the Corporate Governance Report of Thai Listed Companies by Thai Institute of Directors Association (IOD), Dow Jones Sustainability Indices (DJSI), ASEAN Corporate Governance SCORECARD, Thailand's Private Sector Collective Action Coalition against Corruption (CAC), and the Integrity Award from The National Anti-Corruption Commission (NACC).

- PTTEP establishes a clear segregation of duties (SoD) between the Board and the management. The Board's duty is to develop corporate goals and strategies, without performing routine operations as the management do, and to govern and follow up on business performance of the management to achieve strategic plans, operational direction, objectives, and specified policies. The Board also ensures that the strategies and policies are flexible and suitable for the management to smoothly and efficiently operate appropriately under the current business environment for the Company's sustainability. Additionally, the Board has assigned the Audit Committee to govern and raise observations on the Company's Internal Control System, Internal Audit System, and Financial Reports, as well as the appointment of the external auditor which are in line with the roles and duties set out in the Audit Committee Charter.

- PTTEP organization structure is appropriately designed in accordance to our main business of exploration and production, with flexibility and efficient collaboration that are in line with internal control principles, such as SoD, and checks and balances. In 2019, to appropriately support our business growth, the Company has conducted an organizational restructuring in related areas, for example, the restructuring of Supply Chain Procurement and Contracts Department to focus on specialization in the Electronic Government Procurement system (e-GP) as well as other product and service procurement. Moreover, the Company has established the Malaysia Asset Transition Team to support operations involved in the acquisition of Murphy Oil Company in Malaysia.

- PTTEP has appropriate reporting-line structures and hierarchy of authorities for the Company's business requirements and responsibilities of the management and employees, which are clearly defined and documented in the Company's Functional Description and the Delegation of Authority and Signatures (DAS). In 2019, PTTEP revised DAS according to the new organization structure for more effectiveness of authority delegation in related areas such as tax and procurement.

- PTTEP has an extensive set of resource management regulations and policies which focus on attracting, developing, and retaining individuals for supporting short-term and long-term organization growth. In 2019, the Company aims to prepare personnel to meet business needs as follows:

(1) Personnel development and recruitment to support the exploration and production business by focusing on four main areas, namely mergers and acquisitions (M&A), exploration success, joint-venture management and deep-water operation.

(2) Personnel development and recruitment to support new businesses, such as commercial, business and organization transformation, digital technology, etc.

- The Company also continuously reviews current and future manpower demand to support business growth and future expansion by especially focusing on development of existing employees. In addition, specific development plans for high potentials, management succession plans, job rotation, and promotion plans have also been developed. Employee engagement is also given importance; a survey is carried out every year to obtain current employee satisfaction levels and to create improvement plans for higher levels of employee engagement in upcoming years.

- PTTEP has an established process of employee performance appraisal and a pay-for-performance compensation system to retain highly competent individuals. Consequently, employees' merit increase, annual special payment, as well as promotion are subject to their performance appraisal results to compliment and retain those with outstanding performance and conformed attitudes with corporate values (*EP SPIRIT*). In 2019, the Company has also introduced the implementation of the 360 Evaluation system as a tool to assess a given employee's behavioral attributes against *EP SPIRIT*. The 360 Evaluation is also an essential part of an individual's Key Performance Indicator (KPI) as it helps to reflect an employee's performance in all-round aspects by including evaluations from peers and subordinates apart from direct supervisors as in previous years.

- PTTEP has established both the Internal Control Policy and the Internal Control Standard. These documents have been consistently communicated with the management and employees through training courses, activities and publication such as GRC execution, to ensure accurate understanding of the principles, roles, and responsibilities of each individual in relation to the internal control system. Moreover, PTTEP, which is defined as a state enterprise under the State Fiscal and Financial Disciplines, appointed the Internal Control Committee as stipulated by The Rule of Ministry of Finance on Standard and Rule of Practice of Internal Control for Government Agency B.E. 2561 (2018) in order to comply with the mentioned laws and regulations.

