Corporate Governance

Corporate Governance Policy

As the national energy company (officially a state enterprise) and a listed company on the Stock Exchange of Thailand (SET), PTT recognizes its vital mission of good management filled with transparency, establishing equitability among all stakeholders while striving to develop itself into a corporate governance (CG) role model. For it is convinced that CG under good management will bring about fairness, investors' confidence, create a long-term value for shareholders, boost all stakeholders' confidence, and give the corporation a most suitable, efficient, and effective management systems while enhancing its competitiveness for sustainable growth.

Ever since its privatization into PTT Plc. and distribution of its shares on SET in late 2001, the Board of Directors has adopted CG as its guiding principles. The Articles of Association of PTT state: "The Company must have and implement a policy on its business ethics, including the ethics of its Board of Directors, senior executives, the management, and employees in compliance with good CG practices as its code of conduct for the proper conduct of the organization with a high standard." PTT has issued its CG code in 2001 and revised it. It published the first CG Handbook in 2003 and delivered to each director, the management, and the employees to sign, acknowledge, and comply with. The handbook was revised regularly to improve the standard of operation to comply with SEC and SET's CG of listed companies (CG Code) as well as comments and recommendations from IOD's Corporate Governance Assessment Report, including The Organization for Economic Cooperation and Development, the ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard), and the Dow Jones Sustainability Indices (DJSI), together with best practices of leading international companies. The handbook in 4th revision was renamed "Corporate Governance, Ethical Standards and Code of Business Ethics Handbook" (CG Handbook). Essential provisions added to the handbook which were approved by the Board this year are:

- Revision of the duties and responsibilities of the Enterprise Risk Management Committee to screen and provide opinions and recommendations on investment items.
- Revision of the Anti-Fraud and Corruption Policy for PTT and PTT Group, including Fraud and Corruption Risk Assessment to cover with its core contents and guidelines embrace Fraud and Anti-Corruption.

PTT has integrated CG in its vision, mission, and core values as part of its sustainable growth strategy, to become a leading Thai energy company as the Pride & Treasure of Thailand, with a focus on transparent business and balanced stewardship of stakeholders on CG Principles.

Corporate Governance Policy

PTT duly reviewed its CG Policy and handbook to suit prevailing economic and social circumstances and requires all directors, the management, and employees to acknowledge it in writing and observe all policies in the course of their work to illustrate the commitment to practical application of such policy and code of conduct to their jobs. The Board's policy on CG is as follows:

- 1. The Board, the management, and all employees shall commit to the six elements of CG: Accountability, Responsibility, Equitable Treatment, Transparency, Vision to Create Long-Term Value, and Ethics. An organization structure shall fairly balances the roles of the Board, the management, and shareholders.
- 2. Directors must perform their duties independently with full commitment, responsibility, and independence. There is a clear division of responsibility between the Chairman and the President & CEO.
- 3. Playing a key role in formulating PTT's vision, strategies, policies, and key plans with due regard for risk factors and proper risk management, the Board must also ensure the credibility of PTT's accounting system, financial statements, and accounting audit.
- 4. The Board shall be the Role Model on ethics and CG, as well as oversee and resolve Conflicts of Interest and Connected transactions.
- 5. The Board may appoint specific committees to help it screen critical issues.
- 6. The Board must perform an annual self-assessment to obtain a scope for its performance assessment.
- 7. The Board must establish a code of conduct, which the Board, the management, employees, and all contract employees to observe in addition to PTT's Rules and Regulations.
- 8. The Board must arrange for disclosure of PTT's information both of financial and non-financial information to be carried out adequately, credibly, promptly, and fairly for all shareholders and stakeholders. The Corporate Communication and Investor Relations are responsible for providing the information to investors.
- 9. For fair treatment, the Board must arrange for PTT shareholders to access information through proper communication channels with PTT.
- 10. The Board must ensure a proper recruitment procedure for the appointment of key management personnel under a fair and transparent nomination process.
- 11. The Board must establish an efficient anti-corruption system to ensure that the management is aware of action and pay attention to anti-corruption, as well as complying with anti-corruption measures.

PTT publicized on the intranet and its website the latest version of its "Corporate Governance, Ethical Standards, and Code of Business Ethics Handbook" in Thai and English for the benefit of and reference for investors and foreign interested parties together with stakeholders.

1. Shareholders' Rights

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

1.1 Shareholders' Meeting

PTT schedules an annual general meeting of shareholders (AGM) within four months of the annual closing date of its accounting books. For urgent matters that affect or involve shareholders' interests or involve conditions, regulations, or laws that require shareholders' approval, however, it can call an extraordinary meeting of the shareholders (EGM).

This Year, The AGM held on April 11 at the Bangkok Convention Center, 5th floor, Central Plaza Lardprao Shopping Complex, 1695 Paholyothin Road, Chatuchak district, Bangkok. This meeting, PTT was the first entity in the industry to receive the certification of "Sustainable Meeting" from the Thailand Convention & Exhibition Bureau (TCEB). No EGM took place this year. Also, The meeting was organized in accordance with the AGM Checklist, prepared by the Thai Investors Association (TIA), the Thai Listed Companies Association (TLCA), and The Securities and Exchange Commission, Thailand (SEC). In 2019, PTT received a full score of 100 points on AGM Checklist, for 7 consecutive years.

1.2 Delivering Meeting Notices

For this year's AGM, Board Meeting No. 2/2562 (2019) of February 21, 2019, decided to call a meeting on April 11, 2019. Its decision, meeting date, and meeting agenda

were disclosed in detail ahead of time by announcing on SET's website to notify shareholders before sending meeting notices. PTT assigned Thailand Securities Depository Co., Ltd. (TSD), its securities registrar, to mail the notices together with agenda details and accompanying documents, supplementary and supporting information for decision-making, opinions of the Board, complete minutes of the last meeting, the annual report, meeting documents, and proxy forms with complete instruction for shareholders more than 14 days before the meeting date. The meeting notices were sent on March 21, 2019 and three days before the meeting, the invitation was announced through one Thai and one English newspaper, each for three consecutive days (April 5 - 7, 2019), to allow shareholders enough time to prepare themselves for the meeting.

The AGM meeting notice and supporting documents were made available at PTT's website (www.pttplc.com) 30 days before the meeting date (starting March 11, 2019).

1.3 On the Meeting Date

Before the meeting, the Chairman of the meeting introduced the directors, the management, the external auditor, and the legal advisers who served as a neutral party and witness. The Chairman then elaborated on the voting and ballot counting for individual agenda items under PTT's Articles of Association, as well as how to vote on each item. Once information had been provided on each item, the Chairman gave a chance to all attendees to comments or recommendations and ask questions, allowing adequate time for debate. The Chairman and the management answered all questions clearly and precisely, treating all questions with due respect. For the election of directors, individual votes were required.

The Chairman ensured that the meeting proceeded by the order of the agenda and did not add any item without notifying shareholders in advance. If the meeting should decide to change the order of the agenda, it would need at least two-thirds of the votes of the shareholders in attendance. Alternatively, the shareholders with at least one-third of all subscribed shares may ask the meeting to consider other matters not mention in the meeting notice. At the 2019 AGM, the order of the agenda was not changed, and there was no request to consider any other matter.

At every meeting, the minutes must be completely and accurately recorded with the vote tally on each applicable agenda item. As a rule, a shareholders' meeting lasts 3 - 4 hours. The 2019 AGM began at 1.30 p.m., with registration beginning at 11.30 a.m. At the meeting's opening, a total of 5,189 shareholders registered, of whom 2,591 were shareholders and 2,598 were proxy holders, holding a total of 20,697,911,424 shares, or 72.464% of the total shares, which exceeded one-third of all PTT's subscribed shares of 28,562,996,250. Below is a description of meeting attendants and those responsible for issue clarification:

- All 15 PTT director attended the meeting. The Chairman presided as the Chairman of the meeting with the sub-Committee chairmen, members, the President & CEO, the Chief Operating officer, Upstream Petroleum and Gas Business Group, the Chief Operating officer, Downstream Petroleum Business Group, Chief Technology & Engineering Officer, and the Chief Financial officer together provided supporting information on stage. The Senior Executive Vice Presidents, Executive Vice Presidents, and the management of PTT Group were attended in the front rows to provide informations for relevant questions. Independent directors served as proxies for minor shareholders.
- The external auditors from the State Audit Office of the Kingdom of Thailand were Ms. Mayuree Juntamat (Bureau Director), Ms. Phakawan Sueblao, and Ms. Jirawat Prueksasuai.
- Legal advisers from Weerawong, Chinnavat and Partners Co., Ltd. (witness in charge of the examination of voting in case of disputes throughout the meeting): Mrs. Veeranuch Thammavaranucupt and Ms. Phatcharaporn Pootranon.
- Shareholder count

 (as the AGM adjourned at 6.45 p.m.)
 A total of 7,211 shareholders,
 of whom 3,337 were shareholder
 and 3,874 were proxy holders.

 Total Shares represented: 23,458,184,683
 or 82.13% of the total shares.

1.4 Practical Guidelines for Reporting Conflicts of Interest

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

At the shareholders' meetings, any director with vested interests or involvement on any agenda item must inform the meeting to excuse themselves and abstain from voting on each applicable agenda item.

1.5 Disclosure of Shareholders' Meeting Outcomes

For the 2019 AGM, PTT submitted a summary of AGM resolutions to SET and SEC on the evening of the meeting date (April 11, 2019). It also submitted the minutes of the shareholders' meeting (each agenda clearly separated), number of directors in attendance/absence, questions raised by shareholders and answers from directors, together with the voting tallies of each agenda item to SET and SEC within 14 days after the meeting. Meeting information, video-recording, photos, and audio-recording are accessible through PTT's website.

2. Equitable Treatment of Shareholders

PTT treats all shareholders fairly despite their different shareholding proportions and corresponding voting power. Shareholders' fundamental rights are conserved regardless of their gender, age, race, nationality, religion, belief, social status, physical impairment, or political inclination. At the AGM, seats at the most convenient spots were reserved for the elderly, the handicapped, and pregnant women, with officers attending to their needs. Information on the shareholders' meeting was announced ahead of the meeting in Thai and English. Directors with vested interests on any agenda item must excuse themselves from the meeting on that item. All shareholders have equal rights to take part in PTT's activities.

2.1 Proposing Additional Meeting Agenda Items and Nominating Directors

To enable minor shareholders to take part in business oversight, for the 2019 AGM, PTT has defined the criteria and consideration process for entitling them to propose meeting agenda items or nominate directors in advance, or both, so as to deliberate agenda items that could prove useful to PTT, including the selection of qualified directors to perform their duties efficiently in the maximum benefit of PTT, the shareholders, and the stakeholders. In practice, shareholders with a combined holding of at least 5% of the total eligible votes or at least 1 million shares held uninterrupted for at least one year could propose agenda items or nominate directors before the AGM from September to November of 2018, in case the nomination of directors might need the approval of the State Enterprise Policy Office (SEPO), as required by the regulation of The Prime Minister's Office on State Enterprise Policy and Monitoring B.E. 2557 (2014).

For this year's AGM, PTT posted such criteria on its website and an announcement on SET's website from September 1 to November 30, 2018. However, this attracted an or recommendation of such agenda items or nomination of directors, and the Company Secretary duly informed the Board meeting on the matter.

2.2 Facilitating Shareholders at the Meeting

As in previous AGM at the 2019 AGM PTT facilitated all shareholders by manning officers to welcome and take care of them, and provided adequate convenience. The meeting venue was well chosen to accommodate all shareholders and facilitate the elderly and those on wheelchairs. Back-up meeting rooms were arranged, as was a signal relay system between meeting rooms. Security precautions and emergency contingency plans were in hand. Examination of registration credentials was available seven days in advance. Officers provided photocopying services and verified documents. On the meeting day, registration opened two hours early and extended until the period before the last meeting agenda. A barcode system facilitated registration and voting. Refreshments were also provided for the shareholders at the meeting.

Since most shareholders at the AGM were Thais, it was conducted in Thai. However, for the benefit of foreign shareholders, PTT commissioned the translation of shareholders' meetings, supplementary documents, and relevant documents into English. Its website is also bilingual. It also provided officers with a good command of English on hand at meetings to facilitate foreign shareholders. If shareholders cannot communicate in Thai but want to pose queries or discuss topics at the meeting, PTT arranges for suitable communication and provides translation into Thai for both queries and answers for the benefit of other shareholders to preserve their rights and ease communication needs for foreign shareholders.

2.3 Appointing Proxies

To maintain the rights of those who could not attend the 2019 AGM in person, they could appoint proxies or delegate their votes to any independent director in attendance. To this end, PTT has specified these independent directors' names on proxy forms defined by the Ministry of Commerce for voting on behalf of shareholders without conditions. PTT treats proxies as if they were shareholders. As a rule, 30 days before each meeting, PTT discloses the proxy form, attached with details and procedures, on its website. Shareholders may make further inquiries about this by phone or through other channels such as PTT's website and e-mail.

3. Roles toward Stakeholders

As the national energy company, PTT accounts for all stakeholders' rights and interests by establishing guidelines for addressing the needs of each group in and outside the corporation, as well as its own responsibility for society and the environment. The following spells out PTT Group's missions for each group:

The country:

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

Communities and society:

Shareholders:

Representing a corporate citizen by exercising environmental stewardship of international standards and improving the quality of life for communities and society. Operating profitable businesses that lead to sustainable growth while generating

optimal returns.

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

Business partners:

Conduct fair practices with all partners while promoting trust, relationship, and cooperation to extend business capability and increase efficiency in long-term business partnerships.

Employees:

Promoting professional capacity-building and ensuring that employees' wellbeing is on a par with those in other leading companies in order to strengthen employee engagement.

3.1 Treatment of Six Main Stakeholder Groups

3.1.1 Thailand

As the national energy entity with a crucial mission to drive the country under the national strategies and the "Secure, Prosperous, and Sustainable" Thailand vision, PTT is tasked with a mission to achieve long-term energy security through supply of energy of sufficient volumes, standard quality, at fair prices, and in support of public policy to promote national economic growth. Its major operations are listed below.

- 1) Energy Security: PTT leverages its investment budget to relentlessly develop energy infrastructure to accommodate rising energy consumption, including growth in natural gas transmission systems and capacities, LNG-receiving terminals, power plant investment, and pursuit of an ASEAN LNG trading hub, together with investment in emerging businesses, including the battery and clean energy businesses. In sourcing energy supplies to meet domestic demand, PTT executes risk management plans for supplies from various sources to ensure adequate volumes, quality, and standards, including sourcing of natural gas to cover indigenous deposits, imports from neighboring countries, or power business growth both of domestic and international countries to support the national energy demand.
- 2) Public policy support for economic growth and national competitiveness along with support for the national grassroots economy closely with the public sector. The key actions of 2019 are as follow:
 - EECi: PTT is the key partner of the National Science and Technology Development Agency (NSTDA) in planning, developing, and administering the Wang Chan Valley serve as Research and Development city in the Eastern Economic Corridor of Innovation (EECi) to become a domestic and regional trade and investment hub. To this end, PTT pursues the target of establishing new industries to accommodate a research hub on automatic, robots, and smart systems (ARIPOLIS), a research and innovation hub on biosciences and biotechnology (BIOPOLIS), an innovation hub on space technology and geo-information (SPACE INNOPOLIS), and a food innovation hub (FOOD INNOPOLIS) - all to transform the industrial sector to the Thailand 4.0 age. In addition, PTT mobilized initial funds for InnoSpace (Thailand), a national agency for incubating, developing, and upgrading startups in Thailand.
 - Project on State Welfare Card LPG for low-income earners: PTT, the Ministry of Energy, and the Ministry of Finance modified the assistance method for providing LPG discounts to the target group (lowincome earners) by providing such discounts only to vendors, hawkers, and street stall owners holding such cards. This eases their costs of living, stimulate the grassroots economy, and promotes low-income earners' livelihoods.

- B10 diesel support: PTT piloted and actively drove the growth of PTT Stations with sale of B10 biodiesel. Besides costing less and being more environmentally friendly, B10 gives income to oil palm growers, thus contributing to the grassroots economy.
- Thai Det Project: PTT, the Ministry of Commerce, SME Bank, Bank of Agriculture and Agricultural Cooperatives, and Thammasat University secured areas on the premises of service stations for sales outlets of goods, food, and handicrafts from several localities sold by social enterprises.

3.1.2 Society and Communities

PTT is committed to driving Thailand through enhanced national energy security and economic growth in parallel with a better quality of life for society and communities by applying SDGs of the United Nations, the 2018-2037 National Strategies, and the result of surveys of PTT Group stakeholders', society's and communities' needs and PTT Group's skills as ... guidelines for social development endeavor. Mainly, the focus is on people development (People) to possess sufficient skills to live in the 21st century through promoting learning innovation in and outside classrooms and developing their skills so as to upgrade their quality of life to self-reliance through livelihood promotion and renewable-energy promotion. In addition, PTT supported the conservation and restoration of natural resources and the environment (Planet) by raising the awareness of and cooperation in the conservation of nature and the ecosystem in environmental restoration, in urban and rural areas alike. This included the continual reforestation of 1 million rai for fertile forests and reduction of impacts of climate change.

Details about these sustainable efforts are illustrated under "Corporate Citizenship" in the 2019 Corporate Sustainability Report.

3.1.3 Shareholders

PTT remains firmly committed to being a Pride & Treasure of Thailand through the management of 3P: People for human resource development, Planet for stewardship of natural resources and environment in balance with the well-being of the Community and Society, and Prosperity for service as a platform for economic and social sector. Its business is engaged with good governance and balanced stewardship of its stakeholders in pursuit of Sustainable Growth for All to ensure investors that PTT provides sound investment returns and is sustainable, apart from being a part of Thai society in the future.

Investors' Activities

Since 2006, PTT has arranged ongoing trips for minor investors to visit its operation, update information, and meet the management as well as participating in PTT's CSR activities in Rayong.

In 2019, PTT organized the activity on October 29 - 31 by mailing letters of invitation and response forms to all shareholders whose names appeared on the share roster on the record date for the 2019 AGM attendance (March 7, 2019). Interested shareholders were asked to notify PTT of their interest in the visit. But due to the overwhelming interest shown by shareholders (about 4,907 persons), PTT had to draw lots to select those who won the right to visit, as done in past years. Witnessing the draw on September 17 were the Corporate Governance Committee, executives, and CG taskforce members. The winners' names were posted on PTT's website. PTT notified the winners by phone to confirm their acceptance. This activity involved 450 shareholders' visits (three groups of 150 persons each) to the Kamnoetvidya Science Academy (KVIS), Vidyasirimedhi Institute of Science and Technology (VISTEC), and Wang Chan Forest Learning Center, Wang Chan district, Rayong province, to hear a presentation about their operations. PTT will apply shareholders' recommendations to the improvement of its work next year.

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

Activities for Debenture Holders

Since 2010 PTT has staged ongoing debenture holders' activities to serve as a channel for maintaining cordial relations with them and repay them for the confidence in PTT bonds over the long term. In 2019 the activities were diverse to meet the needs of debenture holders, who numbered over 18,000, including:

- The "happiness" quarterly journal, which communicates corporate data, provides energy knowledge, and edutainment articles, was found to be highly suitable and satisfactory by target debenture holders.
- Two visits to PTT's business operation. The first was
 a trip to gas separation plants and the Amazing Winter
 City Flower Tulip in Rayong in April; the second, to
 KVIS, VISTEC, and the Wang Chan Forest Learning
 Center Project in Rayong in October, both of which
 were found intriguing by visiting debenture holders.
- Relations activities, including seminars and workshops, particularly concerts, which consistently met with excellent responses. In 2019 PTT staged The XXL Concert to commemorate its 10th anniversary of its series of concerts. In addition, it organized a stage drama (The Musical of Love) commemorating PTT's 40th anniversary, narrating PTT's existence through thicks and thins; PTT supported a royally bestowed Khon cultural show from the epic Ramayana (Sueb Munkha episode). Finally, it supported a puppet show entitled Taleng Phai.

PTT is committed to raising its efficiency and satisfaction of debenture holders by adding the PTT Debenture Mobile Application channel for them to access data of the PTT Debenture Club, including data on debenture holding, maturity dates, application and verification of the rights to attend activities, personal data, and online magazine subscription. These channels indeed helped raise data access efficiency.