2. Risk Assessment

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

- PTTEP has specified a Risk Management Framework and documents related to risk management including Risk Appetite Statement, Risk Metric & Limit, and Enterprise Risk Management Policy 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 regularly communicates the Risk Management Standard, Guidelines, Process, and tools to the management and employees through various channels, such as employee training, workshops, and announcements on the intranet to enhance personnel's understanding and to ensure that they can apply the concept and practices to their work responsibilities in order to ensure the Company's objective achievement.
- PTTEP develops a Business Continuity Management Policy, a Business Continuity Management Standard and a Corporate Business Continuity Procedure. In 2019, the policy, standard and procedure were reviewed and revised for more appropriate practices. Furthermore, the Company continuously develops and improves the Business Continuity Management System in accordance with the ISO 22301:2012 standard as demonstrated by the following certifications at critical assets during 2019: PTTEP Myanmar Asset and PTTEP Petroleum Development Support Base (PSB) in Songkhla to maintain certification, PTTEP Headquarters in Bangkok to receive re-certification, and S1 Production Operations Department to prepare for certification application in 2020.
- PTTEP manages risk throughout the organization based on four risk categories, namely Strategic Planning and Management, Investment and Divestment Decision-Making, Capital Project Management, and Operational Business Process. In addition, the Company develops a Risk Profile to identify and assess risk at all levels, ranging from corporate, function groups, divisions, and department levels to asset/project levels.
- PTTEP clearly defines business objectives which enable risk assessment for both internal and external risk factors and evaluates the impacts and likelihood of such risk. Risk mitigation plans are developed, executed, and monitored to reduce the levels of risk through various measures. Key Risk Indicators (KRIs) are also prepared to provide early warnings of risk to prevent and develop mitigation plans for risk that can potentially prevent the Company from achieving our business objectives.
- PTTEP appointed the Hedging Committee to oversee and efficiently manage petroleum price risk and financial risk. In 2019, the Hedging Committee convened four times.
- At the corporate level, PTTEP assesses business activities that face high exposure to fraud risk, which comprises asset misappropriation, corruption, fraudulent practices, 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 managing both fraud and operational risk arising from processes under their responsibilities and develop internal controls corresponding to such risk with the aim to effectively improve our internal control system.

- The Company performs risk assessment from all-round factors that may impact corporate performance, including (1) internal factors such as strategic risk, exploration/ development/ and production risk, investment risk, etc. and (2) external factors from fluctuation risk in oil prices, foreign-exchange rates, interest rates, etc.
- PTTEP's Audit Committee assigned the Internal Audit Division (CIA) to carry out audits on high-risk areas which can lead to fraud. The Internal Audit Division is also responsible for undertaking a preliminary investigation of any suspected fraud cases upon receipt of a report, or as requested by the Audit Committee and/or the President and Chief Executive Officer (CEO).
- PTTEP regularly monitors and reviews strategic plans to ensure that the business goals remain reasonable and consistent with the changing situations. The Company closely monitored changes of key factors such as oil prices, global and domestic economies, geopolitics, foreign exchange rates, laws and regulations, government policies, technological advancements, especially in alternative energy, which currently plays a bigger role in the energy industry, to respond to those changes in a timely manner.

3. Control Activities

PTTEP has adequate and efficient control activities to appropriately manage and mitigate risk to an acceptable level. Our key control activities can be summarized as follows:

- PTTEP has extensive sets of written regulations and policies which the management and employees must strictly comply with, whereas the management and supervisors are responsible for governing and monitoring compliance with such specifications. In 2019, to ensure higher work efficiency within the organization, the Company developed and updated corporate policies, standards and guidelines to improve work efficiency, such as policies in Internal Control and Business Continuity Management, and the Standard of PTTEP Group Governance and Subsidiary Management for Business related to Power & Energy, etc.
- PTTEP recognizes the significance of control activities at the process level, including SoD and review and authorization of transactions, to ensure that the Company's business operations are efficient and able to prevent fraudulent acts. In 2019, the Company carried out a number of business process improvements to achieve higher levels of work efficiency and effectiveness as well as to develop and revise process controls regarding control self-assessment (CSA) such as the Anti-Corruption Process and Procurement Value up to 15,000 USD (Low-Value Purchase) Process. In addition, the Company regularly monitors contractors/suppliers to ensure that they comply with contract agreements by using control measures such as Contract Management Procedure review and improvement, random implementation assessment against the procedure, and random contractual compliance assessment.
- PTTEP develops general controls over technology and physical equipment, including data backup and recovery to ensure business continuity from any disruption. An IT security policy was announced across organization in keeping with good corporate governance. In 2019, the Company initiated various information system activities that would support operational security and flexibility, for instance, the appointment of a PTT Group Cybersecurity Governance & Assurance Project Committee to