Activities for Institutional Investors

In 2019, besides investors' meetings to inform institutional investors and securities analysts about its quarterly performances, PTT organized annual company visits to PTT Group companies and meetings with its executives in September, namely a visit to IRPC's Residue Deep Catalytic Cracking Plant (RDCC Plant: UHV), GC Polyols Lab & Innovation Center, GPSC's Gheco-One Power Plant, and PTT's strawberry farm in Rayong. In October, it organized a trip to PETRONAS's MLNG Complex, PTT Global LNG Company Limited, equally owned by PTT and PTTEP under the Liquefaction Train 9 Project, and a visit to PTTEP's Bintulu Onshore Receiving Facility (BORF) in Sarawak State, Malaysia. These trips were designed for investors and analysts to learn about PTT Group's business directions and opportunities, as well as PTT Group's cooperation for national energy security.

3.1.4 Customers

PTT divides its market into both of domestic and overseas. Its core products are natural gas products and petroleum products. These are sold to customers of the International Trading Business Unit, Gas Business Unit, and Infrastructure and Sustainability Management Business Group, with two major groups of customers: Business to Business (B2B) and Business to Customer (B2C).

PTT listens to customers' needs and expectations to analyze them through assorted channels, including customer visits, seminars, and opinion surveys. These provide information on competitors, state of competition and technology, customers' behavioral trends and lifestyles, the market environment, and future needs of customers. All input is reviewed together with other information, namely situations and trends of energy economics, public policies, regulations, technological innovations, and financial and economic data for the design of products and services that match the needs and expectations of current and future customers.

Constantly, PTT developed support systems to ease customers' transactions with it, including the e-Billing, e-Payment, and Direct Approved systems designed to help customers search for information on getting support and engagement in transactions round the clock, efficiency improvement of the Order & Customer Relations Center through the iMind System, which links all related information centers, including e-mails, the website, and PTT Fleet Card member data, so that Contact Center officers can swiftly respond to customers with accurate and timely data.

PTT also developed a service standard manual and procedure manual that are comprehensive, including a manual on service station standard, LPG bottling, and Contact Center standard. In place are procedures for periodic assessment against service standards under QSHEMSC, Mystery Shopper, and Gas Control to ensure that its personnel can regularly provide good experience to customers

PTT developed means to foster relations with customers that suit each life-cycle of customers, designed to lead to repurchase and "word of mouth" to others, which form the ultimate goal. In place is PTT satisfaction and engagement assessment in comparison with competitors via the annual satisfaction survey, featuring constant query development. To this end, PTT considers the outcomes directly with customers' purchasing behavior to allow survey outcomes to reflect current operations while extending future businesses more clearly. Customers' dissatisfaction has been regularly compiled and analyzed, including the Contact Center and customer visits so that PTT may know trouble indicators and promptly resolve problems, preventing losses of customers or competitors' intervention.

PTT groups complaints by severity of impact, with defined service level agreements for different types of complaints, for which relevant units must resolve problems within given periods. All complaints must be addressed within 24 hours, and after problem resolution, an inquiry will be made to customers to determine their satisfaction with PTT's problem-solving. At the same time, customers will learn about PTT's long-term problem-solving plans. This ensures that customers are satisfied and will continue to buy PTT's products and services in the future.

Constantly paying attention to customers' convenience and safety, PTT launched projects like the PTT Tune up Project, under which free engine checks and tune-ups are given.

	Natural Gas					
	Natural Gas	Power Plant and Wholesale Market	Industry	Petroleum and Petrochemical Products	NGV	International Trading
Satisfaction level 2019	92.2	90.6	92.7	93.1	88.4	96.2
Satisfaction level 2018	90.6	87.8	91.2	94.4	88.1	91.0
Satisfaction level 2017	92.0	90.7	92.2	93.7	91.0	88.3

3.1.5 Business Partners

Since business partners are keys to business success through mutual support, PTT values and treats them fairly on the basis of fair competition, mutual respect, and good cooperation. PTT strictly complies with contracts and procurement processes, since they are vital to the determination of expenses and the quality of PTT products and services. A clear procurement procedure is in place to ensure transparency, accountability, and maximum benefit.

To achieve its resolution, PTT is committed to doing business for sustainable growth in parallel with good governance for communities, society, and the environment. It therefore values supply chain management such that it is clearly in place by developing risk management processes and mitigation of impacts arising from business partners' business conduct to support the success of supply chain management. The key factors for the drive are as follows:

1. Clear policy and directions

This means PTT's policies and strategies are key factors for forging awareness among employees and society of PTT's commitment and business directions. Therefore, in 2015 PTT issued a PTT Group policy on procurement and sustainable business partner management.

So that PTT's business partners' business conduct guidelines may be more in line with, and more suitable for, the sustainable organizational management concept, the company revised the PTT Supplier Sustainable Code of Conduct (SSCoC) and announced its third edition on August 3, 2015, defining the contents and scope under applicable regulations and laws, together with the aspects taken seriously by PTT, consisting of four main topics:

- 1. Business Ethics
- 2. Social Responsibility
- 3. Safety
- 4. Environmental Management.

2. Sustainable business partner selection and management process development

To align supply chain management with corporate directions, PTT manages its business partners with due regard for ESG (Environmental, Social, and Governance) impacts. Assessing risks and impacts from the perspectives of the environment, society, and oversight of goods and services groups, PTT divides business partner management into three levels: critical, key, and managed (in order of potential severity of impacts). For those in the critical group, management actions will be more intensified than the other groups. Besides formally acknowledging the guidelines for sustainable

treatment of PTT's business partners, they must respond to the Sustainability Performance Assessment Form. After self-assessment, if they fail, they will need to formulate ESG Corrective Action Plans. PTT reserves the right to audit business partners' self-assessment outcomes. This year a PTT team in conjunction with a third-party agency conducted sustainability assessment of 12 "critical" business partners. Overall, their scores passed the criteria set by PTT. A project designed to develop business partners' sustainable operation caliber was launched, under which PTT selected major business partners whose operations involved ESG for training on sustainability capability development of business partners and practices on sustainability capability self-assessment for development planning in line with PTT's policy. In addition, PTT commands a policy on green procurement conforming to the public sector. A system was developed in support of green procurement through the PTT Vendor Management system. This system compiles green spending data. Vendor who won from price bidding can report their choices of green products in serving PTT, with effect from March 1, 2019. As of the year-end, 42 tasks were related to such green spending and green products, valued at some THB 327 million.

In addition, to illustrate PTT's "pride" action in being a transparent company, it joined public agencies in preventing and suppressing corrupt practices by signing a memorandum of cooperation on driving the prevention and suppression of corrupt practices with the Office of the National Anti-Corruption Commission (NACC), State Enterprise Policy Officer (SEPO), and state enterprises to ensure that the national strategy on prevention and suppression of corrupt practices, relevant measures, relevant government policies, and action plans are successfully driven to implementation in state enterprises under CG. To this end, for the provision and disclosure of information on procurement, PTT disclosed related data in compliance with an announcement of the panel on public information on the requirement that information about the outcomes of procurement deliberation of public agencies must be open to the public under Article 9 (8) of the Public Information Act of B.E. 2540 (1997). Disclosure is to be done monthly through the www.pttplc.com website for

public examination. Note that PTT's procurement information disclosure is subject to annual assessment through a project on Integrity and Transparency Assessment (ITA), sponsored by NACC. This year's score for PTT was 100% on procurement information disclosure, based on the assessment of visual evidence inspection.

Since August 24, 2017, PTT has complied with the Public Sector Procurement and Materials and Supplies Administration, B.E. 2560 (2017). It therefore amended its own processes by requiring the disclosure of its annual procurement plan for interested parties to join in price bidding contests at PTT and manage their bidding readiness. PTT has disclosed its 2019 annual procurement plan via three channels: www.pttplc.com, e-Government Procurement (e-GP) of the Comptroller General's Department, and bulletin boards at PTT offices.

PTT has appointed a Procurement Governance and Audit Committee to ensure transparency of procurement, both those requiring compliance with Public Sector Procurement and Material Supplies Administration laws and those direct commercial procurement requiring compliance with PTT regulations already approved by the Public Sector Procurement and Materials Supplies Commission. The committee consists ... of executives from procurement and legal units and the Office of Corporate Audit, with roles and responsibility to govern and audit procurement processes to ensure compliance with laws, regulations, criteria and relevant processes. Annually, the committee inspects procurement processes randomly to detect deficiencies, causes, and preventive measures. In 2019 the management was committed to the transparency organization vision. Each department was required to set KPIs for procurement compliance to ensure that such procurement is worth the value, transparent, fair, efficient, effective, and auditable.

A system is now in place, called Material Receive (MR) on Web, through which user units assess business partners in assorted aspects, including quality, delivery, service, performance, SSHE, and sustainability. Initially, assessment outcomes will be released to registered business partners for further improvement.

3. Capacity-building of relevant parties

Since the mastery and caliber of relevant parties represent another key factor driving the success of this matter, PTT values capacity-building on procurement and management of business partners by PTT's own executives and staff in a systematic and suitable way. This is achieved through training, communication, and knowledge management (KM) so as to achieve the sustainability objectives of business partner management. In addition, PTT establishes business partners' readiness and communicates with them in parallel so that they may prepare themselves for developing their own businesses along the sustainability approach (PTT Supplier Sustainable Code of Conduct).

To promote the sharing of data and knowledge between PTT and business partners while nurturing their caliber to support PTT's success in outcomes, business continuity, and social responsibility, this year PTT has staged Supplier Relationship Management Seminars (SRMs) to communicate PTT's business direction under GRC for transparency, fraud-free execution of tasks, suitable complaint channels, and education on the types and methods of procurement together with channels accessing procurement data of suppliers. This year PTT communicated and educated suppliers on the new procurement system under the Digital Procurement Project, including an overview on the premises of the Rayong gas separation plant, Gas Transmission, and NGV for Vehicles (a total of four exercises). Specifically, they touched on business policy and direction, as well as the electronics system of procurement for their readiness for the new system. Besides, training on ISO 20400 sustainable procurement by Management System Certification Institute (Thailand) (MASCI) for 34 employees of the procurement function and related units was organized. Such standard system focuses on sustainable procurement to develop relationship between suppliers and PTT.

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

A PTT Approved Vendor List (PTT AVL) is prepared for the benefit of procurement through bidding to ensure that, under the process to determine business groups and procedures or methods of selecting business partners to register for PTT AVL, business partners are efficient and deliver products/services that meet PTT's requirements and foster sustainable partnership with PTT. This year the PTT AVL consisted of 233 companies from 19 business groups.