elevate the cybersecurity system of the entire PTT Group, the implementation of the Microsoft Office 365 system for better convenience of information access, etc. Digital Security Awareness E-Learning was also carried out to foster staff awareness and understanding that the corporate IT security policy, regulations, and Thailand's Computer-related Crime Act B.E. 2550 (2007) must be strictly followed.

- PTTEP establishes information technology (IT) infrastructure control and a clear policy for implementation of digital technology to ensure IT system effectiveness according to the standards of COBIT5, which is a business framework for governance and management of IT, and ISO 27001, which is an information security standard. In 2019, the Company considered the use of an IT system on Cloud platform for the purposes of flexibility and convenience, while still continuing security and efficiency as specified by PTTEP.

- PTTEP emphasizes the IT security policy and controls for IT risk to maintain system stability and prevent the Company from security breach. A data backup and recovery system is also provided to ensure business continuity. The controls can be classified into three types, namely (1) Control at General Level, such as common IT guidelines and procedures, Business Continuity Plan on IT areas, (2) Control at Personal Level, such as personal access controls, Cybersecurity Drill, trainings on Cybersecurity Act and Personal Data Protection Act for employees at all levels, and (3) Control at System Level, such as log keeping of each user's system usage as required by law and External Penetration Testing by an expert organization for system vulnerability improvement.

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

- PTTEP governs subsidiaries, associated companies and joint ventures by assigning the Company's management and employees to manage these entities. The Company has developed Subsidiary Directors Guidelines for the assigned persons to ensure standardized Subsidiary Directors' Roles and Responsibility. The Internal Audit Division also has the responsibilities to audit Assets/Projects in which the Company has invested. During 2019, PTTEP established the Standard of PTTEP Group Governance and Subsidiary Management for Business related to Power & Energy, which also indicates roles and responsibilities of nominated PTTEP representatives to serve as directors in joint-venture companies. The Standard also specifies areas of agenda that requires approval from within PTTEP prior to voting in a joint-venture company's meeting.

- PTTEP regularly reviews policies, requirements and work processes to ensure that work processes and defined control activities are effectively and efficiently managed against relative risk when changes occur. In 2019, the Company revised policies, requirements and work processes for greater efficiency, such as the issuance of Compliance Manual to provide a tool for complying with internal and external laws and regulations. For internal regulations, the owners of those documents are held responsible in ensuring compliance with the stated requirements. Another example is the revision of the PTTEP Group Document Management System, as well as the documents' relative SoDs. This also includes appropriate revisions of DAS in the Company's regulations, policies, standards, procedures, and guidelines.

4. Information and Communication

PTTEP has effective and efficient information and communication systems for internal and external stakeholders which can be summarized as follows:

- PTTEP validates data and information from internal and external sources after being reviewed by responsible units before making decisions. In addition, the Company imposes the confidentiality of usage and protection of information in both physical and digital formats, including data classification to prevent the disclosure of the Company's sensitive or confidential information.
- PTTEP has developed a Corporate Reference Document Center or "FindMe" as the information technology infrastructure to store and manage important business documents through a single access channel. In 2019, PTTEP specified approval authority in sending important or confidential information to external parties under DAS so that disclosure of important information to external parties is being controlled appropriately.
- For internal communication, PTTEP has effective and efficient internal channels to ensure that the management and employees can access essential information for their work requirements. The Company communicates objectives and responsibility of internal control through internal meetings and emails. PTTEP has also set up the "Call Tree" network for communication when any crisis arises. During 2019, the Company promoted the GRC concept to the management and employees through GRC Workshops to ensure that they can appropriately integrate this concept into their work responsibilities. Furthermore, lessons-learned cases about punishment from misconduct have also been communicated to all employees to minimize repetitions.
- For external communication, PTTEP established business units which are responsible for communicating with each specific group of stakeholders, such as Investor Relations, Corporate Communication, and Corporate Secretary units. This is to ensure that information disclosed to external stakeholders is accurate, complete, sufficient, transparent, timely, and regularly communicated. In 2019, the Company provided assorted information to stakeholders, such as the announcement of new "Energy Partner of Choice" corporate vision, expansion of investments in the Middle East and Southeast Asia which is in accordance with our strategic direction, etc. We also provided information publications for analysts, fund managers and shareholders to enhance better understanding of the E&P business. We have also launched our new communication channel, PTTEP Investor Relations Mobile Application, this year. Besides, the Company also published the CEO Message column for investors and analysts via PTTEP Website, Facebook and LinkedIn. The Safety, Security, Health and Environment (SSHE) Policy and CG&BE, which includes PTTEP's Anti-Corruption Policy, have been communicated to suppliers/vendors through various communication channels, such as the PTT Group CG Day.
- PTTEP maintains the availability of our whistleblowing channels for employees and external stakeholders to accurately, completely, and timely report wrongdoings by our directors, the management, employees, or third parties acting on behalf of the Company. Based on the PTTEP Reporting and Whistleblowing Regulation, complaints can be reported through various channels such as letter, facsimile, email, and the Company's official website.

5. Monitoring Activities

PTTEP has adequate and efficient monitoring systems which can be summarized as follows:

- PTTEP regularly monitors and assesses internal controls to ensure that they can appropriately respond to dynamic business environments from corporate and technical risk. In 2019, the Company monitored GRC-related activities through the annual GRC Plan to effectively implement the GRC framework within the organization.
- PTTEP uses two levels of CSA, namely (1) corporate and (2) process levels. For the corporate level, CSA is 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 assessed by management at all levels. For the process level, owners of business processes with significant impacts on the Company are required to assess controls of such processes. Findings from the two levels of CSA are subsequently used to develop improvement plans and continuous follow-ups. The CSA Guideline was also revised in 2019 to be more practical and appropriate.
- The Governance, Compliance, and Internal Control Department is responsible for monitoring, reviewing, and reporting two types of compliance circumstances within an organization, namely (1) compliance with external laws and regulations via compilation of Non-Compliance Reporting. The results shall be reported to the CEO and the concerned top management and the Audit Committee on a monthly and semi-annually basis, respectively, (2) compliance with internal regulations and policies by gathering reports on internal regulation compliance from operational areas with higher risk. The results shall then reported to the CEO and the concerned top management on a monthly basis. For non-compliance cases with significant impacts on the PTTEP Group, the management will make further appropriate consideration on reporting to the Board of Directors for acknowledgement.
- The Internal Audit Division (CIA) is responsible for auditing and providing recommendations for improvement to ensure adequacy and effectiveness of the internal control system. CIA is also responsible for developing 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.
- Moreover, PTTEP's whistleblowing channel is another method of monitoring and assessing the Company's CG&BE implementation.

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

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 President and CEO. Key roles, responsibilities and scope of work of the Internal Audit Division include:

(1) In-house and Subsidiary Audits

The purpose of the audits is to ensure that the operations achieve the Company's targets. The auditors evaluate the efficiency, adequacy and effectiveness of governance, risk management, and internal controls 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 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 expenditure incurred and reported is equitable, reasonable, and accurate for the benefit of all parties involved.

(3) Digital Technology Audit

The auditors conduct audits to review and assess the efficiency and effectiveness of IT-related controls of digital technologies utilized in the Company. This is to reasonably ensure that management of enterprise IT achieves the Company's business objectives in core aspects of benefit realization, risk optimization and resource optimization.