To ensure efficient preparation of PTT AVL, PTT considers criteria, conditions, qualifications of business partners who apply to PTT AVL in each business group. The initial qualifications of the business partners must meet the following requirements:

- 1. Business partners must not have abandoned the work of PTT, the public sector, state enterprises, and government agencies.
- 2. If business partners were removed from the Vendor List, they have no rights to apply for registration in that particular business group for three years. An exception applies if the removal was the result of abandoning the work of PTT, state enterprises, and public agencies, in which case PTT will not accept them to PTT AVL until PTT receives a letter proving the cancelation of such removal.
- 3. Business partners must understand and acknowledge PTT Suppliers' Sustainable Code of Conduct (SSCoC).

Apart from these initial criteria, PTT assesses business partners' operations and sustainable implementation in parallel.

After business partners deliver products/services in each allotment, PTT will assess them and notify them of the strengths/improvements to be made in operation for future supplier development.

Moreover, PTT supports Thai suppliers of goods and services and gives them the top priority. Past procurement information reveals that PTT has procured about 90% of local products, generating cash flow in the Thai economic system, promoting procurement of products from the areas where PTT sites are located, and promoting jobs and generating income for people in the communities.

3.1.6 Employees

(The information on employees is reported under Management Structure/ Employees).

3.2 Respect for Universal Human Rights Principles

PTT requires that all its directors, the management, and employees observe laws, customs, and cultures which differ in each country where PTT invests and strictly respect universal human rights principles under the Universal Declaration of Human Rights. This is the minimum requirement of PTT's business operations.

In 2017, to ensure complete and proper compliance by PTT with laws and regulations, PTT established a Compliance Department under the Office of General Counsel to compile laws and regulations, assess risks, support corporate units in proceeding with defined approaches, monitor and inspect, and report on compliance outcomes to the top management and relevant committees.

With the rollout of the human rights management system since 2017, PTT has reviewed risk aspects on human rights covering PTT Group's business operations under the PTT Group Way of Conduct of 15 group companies in 14 countries, or a total of 30 areas. What the group found were aspects that represented core operational risks: safety and occupational health, migrated labor, security, suppliers' workplace conditions, standard of living of communities, and the rights of natives. Control measures have been developed and applied, along with human rights management plans to keep risks manageable. As assurance of the maximum effectiveness, implementation of such a plan is to be monitored every quarter. So, this year no human rights complaints arose. Constantly, it disclosed operating information under the 10 Principles of the United Nations Global Compact. Finally, PTT enrolled in the effectiveness assessment of operating outcomes on human rights organized by Corporate Human Rights Benchmark, with the outcomes also encouraging.

3.3 Significant Disputes with Stakeholders

This appears under "Legal Disputes", disclosed in Form 56-1

4. Disclosure of Information and Transparency

Disclosure of information is a key index of operating transparency, a crucial factor for confidence among investors and stakeholders. PTT values accurate, precise disclosure of information and creates numerous channels of disclosure so that all stakeholders can gain easy access to information. It promotes awareness among directors, the management, and employees of the importance of CG and transparency to their work, and creates appropriate tools to receive complaints while providing fair treatment to whistleblowers and those complained against as follows:

4.1 Financial and Non-financial Reports

PTT prepared the 2019 Corporate Sustainability Report to disclose the outcomes of economic, social, and environmental operating performance, based on the Sustainability Reporting Guidelines and Oil and Gas Sector Disclosure (OGSD) of the Global Reporting Initiative (GRI). It presented data under the Integrated Reporting (IR) model of The International Integrated Reporting Council (IIRC) along with reporting progress on the 10 Principles of UNGC, and illustrating PTT's commitment to supporting the UN SDGs. Further, PTT applied the Recommendation of the Task Force on Climate-related Financial Disclosures (TCFD) to report performance on climate change. There also was a report review to validate the information by an external party regularly. This report and the annual report were delivered to the shareholders this year and are accessible to those interested via www.pttplc.com, GRI and UNGC.

4.2 Investor Relations

Ever since PTT's privatization and share trading on SET in October 2001, the Investor Relations Department has been established as a center for disclosing essential information to investors and shareholders, including financial data like quarterly performance and financial statements, Management Discussion & Analysis (MD&A), Corporate strategies, and outlooks of PTT. These are disclosed with regularly, fairly and thoroughly. Investors may contact Investor Relations Department directly at phone number 0-2537-3518-9, e-mail: ptt-ir@pttplc.com, and PTT website at www.pttplc.com, which is regularly updated, for information in Thai and English, which includes:

- Company information
- Annual report (Form 56-2)/ Form 56-1
- Information for common-share holders
- Information and activities for debenture holders
- Presentations and webcasts
- Roadshow/ conferences
- Analyst Research
- Activity Calendar
- Code of Conduct for Investor Relations
- Major investment project information
- Policy and business direction statements by the management
- Compliance with public policies
- Key plans
- CG policies and promotional activities
- Financial performance
- Non-financial performance
- Highlights of CSR activities.
- Procurement
- Name and contact number of Investor Relations.

Through the years, PTT has valued disclosure of information that is accurate, complete, transparent, and comprehensive, as well as continual direct and indirect presentation of performance while keeping investors, shareholders, and relevant parties informed of its data. Highlights appear below:

• Direct: PTT regularly reports performance, capital budgets, and industry outlooks to analysts, investors, and employees at quarterly analysts' meetings; conference calls as requested; local and international roadshows/ conferences organized by domestic and international financial institutions; company visits by analysts, investors, or related parties, or all, including credit rating agencies; press meetings, to inform about performance outcomes and investment projects; basic business knowledge involving PTT; site visits; and SET's Opportunity Days. This year PTT applied digital technology to investor relations work, including quarterly analyst meetings via Facebook Live (in Thai and English); provision of data to analysts and institutional investors; and automatic written conversations through the PTTIR LINE Chatbot, with extra convenience, cost reduction, and travel time reduction for analysts and institutional investors. PTT also participated in the SET Digital Roadshow, organized by SET. This year, these key activities took place:

Activities	2018 (times)	2019 (times)
Analyst Meetings via Facebook Live	4	4
Conference calls (presentation of quarterly performances, capital investment, and other key events)	5	5
Domestic roadshows/ conferences (including provision of basic PTT business knowledge)	12	14
International roadshows (including video conferences)	14	9
Company visits/ conference calls (upon request)	55	57
Credit rating reviews	4	4
Press meetings	2	2
Company visits by analysts and institutional investors	4	4
e-mail/ phone calls	8 - 10 times/day	8 - 10 times/day
Quarterly SET Opportunity Days and SET in the City	5	5
Participation in SET Digital Roadshow (organized by SET)	4	4
Minor investors' meetings with the management and company visits	One visit (2 groups), Oct. 30 - 31	Two debenture holder visits (2 groups), Apr. 18 - 20 & Oct. 16 - 18 One shareholder visit (3 groups), Oct. 29 - 31
Relations activities with debenture holders	15	17

- Indirect: Information about PTT, its performance, financial statements, and reports filed with SET are found at www.set.or.th, PTT's website www.pttplc.com, the "happiness" magazine for debenture holders (via the PTT Debenture Application).
 - Investors and interested parties can also mail inquiries to Investor Relations at Tel. 0-2537-3518-9, through e-mail at ptt-ir@pttplc.com or PTT website at www.pttplc.com.

In addition, PTT has constantly publicized news, business activities, operation and project updates, apart from addressing questions and facilitating contacts for the media and the public. In 2018 - 2019, the activities appear below:

Activities	2018 (times)	2019 (times)
E-mails	225	186
News/photo releases	225	186
Press conferences	12	22
Media visits to operations (domestic and international)	6	3
Welcoming and information provision to visiting agencies for assorted purposes	65 groups (3,026 persons)	64 groups (2,521 persons)

4.3 Complaint-Filing and Access to Information

All stakeholders have equal access to PTT's public information, including reporting of news and leads, whether inside PTT through the intranet webboard or outside PTT through its website, by phone, letter, or e-mail. Please contact Investor Relations, Office of the President, Corporate Communication and Branding, Governance, Risk Management and Compliance (GRC), or the Ordering & Customer Relations Center through these channels:

Telephone: 1365 Contact Center, 0-2537-2000

Website : www.pttplc.com

e-mail : - Ordering & Customer Relations Center: 1365@pttplc.com

- Corporate Communication and Branding Department: corporate@pttplc.com

- Office of the President: corporatesecretary@pttplc.com

Investor Relations: ptt-ir@pttplc.comGRC Hot Line: GRChelpdesk@pttplc.com

Line@ : @contact1365

Queries, comments and recommendations will be forwarded to relevant agencies to be addressed through the complaint management system. Follow-ups on the actions are done through e-mail every three days. If the actions are not completed, a notification will be sent to a higher level of supervisors for action. When completed, responsible units will notify the contact person(s), with another follow-up to find out about their satisfaction with the services of Contact Center officers, which will help improve information system management. The management tracks all information every month to detect trends and apply them as an approach for refinement of processes, products, and services in response to all stakeholders. This year, excluding complaints about PTT Oil and Retail Business Plc, queries, comments, and recommendations received totaled 16,878 mostly concerning discount cards, energy credit cards, and service station data.

PTT offers opportunities for the public to file complaints about improper behavior of directors, the management, and staff or their violation of PTT's code of conduct. They are to be directed to the Audit Committee, Office of Corporate Audit, GRC, or Human Resources Department. PTT treats all complaints with equality, transparency, attention, and fairness to all concerned. An appropriate timeframe to consider the complaints is set, and secrecy and protection of whistleblowers will be observed. No significant complaint on ethics was filed this year.

In 2018 the Board approved the structure of Corporate Governance and corporate relations by appointing the Good Governance and Corporate Ethics Department to centralize whistleblowing: filing incidents and tips, following up on complaint-handling, protecting and ensuring fair treatment of whistleblowers or those who provide tips on corruption in the company, reporting investigations and the punishment to the management and applicable committees, and informing relevant parties of the results. In 2019 there were 21 cases filed; after reviewing under the process, 16 found no grounds for corruption, and five were under investigation (these were about non-compliance with PTT's Rules and Regulations).

Committees, Directors' Assessment, Directors' Development

1. Committees

The Board values CG by initially appointing the Audit Committee, the Nominating Committee, and the Remuneration Committee. For a period, the Audit Committee also looked after CG matters and risk management for the Board.