(4) Consulting Services

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

(5) 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 bear any conflicts of interest on complaints under the investigation. Prevention, detection, further investigation, and prosecution of fraud offenders are however the responsibility of the management.

(6) 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 risk.

According to the Audit Committee Charter, the Audit Committee has a duty to endorse the appointment, transfer, removal, promotion, and performance appraisal of the Head of the Internal Audit Division.

Ms. Yaninee Wajeepratubjit held the positions of Acting Senior Vice President of the Internal Audit Division and Head of the Internal Audit Division during January – October 2019. Since November 1, 2019, Ms. Jutima Lalitkul has assumed these positions. The Audit Committee deems that both aforementioned executives are qualified to undertake the responsibility based on their educational background, necessary knowledge, skills, and work experiences. They both have also been up-to-date in terms of professional knowledge and expertise, primarily through extensive training on internal auditing methodologies, management programs, and internal auditor competency development. Such stringent attention to the person holding the title

and the support 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 Function.

11.2.2 Roles and Responsibilities of Head of the Compliance Department Function

PTTEP has established the Governance, Compliance and Internal Control Department, which has a direct reporting line to the Senior Vice President of the Corporate Secretary Division, the Executive Vice President of the Human Resources, Assurance, and Transformation Group, and the President & CEO. 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 provision of communication and training programs, developing and maintaining of the legislation database, 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.

Head/Vice President of the Compliance Department Function in 2019:

Mr. Kanes Supyaboonrod has been appointed as the Vice President of the Compliance Department, having already functioned in this position from October 1, 2018 to December 31, 2018. He has been appointed as the Vice President of the Governance, Compliance and Internal Control Department since January 1, 2019.

More details of the Head of the Compliance Department Function 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, 2019 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: <ol style="list-style-type: none"> Mr. Chansin Treenuchagron Mr. Atikom Terbsiri Mr. Phongstorn Thavisin 	Petroleum product sales: crude oil; natural gas; liquefied petroleum gas; and condensate <ul style="list-style-type: none"> Total income Accounts receivable 	4,917.40 535.94	<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 infrastructure services to support petroleum development such as warehouse, helicopter, and accommodation for PTT personnel at Arthit and Bongkot projects Income from maintenance of natural gas meters Income from charges to PTT for working areas at Arthit and Bongkot projects' production platforms based on the Gas Sales Agreement Income from charges to PTT for gas receiving areas, working areas and accommodation on platforms based on the Greater Bongkot South field's natural gas purchase/sale contract. Income from the jetty and warehouse rentals at Songkhla base Income from the Company's personnel seconded to PTT 		<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
		<ul style="list-style-type: none"> Income from service charges for management's drivers based on the agreement between PTT and PTTEP Services (a subsidiary of PTTEP) Income from service charges for dismantling of natural gas meter of S1 project Income from equipment inspection provided by AI and Robotics Ventures Company Limited (ARV) (a subsidiary of PTTEP) Income from office building rental and facility management provided by Energy Complex Company Limited (EnCo) (a subsidiary of PTTEP) 	15.99 5.13	
		<ul style="list-style-type: none"> Total income Accounts receivable 	4.58 0.40	<ul style="list-style-type: none"> Condition and price setting for the purchase of petroleum products, 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.
		<ul style="list-style-type: none"> Purchase of petroleum products and related expenses, manpower charges for PTT personnel seconded to the Company and subsidiaries, and other expenses 	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.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
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. 	Income from the Company's personnel seconded to EnCo and Dividend income	2.67 0.14	<ul style="list-style-type: none"> Manpower rates are based on the actual rates the Company pays to employees seconded to EnCo.
		<p>The Company has signed a three-year lease agreement with EnCo to rent the office building, storage and common areas at the Energy Complex. The Company is eligible to extend its lease agreement for another three years.</p> <ul style="list-style-type: none"> Total lease and service expenses Accounts payable 	19.06 0.03	<ul style="list-style-type: none"> The leasing rate is based on the market rate of the office building lease and follows normal business operations, at an arm's length basis for non-related persons or operations.
		<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 the loan contract between EnCo and Krung Thai Bank Public Company Limited, dated April 2, 2009 (contract amendment is included.) <p>The interest rate as of December 31, 2019 is FDR+2% per year, total 3.35% p.a.</p> <ul style="list-style-type: none"> Interest receivable Loans outstanding 	0.65 19.26	<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 of EnCo's shareholders proportionately.