In 2004 the Board set up a Corporate Governance Committee, charged with promotion and screening of CG and promotion of excellence in such areas. In 2013 it set up the Enterprise Risk Management Committee (ERMC) to ensure clearer implementation of corporate risk management in compliance with the CG of listed company and the State Enterprise Policy Office's (SEPO) guidelines on the CG of state enterprises (2009). PTT today therefore has five committees investigating critical matters under the CG principles for the maximum benefit of shareholders, taking into account stakeholders' concerns and interests, business ethics, transparency, and accountability. Each of these committees consists of qualified, non-management directors as required by SET, with clearly written roles and responsibilities in a charter. Since 2009, the duties of the Corporate Governance Committee have been expanded to cover additional policies, implementation, and monitoring of the operation on responsibilities for society, communities, and the environment so that the committee may be responsible for the stakeholders in a more comprehensive and efficient way. In 2013 the duties of this committee also covered the definition of guidelines for CG monitoring concerning PTT's counter-corruption implementation. In 2015 - 2016, the Board updated the authorities of the Nominating Committee, Remuneration Committee, Corporate Governance Committee, and Enterprise Risk Management Committee. In 2017 the Board approved Enterprise Risk Management Committee's steering of stakeholder management as an additional mandate. And this year, the Board approved Enterprise Risk Management Committee's responsibilities to include the screening and commenting on investment items.

PTT has appointed five committees with the following duties and responsibilities:

1.1 The Audit Committee

Each quarter, together with the Accounting Service Center and the State Audit Office of the Kingdom of Thailand, the Audit Committee reviews PTT's financial reports. The Board is accountable for PTT Group's consolidated financial statements as well as other financial information presented in the annual report. The financial reports are prepared under generally accepted accounting principles and are audited and certified by the State Audit Office of the Kingdom of Thailand. Material information, financial and otherwise, is completely and consistently disclosed.

The Board approved the appointment of the Audit Committee on October 1, 2001, which consisted of directors with the qualifications specified by SEC laws and SET. The committee must consist of at least three directors. As of December 31, 2019, it consisted of three independent directors as follows:

Name	Position	Remarks
1. Mr. Vichai Assarasakorn	Chairman	Independent director
2. Mrs. Nuntawan Sakuntanaga	Member	Independent director
3. Mr. Danucha Pichayanan	Member	Independent director

The Executive Vice President, Office of Corporate Audit served as secretary.

Remarks:

- 1. Mr. Vichai Assarasakorn was appointed member with effect from September 4, 2014, and appointed Chairman with effect from April 11, 2019.
- Mrs. Nuntawan Sakuntanaga was appointed member with effect from July 5, 2014. She commands sufficient expertise and experience
 to review and ensure the accuracy and credibility of PTT's financial statement, with experience as member of the PTT Audit Committee
 since 2014.
- 3. Mr. Danucha Pichayanan was appointed member with effect from April 11, 2019. He commands sufficient expertise and experience to review and ensure the accuracy and credibility of PTT's Financial Statement, with experience as member of the Audit Committee of Provincial Electricity Authority.

Duties and Responsibilities

- Prepare a charter on internal audit for the Audit Committee compatible with PTT's scope of work and responsibilities.
 The charter must be approved by the Board and revised at least once a year.
- Review the efficiency and effectiveness of CG, risk management, and internal control processes.
- Review PTT's financial reporting process to ensure accuracy and credibility.
- Review compliance with laws, regulations, procedures, cabinet resolutions, SET requirements, SEC laws, and announcements or directives relevant to PTT's businesses.
- Ensure sound internal audit procedures and review the adequacy of the budget and personnel and the independence
 of the Office of Corporate Audit.
- Consider connected transactions or transactions of potential conflicts of interest or potential corruption affecting PTT's operations under the laws and SET's requirements.
- Provide recommendations to the Board on the appointment, transfer, promotion, and assessment of the head of the Office of Corporate Audit.
- Select, nominate, and recommend fees for the external auditor to the Board.
- · Coordinate audit findings with the external auditor and recommend reviews or verification of any items, if necessary.
- Report internal audit performance to the Board at least quarterly, except for the fourth quarter, which is reserved
 for the annual report. The reports must be submitted to the regulating ministry and the Ministry of Finance for
 acknowledgment.
- Evaluate its own internal audit performance at least once a fiscal year and report the results to the Board.
- Disclose a report on its annual performance and the fees of the external auditor in the annual report.
- The chairman or members of the Audit Committee must attend shareholders' meetings to address matters related to the committee or the appointment of the external auditor.
- Ensure that the management has a whistleblowing mechanism for complaints and supervise the system of complaints.

- When it is necessary to provide its opinions on PTT's assorted operations, seek independent opinions from or hire advisers or specialists at PTT's expenses.
- If internal reports show any sign of violation against laws, regulations, procedures, Cabinet resolutions, announcement, or directives relating to PTT's businesses, the top management must be informed and responsible unit(s) ordered to take due actions.
- Hold the committee meetings at least every quarter and a meeting with the external auditor in the absence of the management at least once a year.
- Hold a formal meeting with the management at least once a year.
- Perform other tasks as required by the law or as assigned by the Board within the committee's scope of duties and responsibilities.

These are in line with PTT's Articles of Association on the Audit Committee and the Office of Corporate Audit 2014.

This year the committee held 16 meetings and duly reported its findings to the Board. In addition, it participated in quarterly audits along with the external auditor and the Accounting Service Center.

The Audit Committee has reported this year's performance in the Report of the Audit Committee section.

Remarks:

In practice, PTT is a state enterprise under the definition of the Budgetary Practice Act, B.E. 2561 (2018), Article 4, interpreted by an organic law concerning the auditing of state budget, B.E. 2561 (2018), Articles 4, 53, and 91, which state that the State Audit Office of the Kingdom of Thailand is authorized to audit financial reports in accordance with the Policy on State Budget Auditing and Standard Regulation, defined by the State Audit Commission and the Finance and Fiscal Discipline Act B.E. 2561 (2018).

1.2 The Nominating Committee

The Board approved the appointment of the Nominating Committee on October 1, 2001, by appointing three directors. As of December 31, 2019, it consisted of:

Name	Position	Remarks
1. Mr. Don Wasantapruek	Chairman	Independent director
2. Prof. Dr. Supot Teachavorasinskun	Member	Independent director
3. Prof. Dr. Surapon Nitikraipot	Member	Independent director

The Company Secretary served as secretary.

Remarks:

- 1. Mr. Don Wasantapruek was appointed Chairman with effect from December 23, 2018.
- 2. Prof. Dr. Supot Teachavorasinskun was appointed member with effect from April 25, 2018.
- 3. Prof. Dr. Surapon Nitikraipot was appointed member with effect from April 25, 2018 to April 11, 2019, and from October 1, 2019, in place of Mr. Somsak Chotrattanasiri, who resigned.

Duties and Responsibilities

- Define the methods and criteria for directors' nomination for transparency.
- Select director nominees to fill vacancies (due to resignation or term completion) for the Board's or the shareholders' consideration and appointment with due regard for the composition of the Board, expertise, competencies, and experience useful to PTT in compliance with PTT's Board Skill Matrix and the Director's Pool of SEPO and IOD. Equally important, nominees must have no conflicts of interest with PTT. The qualifications of desirable directors must prove compatible with PTT's business strategies.
- Propose directors for committee duties with due regard for the committees' compositions, qualifications, expertise, and competencies. Then these names are to be tabled for the Board's appointment. An exception is for the committee itself, which is to be appointed by the Board.
- Be directly accountable to the Board, while the Board is accountable for PTT's businesses to all stakeholders.
- Assess its own performance and report the outcomes to the Board for acknowledgment and disclose them in the annual report.
- Disclose its own performance in the annual report.
- Hold at least two meetings a year.
- Perform other Board-assigned tasks.

Directors' recruitment procedures are as follows:

• The committee defines the qualifications needed for replacements to ensure that new directors meet the criteria and qualifications required by applicable laws and regulations and align with PTT's strategy and operations. It defines a procedure for nominating qualified candidates.

According to the CG Ethical Standards, and the Code of Business Ethics Handbook, the Board should consist of experts from a variety of disciplines needed for the administration of PTT businesses. Specifically, it should consist of at least three experts in the petroleum business, at least one expert in law, and at least one expert in finance and accounting. Currently, PTT's Board Skill Matrix consists of Accounting/ Finance/ Laws/ Information Technology/ Engineering/ Marketing/ Business Management/ International Business/ Economics/ Science, Technology, Energy Innovation, Petrochemical, Biological Industries, Digital, Automation, Artificial Intelligence and Robotics/ Political Science, Security, Risk Management/ Social Enterprise, Natural Resources and environment and sustainability.

- The committee summarizes its recruitment results and presents to the Board a shortlist of qualified candidates along with supporting rationale.
- The Board appoints qualified candidates from the list prepared by the committee and submits their names to the shareholders' meeting for approval. The list must also be endorsed by SEPO in conformance to the Directive of the Prime Minister's Office on the Definition of Policy and Supervision of State Enterprises, B.E. 2557 (2014).

This year the committee held 5 meetings, with all committee members at the time in attendance. The Company Secretary served as secretary to the committee.

The committee disclosed its own performance in the annual report under the Report of the Nominating Committee.

1.3 The Remuneration Committee

The Board approved the appointment of the Remuneration Committee on October 1, 2001, by appointing three directors. As of December 31, 2019, it consisted of:

Name	Position	Remarks
General Teerawat Boonyawat	Chairman	Independent director
2. Mr. Chumpol Rimsakorn	Member	Director
3. Prof. Dr. Supot Teachavorasinskun	Member	Independent director

The Company Secretary served as secretary.

Remarks

- 1. Gen. Teerawat Boonyawat was appointed Chairman with effect from April 11, 2019.
- 2. Mr. Chumpol Rimsakorn was appointed member with effect from December 23, 2018.
- 3. Prof. Dr. Supot Teachavorasinskun was appointed member with effect from October 1, 2019.

Duties and Responsibilities

- Define the criteria for compensation and propose fair, sensible compensation for directors and committee members for the Board's and the shareholders' approval.
- Propose guidelines for assessing performance outcomes and compensation for the President & CEO for the Board's approval.
- Acknowledge and comment on organization restructuring and job levels, and assess and decide compensation for senior executive vice presidents.
- Be accountable to the Board directly, while the Board is accountable for PTT's businesses to all stakeholders.
- Assess its own performance outcomes and report the findings to the Board for acknowledgment and disclose them
 in the annual report.
- Disclose its own performance in the annual report.
- Hold at least two meetings a year.
- Perform other Board-assigned tasks.

This year the committee held 3 meetings, with all committee members at the time in attendance. The Company Secretary served as secretary to the committee.

The committee disclosed its own performance outcomes in the annual report under the Report of the Remuneration Committee.

1.4 The Corporate Governance Committee

The Board approved the appointment of the Corporate Governance Committee on June 24, 2004, consisting of three directors. As of December 31, 2019, it consisted of:

Name	Position	Remarks
1. Prof. Dr. Kittipong Kittayarak	Chairman	Independent director
2. Prof. Dr. Surapon Nitikraipot	Member	Independent director
3. Mr. Thon Thamrongnawasawat	Member	Independent director

The Senior Executive Vice President, Corporate Governance and Regulatory Affairs, and Senior Executive Vice President, Office of General Counsel, served as secretary, and the Executive Vice Presidents, Corporate Governance and the Executive Vice President, Company Secretary and Corporate Relation, served as assistant secretaries.

Remarks:

- 1. Prof. Dr. Kittipong Kittayarak was appointed Chairman with effect from April 11, 2019.
- 2. Prof. Dr. Surapon Nitikraipot was appointed member with effect from December 23, 2018.
- 3. Mr. Thon Thamrongnawasawat was appointed member from November 18, 2016 to April 11, 2019, and from October 1, 2019, in place of Mr. Somsak Chotrattanasiri, who resigned.

Duties and responsibilities

- Propose practical CG guidelines to the Board.
- · Counsel the Board on CG matters.
- Ensure that the performances of the Board and the management align with CG.
- Revise PTT's CG approach annually by comparing it with international practices and propose revisions to the Board.
- Assign the CG policy to the Governance, Risk Management and Compliance Management Committee.
- Assign the policy and guidelines for sustainability management (SM) including CSR.
- Assign a policy of allowing minor shareholders to nominate directors and propose AGM agenda items.
- Monitor SM implementation and report its findings to the Board.
- Define the scope for supervising matters dealing with PTT's anti-corruption practices.
- Hold at least one meeting each quarter.

This year, the committee held 5 meetings with all committee members at the time in attendance. The Senior Executive Vice President, Corporate Governance and Regulatory Affairs, and the Senior Executive Vice President, Office of General Counsel, served as joint secretary to the committee.

The committee disclosed its own performance in the annual report under the Report of the Corporate Governance Committee.

1.5 The Enterprise Risk Management Committee

The Board approved the appointment of the Enterprise Risk Management Committee (ERMC) on October 25, 2013, by appointing at least three directors, at least one of whom must be an independent director. As of December 31, 2019, it consisted of:

Name	Position	Remarks
1. Mr. Supattanapong Punmeechaow	Chairman	Director
2. Mr. Thon Thamrongnawasawat	Member	Independent director
3. Mr. Nuttachat Charuchinda	Member	Director
4. Mr. Chumpol Rimsakorn	Member	Director

The Senior Executive Vice President, Corporate Strategy, as Chief Risk Officer (CRO) and Chief Stakeholder Officer (CSO), served as secretary.

Remarks:

- 1. Mr. Supattanapong Punmeechaow was appointed Chairman, with effect from October 1, 2019.
- 2. Mr. Thon Thamrongnawasawat served as Chairman from April 25, 2018, and as member with effect from October 1, 2019.
- 3. Mr. Nuttachat Charuchinda served as member from April 11, 2019, and he retired from the directorship due to his completion of 65 years of age, with effect from January 17, 2020.
- 4. Mr. Chumpol Rimsakorn was appointed member with effect from October 17, 2019.

In 2019 the committee's duties and responsibilities have been revised to embrace screening and commenting on investment items.

Duties and responsibilities

- Define and review PTT's risk management and corporate stakeholder management policies and scopes
- Supervise and support risk management and stakeholder management practices in line with strategies and business goals as well as prevailing circumstances
- Provide recommendations, monitor, and evaluate risk management and stakeholder management for further implementation of the Corporate Plan and Risk Management Committee (CPRC) (management level)
- Review risk management outcome reports and provide recommendations on risks, including specifications of control measures or mitigation plans and development of the risk management system to CPRC for continued efficiency
- Review reports of corporate stakeholder management outcomes and provide recommendations on relevant plans
 to extend positive outcomes or minimize/offset potential impacts on stakeholders, including development of
 the stakeholder management system for CPRC to ensure continued efficiency
- Support the Chief Risk Officer (CRO) and Chief Stakeholder Officer (CSO) in achieving PTT's corporate risk management and stakeholder management goals
- Report risk management outcomes and stakeholder management outcomes to the Board. In case factors or events might have potential significant impacts on PTT, the Board must be notified immediately.
- Screen and comment before presents to the Board for approval on contractual items, which are complicated businesswise and contain risks potentially affecting PTT or potentially and significantly affecting PTT's stakeholders as endorsed by the Management Committee.

- Screen and comment on investment agenda:
 - PTT's and PTT Group's wholly owned investment projects with investment value exceeding THB 5 billion and present to the Board for approval
 - PTT's investment projects where it holds less than 100% shares and not SET-listed, with investment value exceeding THB 5 billion, and presenting to the Board for approval before PTT's representative votes in shareholders' meetings or board meetings
 - Investment with risks potentially significantly affecting PTT or its stakeholders as endorsed by the Management Committee.
- Meet at least once a quarter.
- Perform other Board-assigned duties.

Revision of the risk management system remains the duty of the Audit Committee and the Office of Corporate Audit.

This year the Committee held 9 meetings. Most of committee members at the time attended to the meeting. The Senior Executive Vice President, Corporate Strategy, served as the secretary.

The committee disclosed its own performance in the annual report under the Report of the Enterprise Risk Management Committee.

2. Board Self-assessment

With the resolution of Board Meeting No. 9/2562 (2019) of September 27, 2019, the Board approved all five self-assessment forms with some modification made to the entire Board assessment form under Board Policy, designed to embrace incorporation of innovation and digital technology as part of the business drive of the corporation; some wording was changed on Board Practices, specifically under performance assessment for clarity and comprehensiveness for exploiting such assessment. Therefore, in 2019 there were five assessment forms, namely Assessment of the Board,

Assessment of Individual Directors (Self-assessment), Individual Assessment of Other Directors (Cross-assessment), and Assessment of the Committees (Entire Committees), and Assessment of Chairman's roles & duties and performance, along with work satisfaction of the committees and chairman of each committee. The five assessment forms stipulated the percentages corresponding to the levels of performance achieved in each of these detailed below.

Over 85%	=	Excellent
Over 75%	=	Very good
Over 65%	=	Good
Over 50%	=	Fair
Below 50%	=	Need improvement.

The self-assessment findings were as follows:

1. Assessment of the Board consisted of Board Policy, Board Composition, Board Practices, Board Meetings, and Board Training and Development.

The results indicated excellent/most suitable overall performance, with an average score of 95.95%.

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

The overall results of the six categories indicated excellent conformance by most directors, with an average score at 98.39%.

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

The cross-assessment results in these six categories indicated excellent conformance by most directors, with an average score of 99.38%.

4. Self-assessment of the Committees (entire committees) consisted of Board policy, Board composition, Board practices, and Board meetings.

The results in the four categories indicated excellent/ mostly suitable overall performance for the committees as follows:

- 4.1 The Nominating Committee indicated excellent performance, with an average score of 97.92%
- 4.2 The Remuneration Committee indicated excellent performance, with an average score of 97.22%
- 4.3 The Corporate Governance Committee indicated excellent performance, with an average score of 98.96%
- 4.4 The Enterprise Risk Management Committee indicated excellent performance, with an average score of 95.83%.
- 5. Chairman's Roles & Duties and Performance Assessment, Work Satisfaction of the Committees and the Chairman of each. The assessment of the Chairman consisted of 8 categories and work satisfaction assessment, 10 categories, with an average score of 98.40%.

6. Audit Committee's Performance Assessment

Under PTT's regulations on performance assessment of the Audit Committee and the Office of Corporate Audit 2014, the Audit Committee Manual for State Enterprises under the Ministry of Finance, and SET's good governance handbook for internal auditors and the audit committee Section 1.1: Responsibility of the Audit Committee, the Audit Committee must assess its performance by undertaking self-assessment at least once a year. The individual self-assessment or the entire committee's assessment is presented annually to the Board, specifying problems leading to unfulfilled objectives. This year the Audit Committee's Meeting No. 8/2562 (2019) of August 13, 2019, resolved the same assessment forms for the Audit Committee, namely Assessment of Individual Directors (self-assessment), Individual Assessment of Other Directors (cross-assessment), and Assessment of the Committee (entire Committee), since they conformed to the best practices stipulated by SEPO and SET. The Audit Committee's Extraordinary Meeting No. 9/2562 (2019) of September 17, 2019, approved the assessment of its performance for 2019 with the following details:

Assessment of the entire committee consisted
 of the structure and composition/ meetings/ roles
 and responsibilities/ relationship with the Office
 of Corporate Audit and the external auditor/
 relationship with the management/ reporting/
 quality consistency.

The assessment criteria were 4=regularly implemented, 3=mostly implemented, 2=sometimes implemented, 1=never implemented.

The results of the assessment of the entire Audit Committee was at the "regularly implemented" level, with an average score of 3.97.

Assessment of Individual Directors (Self-Assessment) consisted of business knowledge/specific expertise/duties and authorities/independence and fairness/understanding of duties and responsibilities of members/commitment to work and meetings.

The assessment criteria were 4=Excellent, 3=Very good, 2=Good, 1=Need improvement.

The results of the Audit Committee's self-assessment indicated "excellent" overall performance, with an average score of 3.85.

• **Cross-assessment** consisted of six identical categories listed above for direct comparison.

The results of the Audit Committee's cross-assessment indicated "excellent" overall performance, with an average score of 3.97.

PTT also analyzed the assessment topics to develop/ improve performance. In addition to developing the annual performance assessment forms for the Board, the Board has since 2017 begun gauging directors' efficiency and effectiveness by defining KPIs for their performance early in the year for measuring the Board's performance and for determining their compensation.

3. Directors Orientation

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

Director's Handbook:

- 1. Public Company Act
- 2. Securities and Exchange Act
- Standard Qualifications of Directors and State Enterprise Officer Act
- 4. Company Registration Certificate
- 5. Company Certificate
- 6. Company Objectives
- 7. Articles of Association
- 8. Company Rules (17 Rules)
- 9. PTT Corporate Governance Handbook
- 10. Manual for Directors of Listed Companies.