Connected Company	Relationship	Transaction	Value (Unit: Million USD)	Pricing Policy and/or Reason
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. 	Income from the following services: <ul style="list-style-type: none"> Income from the Company's personnel seconded to PTT Digital Dividend income Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 4.12 Accounts receivable 0.29 		<ul style="list-style-type: none"> Manpower rates are based on the actual rates the Company pays to employees seconded to PTT Digital.
		The Company and subsidiaries have signed a contract with PTT Digital for IT services and communications. <ul style="list-style-type: none"> Total expenses 23.56 Accounts payable 3.54 		<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 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. 	Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.15 Accounts receivable 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 Energy Solutions Company Limited (PTTES)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 40% of PTTES's registered and paid-up capital. GC, TOP and IRPC hold 20% each of PTTES's registered and paid-up capital. 	Expense from seminars, training and system consultants. <ul style="list-style-type: none"> Total expenses 0.0062 Accounts payable - 		<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.
Business Services Alliance Company Limited (BSA)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of BSA's registered and paid-up capital. 	Income from office building rentals and services provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.13 Accounts receivable 0.0024 		<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
		<p>Expenses from the following services:</p> <ul style="list-style-type: none"> Expenses for field trip arrangements Manpower charges for BSA personnel seconded to PTTGL (a subsidiary of PTTEP) Manpower charges for BSA personnel providing services at (1) Energy Complex, (2) PTT headquarters, (3) PTT Research and Technology Institute in Wangnoi District, Phra Nakhon Si Ayutthaya Province and (4) PTT Research and Technology Institute in Wang Chan District, Rayong Province based on the agreement between BSA and EnCo (the subsidiary of PTTEP) <ul style="list-style-type: none"> Total expenses 0.57 Accounts payable 0.06 		<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Sport Services Alliance Company Limited (SSA)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of BSA's registered and paid-up capital. BSA holds 100% of SSA's registered and paid-up capital. 	<p>Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP)</p> <ul style="list-style-type: none"> Total income 0.0004 Accounts receivable - 		<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		<p>Sponsorship to Rayong Football Club</p> <ul style="list-style-type: none"> Total expenses 0.06 Accounts payable - 		<ul style="list-style-type: none"> Conditions and price setting follow 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
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. Chansin Treenuchagron. 	Income from the following services: <ul style="list-style-type: none"> Income from the jetty and warehouse rentals at Songkhla base Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) Income from drone services provided by AI and Robotics Ventures Company Limited (ARV) (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 1.79 Accounts receivable 0.02 		<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Service fee for equipment inspection of "Pressure Transmitter Yokogawa Model & Pressure gauge precision range" which is used for measurement of gas pressure for S1 project <ul style="list-style-type: none"> Total expenses 0.0002 Accounts payable 0.0001 		<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Dhipaya Insurance Public Company Limited (TIP)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 13.33% of TIP's registered and paid-up capital. 	Income from the following services: <ul style="list-style-type: none"> Insurance claims for Arthit project Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 3.19 Accounts receivable 3.09 		<ul style="list-style-type: none"> Conditions and price setting follow 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
		Expenses for the Company and subsidiaries' assets insurance, and our employees' health and life insurance <ul style="list-style-type: none"> Total expenses Accounts payable 	8.63 0.22	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Thai Oil Public Company Limited (TOP)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 49.10% of TOP's registered and paid-up capital. 	Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	1.08 0.02	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Donations for bowling charity <ul style="list-style-type: none"> Total expenses Accounts payable 	0.0020 -	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Global Chemical Public Company Limited (GC)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 48.18% of GC's registered and paid-up capital. 	