Information kit for directors:

- 1. Overview business presentation of PTT
- 2. List of directors, committees, and management structure
- 3. Director Fiduciary Duty Check List
- 4. CG principles for listed companies
- 5. Connected transactions of listed companies
- Guidance on providing information for listed company management
- 7. PTT Plc Company Profile (short version)
- 8. Annual Report
- 9. Financial Report
- 10. Annual Corporate Sustainability Report
- 11. Corporate Governance book
- 12. Debenture Magazine ("Happiness")
- 13. PTT Spirit publication
- 14. Article: "Truth about Privatization"
- 15. PTT WAY OF CONDUCT
- PTT Technology and Innovation Management Operating System
- 17. PLLI Course Catalog

This year, in the briefing to the new directors, the President & CEO along with senior management presented information about PTT, its management structure, strategies and policies on its business operations and performance, and relevant information for their overview of the overall business operations. At the same time, on three occasions, the above-mentioned documents and handbook for new directors were handed over.

4. Directors' Development

Course/ Seminar

The Board and the management value regular participation in development training relevant to their performance (as detailed in each of their profiles). Most directors (over 90%) have undergone training with IOD. PTT encourages and applies IOD membership for all the directors to provide them with a channel for news and intelligence while augmenting their expertise, which can be applied during directorship. PTT delivers training-related data to the Board for consideration of attending training courses of their interest, as well as training courses of other institutes in all relevant courses throughout the year, which included regular in-house briefings by experts and consultant companies with helpful business data. In addition, it stages visit to other companies and organizations to promote helpful initiatives for application to PTT's sustainable business.

This year the following directors have attended courses and seminars.

Name	Course/ Seminar
Mr. Krairit Euchukanonchai	 Participated in the Closing Ceremony of the Executive Program on Energy Literacy for a Sustainable Future Thailand Energy Academy (TEA) (Class of 13th) Visited PTTEP's Arthit Project, a gas field in the Gulf of Thailand, offshore Songkhla Attended the National Director Conference 2019 Board of the Future, IOD Attended the 31st GASTECH Exhibition and Conference (GASTECH 2019) Welcomed HRH Princess Maha Chakri Sirindhorn, the Princess Royal of Thailand, to Wang Chan Valley, Rayong
Mr. Vichai Assarasakorn	Attended the PTT Group AC Forum 2019 seminar under the "Driving IA in the Age of Digitalization"
Mr. Don Wasantapruek	 Attended the National Director Conference 2019 Board of the Future, IOD Participated in a dialogue and visited the exhibition of the Gas Business Group entitled "Gas Day 2019, Energy Fuel for Today and Tomorrow: To be the Energy Hub of Asia", PTT Attended an event marking the 30th anniversary of PTT International Trading Pte. Ltd. (PTTT), Singapore
Gen. Teerawat Boonyawat	Participated in Executive Program on Energy Literacy for a Sustainable Future Thailand Energy Academy (TEA) (Class of 15th)
Prof. Dr. Kittipong Kittayarak	Attended the National Director Conference 2019 Board of the Future, IOD
Mrs. Nuntawan Sakuntanaga	 Attended the Boardroom Success through Financial and Investment (BFI), Class 7/2019, and Board that Makes a Difference (BMD), Class 9/2019, IOD Participated in the 8th Amazing Winter City Flower: Tulip in Rayong Attended the National Director Conference 2019 Board of the Future, IOD Attended the PTT Group AC Forum 2019 seminar under the "Driving IA in the Age of Digitalization"
Mr. Danucha Pichayanan	Attended the PTT Group AC Forum 2019 seminar under the "Driving IA in the Age of Digitalization"
Prof. Dr. Supot Teachavorasinskun	 Attended the Director Certification Program (DCP), Class 269/2019, and Financial Statements for Directors (FSD), Class 38/2019, IOD Participated in the "PTT Group CG Day 2019: DigitalizationChallenge the Governance"
Prof. Dr. Surapon Nitikraipot	 Participated in the "PTT Group CG Day 2019: DigitalizationChallenge the Governance" Attended Thailand's National Conference on Collective Action against Corruption, "Innovations in the Fight Against Corruption" seminar, IOD Participated in a dialogue and visited the exhibition of the Gas Business Group entitled "Gas Day 2019, Energy Fuel for Today and Tomorrow: To be the Energy Hub of Asia", PTT

Name	Course/ Seminar
Mr. Thon Thamrongnawasawat	Attended the National Director Conference 2019 Board of the Future, IOD
Mr. Chumpol Rimsakorn	 Participated in the 8th Amazing Winter City Flower: Tulip in Rayong Attended the 3rd SOE CEO Forum, organized by State Enterprise Policy Office (SEPO)
Mr. Nuttachat Charuchinda	Attended the National Director Conference 2019 Board of the Future, IOD
Mr. Chansin Treenuchagron	 Attended the 3rd SOE CEO Forum, organized by State Enterprise Policy Office (SEPO) Participated in The World Economic Forum Meeting in Davos, Switzerland Attended the National Director Conference 2019 Board of the Future, IOD

Directors who resigned or retired during the year

Name	Training Course/ Seminar
Mr. Kulit Sombatsiri (Resigned, effective from October 9, 2019)	 Participated in the Closing Ceremony of the Executive Program on Energy Literacy for a Sustainable Future Thailand Energy Academy (TEA) (Class of 13th) Attended the 31st GASTECH Exhibition and Conference (GASTECH 2019) Participated in a dialogue and visited the exhibition of the Gas Business Group entitled "Gas Day 2019, Energy Fuel for Today and Tomorrow: To be the Energy Hub of Asia",PTT

The Board also participated in other corporate activities, including "The Anniversary of Love" event marking PTT's 40th founding anniversary. The Company's policy is to stage business visits to PTT's and PTT Group's assets and employees or organize periodic study visits to promote understanding of business and enhance the Board's expertise on the outlook for energy consumption of other countries so that they may apply the knowhow and experience to defining future business approaches for PTT and Thailand. This year they visited, studied business conduct, including the monitoring, of EECi together with a meeting with the board of the State Railway of Thailand and a project taskforce supporting state enterprises on organizational management (the mentor project). They also visited VISTEC and KVIS, and a member of the Enterprise Risk Management Committee visited the Battery Manufacture in Japan. Finally, the Audit Committee visited the Gas Business Unit's operation at the Gas Dispatch Control Center.

Nomination and Appointment of Directors and President & CEO

1. Independent Directors

1.1 Qualifications of Independent Directors

At Meeting No. 1/2556 of January 17, 2013, the Board endorsed a proposal of the Corporate Governance Committee to redefine PTT independent directors' qualifications more stringently than the criteria of SEC and SET and define their roles and responsibilities in a manual signed by the Chairman on January 21, 2013, as follows:

Qualifications of Independent Directors

- (1) Hold up to 0.5% of the voting shares of PTT, its subsidiaries, associates, juristic persons with potential conflicts, or related companies (including the shares held by related parties under Article 258 of Securities and Exchange laws))
- (2) Have not been involved in the management or employees, wage earners including audit advisors, legal or other advisers on the payroll of PTT, or have control over PTT, its subsidiaries, associates or juristic persons that could pose conflicts of interest for the past two years
- (3) Have no blood relationship or relationship through registration as parents, spouses, siblings, and children. This definition also applies to children's spouses, executives, major shareholder, controllers, or people due to be nominated as an executive or controller of PTT or its subsidiaries
 - (4) Business relationship with PTT
 - (a) Types of relationship
 - Professional service
 - Auditor and other professional service provider, including legal adviser, financial adviser, property valuator
 - "Non-independent" criteria
 - Total prohibition for auditors
 - Other professional services: when the total value exceeds THB 2 million per year.
 - Commercial/business relationship (similar to SET's requirements for connected transactions)
 - Types of relationship: Full coverage of business transactions, that is, normal transactions, real-estate leasing, asset/service transactions, and financial assistance transactions
 - "Non-independent" criteria: Transaction value from THB 20 million or 3% of PTT's NTA upward (whichever is lower); the total value must include items occurring within six months before this transaction.
 - (b) Should the relationship under (a) apply to a juristic person, the parties regarded as "non-independent" consist of the major shareholder, directors that are not independent ones or not a member of the Audit Committee, and executives (or partners) of that juristic person
 - (c) The forbidden periods for (a) and (b): Two years before the appointment
 - (d) Exceptions: If necessary and suitable (exceptional cases), independent directors/Audit Committee members may have more relationship than the non-independent criteria while holding directorship, provided that a prior unanimous approval has been given by the Board. Besides, PTT must disclose such relationship in Form 56-1 and its annual report (Form 56-2). And should PTT should decide to extend the term of that independent director, it must disclose details about such relationship in the meeting notice for the next shareholders' meeting (in the directors' election agenda item).

- (5) Are not appointed to represent PTT's directors, its major shareholder, or shareholders related to PTT's major shareholder.
- (6) Have no qualifications that compromise the expression of free views.
- (7) Independent directors with qualifications 1 through 6 above may be assigned by the Board to decide on business matters of PTT, its subsidiaries, associated companies, affiliated companies, or juristic persons that could pose conflicts of interest; such decisions are to be collective decisions.

Incidentally, if independent directors serve in this position in PTT, its subsidiaries, associated companies, or affiliated companies, PTT must also disclose information as well as the overall remuneration of such directors in Form 56-1 and Form 56-2.

Roles and Responsibility of PTT's Independent Directors

- (1) Recommend essential, beneficial matters to PTT and its minor shareholders to the Board or the President & CEO, or both
- (2) Advocate roles and responsibilities of the Board and provide views commonly expected of independent directors for the benefit of PTT and its minor shareholders.
- (3) Review PTT's compliance with laws dealing with independent directors, and revise the definition of independent directors for suitability and legal completeness.
- (4) Take other Board-assigned actions provided that these actions do not compromise their independence.
- (5) An independent director's term begins once he or she fulfills all the requirements under the definition for PTT's CG; it ends when he or she lacks qualifications or completes the PTT term.
- (6) The independent directors must hold their own meeting at least once a year.

1.2 Segregation of the Chairman and the President & CEO Positions

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

The current Chairman is an independent director. He exercises high-level leadership and ensures that directors do not fall under the influence of the management by encouraging them to exercise their voting rights and strictly comply with the CG principles.