Income from the following services: <ul style="list-style-type: none"> Income from meeting room rentals Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) Total income Accounts receivable 	2.65 0.06	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Mercury analysis fees for PTTEP SP Gas Processing Plant <ul style="list-style-type: none"> Total expenses Accounts payable 	0.0038 0.0002	<ul style="list-style-type: none"> Conditions and price setting follow 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 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 the management's drivers based on in the agreement between PTT NGD and PTTEP Services (a subsidiary of PTTEP) Income from office building rental and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.19 Accounts receivable 0.0023 		<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Retail Business Company Limited (PTTRM)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of PTTRM's registered and paid-up capital. 	Income from office building rental and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.04 Accounts receivable 0.0040 		<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.
		Expenses for drinking water for EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total expenses 0.0066 Accounts payable 0.0001 		<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Tank Terminal Company Limited (PTT Tank)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of PTT Tank's registered and paid-up capital. 	Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income 0.02 Accounts receivable 0.0008 		<ul style="list-style-type: none"> Conditions and price setting follow 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
Trans Thai-Malaysia (Thailand) Limited (TTM)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds more than 10% of TTM's registered and paid-up capital. 	Income from the following services: <ul style="list-style-type: none"> Income from warehouse rentals at Songkhla base Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.02 0.0031	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT International Trading Pte. Ltd. (PTTT)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTTT's registered and paid-up capital. 	Income from oil price hedging contracts <ul style="list-style-type: none"> Total income Accounts receivable 	4.00 0.95	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Expense from oil price hedging contracts <ul style="list-style-type: none"> Total expenses Accounts payable 	4.26 2.24	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT International Trading London Ltd. (PTTT LDN)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTTT LDN's registered and paid-up capital. 	Petroleum product sales: crude oil <ul style="list-style-type: none"> Total income Accounts receivable 	66.79 -	<ul style="list-style-type: none"> Conditions and price setting follow 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 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. 	<p>PTTGL Investment Limited (PTTGLI), a subsidiary of PTTEP, signed a loan contract with PTT RTC under the following conditions:</p> <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 are in line with market rates. <p>On December 23, 2019 PTTGLI repaid loan to PTT RTC and signed a new loan contract with PTT Treasury Center Company Limited (PTT TCC).</p> <ul style="list-style-type: none"> Interest expenses Loans outstanding 	<p>1.54</p> <p>-</p>	<ul style="list-style-type: none"> The mentioned contract follows the conditions and price setting of the 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 22.58% of GPSC's registered and paid-up capital. 	<p>Income from the following services:</p> <ul style="list-style-type: none"> Income from demolition and installation of office equipment, and leasing office space for Enco B, Floor 18th (684 sq.m.) Income from office building rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) Income from manpower charges based on the agreement between GPSC and PTTEP Services (a subsidiary of PTTEP) Income from drone services provided by AI and Robotics Ventures Company Limited (ARV) (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	<p>1.01</p> <p>0.05</p>	<ul style="list-style-type: none"> Conditions and price setting follow 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 Global LNG Company Limited (PTTGL)	<ul style="list-style-type: none"> • PTT, major shareholder of PTTEP and PTTGL, hold 50% of PTTGL's registered and paid-up capital. • PTTEP, PTTGL's major shareholder, holds 50% of PTTGL's registered and paid-up capital. 	<p>Income from the following services:</p> <ul style="list-style-type: none"> • Income from accounting, tax and financial operations services provided by PTTEP • Income from financial services provided by PTTEP Treasury Center Company Limited (a subsidiary of PTTEP) • Income from the Company's personnel seconded to PTTGL • Income from subleasing office areas of approximately 320 sq.m. and facility service • Income from service charges for management's drivers provided by PTTEP Services (a subsidiary of PTTEP) <ul style="list-style-type: none"> ▪ Total income ▪ Accounts receivable 	<p>1.33</p> <p>0.35</p>	<ul style="list-style-type: none"> • Conditions and price setting follow 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, major shareholder of PTTEP and PTTGL, hold 50% of PTTGL's registered and paid-up capital. • PTTEP, PTTGL's major shareholder, holds 50% of PTTGL's registered and paid-up capital. • PTTGL, the major shareholder of PTTGLI, holds 100% of PTTGLI's registered and paid-up capital. 	<p>PTTEP Treasury Center Company Limited (a subsidiary of PTTEP) signed a loan contract with PTTGLI under the following conditions:</p> <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 are in line with market rates. <p>On December 23, 2019 PTTGLI repaid loan to PTTEP Treasury Center and signed a new loan contract with PTTEP Treasury Center under the following conditions:</p> <ul style="list-style-type: none"> • Contract period of 4 years and 6 months • Expiration date is July 2, 2024. • Interest rates refer to the LIBOR plus Interest Rate Spread which are in line with market rates. <ul style="list-style-type: none"> ▪ Interest income 3.14 ▪ Loans outstanding 66.82 		<ul style="list-style-type: none"> • The mentioned contract follows the conditions and price setting of the normal business operations, at an arm's length basis for non-related persons or operations with the financial support of all PTTGL's shareholders proportionately.
		<p>The Company and subsidiaries signed contracts with PTTGLI for the following services:</p> <ul style="list-style-type: none"> • Accounting, Tax and Financial Operations services provided by PTTEP • Financial services provided by PTTEP Treasury Center Company Limited <ul style="list-style-type: none"> ▪ Total income 0.09 ▪ Accounts receivable 0.0073 		<ul style="list-style-type: none"> • Conditions and price setting follow 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 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 rentals and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.08 0.0010	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
PTT Oil and Retail Business Public Company Limited (PTTOR) (Formerly is PTT Retail Management Company Limited "PTTRB")	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTTOR's registered and paid-up capital. 	Income from the following services: <ul style="list-style-type: none"> Income from sublease of office space at floor 6th, EnCo building A and floor 18th, EnCo building B (total 1,927 sq.m.) and other services provided by PTTEP Income from utility services Income from drone and inspection services provided by AI and Robotics Ventures Company Limited (ARV) (a subsidiary of PTTEP) Income from office building rental and facility service such as water, electricity, air condition and parking provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	2.00 0.72	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
		Expenses from the following services: <ul style="list-style-type: none"> Purchase of petroleum products and related expenses Manpower charges for PTTOR personnel seconded to EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total expenses Accounts payable 	49.84 3.96	<ul style="list-style-type: none"> Conditions and price setting follow 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 Treasury Center Company Limited (PTT TCC)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of PTT TCC's registered and paid-up capital. 	PTTGLI (a subsidiary of PTTEP) signed a loan contract with PTT TCC under the following conditions: <ul style="list-style-type: none"> Contract period of 4 years and 6 months Expiration date is July 2, 2024. Interest rates refer to the LIBOR plus Interest Rate Spread which are in line with market rates. Interest expenses Loans outstanding 	0.03 33.41	<ul style="list-style-type: none"> The mentioned contract follows the conditions and price setting of the 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 Management Holding Company Limited (Global Management Holding)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of Global Management Holding's registered and paid-up capital. 	Income from installation of company nameplate on the 2 nd floor of Building F, EnCo provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.000003 0.000003	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.
Siam Management Holding Company Limited (Siam Management Holding)	<ul style="list-style-type: none"> PTT, the Company's major shareholder, holds 100% of Siam Management Holding's registered and paid-up capital. 	Income from installation of company nameplate on the 2 nd floor of Building F, EnCo provided by EnCo (a subsidiary of PTTEP) <ul style="list-style-type: none"> Total income Accounts receivable 	0.000003 0.000003	<ul style="list-style-type: none"> Conditions and price setting follow normal business operations, at an arm's length basis for non-related persons or operations.

Remarks: Please see historical data of 2018 and 2017 for 3 years comparison from the Company's website.

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, 2019 as summarized above and considered them to be indispensable, fair and justifiable in terms of conditions and prices, 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 process in the conflict of interest.

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 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 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, Stock Exchange of Thailand, and 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 purchases 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.