1.3 Independence of the Chairman

Board Meeting No. 7/2561 (2018) of July 20, 2018, appointed Mr. Krairit Euchukanonchai, an independent director, as Chairman of the Board, which was endorsed by the State Enterprise Policy Office (SEPO) with effect from September 7, 2018, as required by the regulation of the Prime Minister's Office on State Enterprise Policy and Monitoring B.E. 2557 (2014), and the 2017 CG principles for listed companies. It would allows the work of the Chairman to be independent and boost confidence in the transparency of operations and fair treatment of all stakeholders.

Nomination of Directors and President & CEO

2.1 Nomination of Directors

(The nominating process for directors is reported under Corporate Governance, entitled "Proposal of additional agenda items and nomination of directors" and "The Nominating Committee").

2.2 Nomination of President & CEO/ Succession Planning

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

Succession planning for the executives is reported under Management Structure, entitled "Employees".

Governance of Subsidiaries and Associated Companies

Governance Mechanisms

PTT defined a CG policy for PTT Group companies by preparing the "PTT Way" handbook and the "PTT Way of Conduct" guidelines, which compile work procedures in various aspects of PTT Group companies so that their work procedures may be in conformity and unity as a governance tool for PTT group companies. All are required to practice and drive toward the same standard across PTT Group through PTT's representative(s) assigned as directors, the management, and officers. This way, PTT Group commands unity in action, leading to synergy, enhanced capability and strength in international competition for PTT Group to in turn lead to joint growth in a transparent and sustainable way.

Below is the scope of PTT Group management, which consists of five governance principles:

- 1. Definition of key strategic positions for PTT's executives and employees, based on the joint agreement of PTT Group or other business terms
- **2.** Rules and regulations and directives which form part of the governance designed to drive linkages between PTT Group's policy governance and its successful implementation. Such rules, regulations, and directives are to be put into practice and driven toward a uniform standard throughout the group by PTT representatives assigned to serve in these companies as directors, top executives, the management, and officers.
- **3. Reporting line and performance management:** PTT Group companies must report implementation updates under assorted policies to PTT's management and/or the Board.
- **4. Multi-level governance:** This is to proceed through governance transfer (PTT Group Way of Conduct) from PTT direct to PTT-invested companies (subsidiary companies). ... PTT authorizes to govern through PTT executives serving as the top executives there. To this end, such companies must develop its own group governance to convey the PTT Group ... Way of Conduct concept to its invested companies (affiliated companies) so that a single standard governs the entire PTT Group.
- **5. Management Committee:** PTTGMC and other policy committees play a key role in driving the efficiency of PTT Group governance since they represent a forum for consultation and joint definition of business directions. In place is regular performance reporting under the PTT Group Way of Conduct by PTT Group companies to PTTGMC to track business efficiency and effectiveness.

Other elements of the PTT Group Way of Conduct:

Roles of the Shareholder:

- Appointing the Board to work on their behalf
- Defining the Company's business direction or decide on matters of significant impacts through shareholders' meetings
- Attending to exercise their voting rights in shareholders'
 meetings to appoint or remove directors, appoint
 the external auditor, and consider matters affecting
 the Company, including dividend payout allocation,
 definition or amendment of the articles of association
 or memorandum of association, capital increase or
 decrease, and approval of extraordinary items.
- Auditing the Board's performance.

Roles of the Board:

- Steering the Company for sound management by defining objectives and goals, strategies, and policies, and allocating key resources for objective and goal achievement, including monitoring, assessing, and ensuring performance reporting.
- Creating sustainable value for the business, leading to competitiveness and outstanding performance outcomes with due regard for long-term impacts.
 Engaging in business with ethics and a respect for rights, while exercising responsibility for shareholders and stakeholders, among others.
- Ensuring that all directors and the management execute their duties of care, loyalty, obedience, disclosure.
- Assigning scopes of duty to the President and the management in an explicit way and monitoring execution as assigned.

Roles of the Top Management:

 Managing the Company as assigned by the Board, specifically by managing the Company under the plan and budgets which by the Board stricly, with integrity and honesty, and prudently, while acting in the Company's and shareholders' best interests.

- Providing linkage of strategies and policies between the Company and PTT Group through concrete implementation.
- Executing duties of care, loyalty, obedience, and disclosure.
- Executing Governance, Risk, and Compliance (GRC) and providing cooperation with Internal Audit.

Policy on Serving as Directors of Other Companies

This year PTT had 33 affiliated companies, five of which are SET-listed flagships. PTT therefore adopted the PTT Group management structure for synergy and alignment of policies. To achieve this, it appointed directors or management team members as directors in these companies to supervise policies and business management which aligned with PTT's policies for the benefit and value addition for all stakeholders. The objectives of such appointments are:

- 1. To ensure that the management of a given company aligns with the policies of PTT Group companies, monitor its overall business performance to align with PTT's policy, and institute comparable standards.
- 2. To establish synergy for the business of PTT Group and add value to all related parties, including Thailand as a whole.
- 3. To apply specific expertise in support of business, including financial know-how to improve accounting and financial processes to enable a given company to grow robustly. This includes assistance to companies outside PTT Group. The resulting application of the knowledge and expertise gained from serving in such leading companies will enhance the benefit to PTT and foster cordial relations and business alliance with PTT.

4. This is part and parcel of the responsibility of the directors and the management of PTT.

PTT ensures its consideration of executives or outsiders from the Ministry of Finance's Director's Pool for appointment within PTT Group, which is regarded as a state enterprise, based on the pertinent act on standard qualifications of directors and state enterprise officials. Chosen directors from the pool must make up no less than one-third of other directors of a given state enterprise. As of December 31, 2019, PTT had 24 members who belonged to the Director's Pool. It also ensures that PTT executives and such outsiders who serve as directors in PTT affiliates serve on no more than three PTT affiliates or other state enterprise affiliates. This is designed to lower risks of conflicts of interest and ensure conformance to applicable laws, as well as conformance to a Cabinet resolution of January 24, 2011, on fraud prevention measures at state enterprises, entitled "The appointment of senior government officials or persons as directors on multiple state enterprises", as proposed by NACC.

Finally, the Board defined guidelines and criteria for serving in various positions by PTT Group's executives. In 2015 the Board decided to adopt them as part of the CG Handbook.

Supervision of the Use of Inside Information

1. Code of Conduct

PTT's written policy and a code of conduct are in place for integrity and a high ethical standard. In the handbook, the Corporate Governance Committee defines the code based on international standards. Violators of the code are subject to disciplinary action. The essential aspects of the code are included below:

- 1. Respect of the law and the Universal Declaration of Human Rights principles
- 2. Prevention of money laundering
- 3. Support to the political sector
- 4. Vested interests and conflicts of interest
- 5. Maintaining of confidentiality, retention of data, and use of inside information
- 6. Treatment of customers and consumers
- 7. Treatment of business competitors
- 8. Purchasing, procurement, and treatment of business partners
- 9. Responsibility to communities, society, and the environment
- 10. Treatment of employees
- 11. Treatment of creditors
- 12. Internal control system and internal audit
- Acceptance and presentation of gifts, assets, and other benefits
- 14. Safety, occupational health, and the environment
- 15. Intellectual properties and application of information and communication technology.

2. Conflicts of Interest

PTT requires information disclosure to prevent conflicts of interest and illegal, improper activities. Under the Board's policy, business decisions made by the management and employees must be solely in PTT's best interests. All staff must not only avoid engaging in financial and other relationships with external parties that would lead to financial losses for PTT or a conflict of loyalty or interests, but also not compromise the efficiency of business operation. Those staff with interests or related businesses which may require PTT's review and decisions must report their relationships and connection with potential conflicts of interest. PTT is to disallow such connected persons from exercising their authority for and involvement in such transactions.

3. Reporting Transactions of Potential Conflicts of Interest with PTT

PTT has required the directors, management, and all employees to disclose potential conflicts of interest through a specific disclosure form for suspected conflicts of interest with PTT. These are to go through a system for reporting such conflicts. In addition, any approval of such items must not contain special conditions or specifications that are out of the ordinary, which forms part of PTT's internal controls. PTT's Office of Corporate Audit and the Audit Committee have been entrusted with the monitoring and resolution of issues related to conflicts of interest. This year the directors, management, and all employees were required to fill out an electronic report through the PTT intranet. However, no such case of significance violations have arisen. The disclosure form confirms their acknowledgment that violation of ethics and the code of conduct in PTT's business operations is subject to disciplinary measures with the seriousness of the actions.

4. Reporting Vested Interests of Directors, the Management, and Related Parties

In the first quarter this year the Board developed a form for reporting vested interests of directors, the management, and related parties as basic information to manage vested interests for directors and senior management. The directors and the management are to report such matters every year and with every change. The Company Secretary is to compile and submit the copy to the Chairman and the Chairman of the Audit Committee to check and manage conflicts of interest. This year, however, no such cases have arisen.

5. Reporting Changes in Share Portfolios

As part of the oversight of inside-information measures, all PTT directors and management, including their spouses and children not yet of legal age, must report any changes in their PTT share ownership to SEC under Article 59 of the Securities and Exchange Act B.E. 2535 (1992) within three days of the dates of sale, purchase, disposal, or receipt of such shares. PTT defines a policy of disclosing or reporting the sale, purchase, disposal, or receipt of such shares, changes in share ownerships of the directors and the management to the monthly Board meeting, contained in advance as a regular agenda item.

Moreover, a week before the closing of the quarterly and yearly financial statements, the Office of the President issues a letter to the directors, executives, or units with privilege of inside information, forbidding them to disclose such information to external parties or unrelated parties, and to buy or sell PTT shares within 45 days (for quarterly statements) and 60 days (for the annual statements) of the last effective date of the financial statements to the notification date of the statements to SET, ahead of the public dissemination of the statements so as to prevent insider trading. This year, all directors and the management have strictly observed this policy. Notifications of no sale, purchase, or transfer of PTT's shares were served on four occasions to the directors and executives:

- 1. Between January 1 and February 28, 2019 (fiscal year 2018)
- 2. Between April 1 and May 15, 2019 (fiscal year 2019, first quarter)
- 3. Between July 1 and August 15, 2018 (fiscal year 2019, second quarter)
- 4. Between October 1 and November 15, 2018 (fiscal year 2019, third guarter).

A policy was set for the avoidance of share trading of PTT Group companies during other periods. If necessary, such share trading must follow notification to the Company Secretary by at least two days.

Directors' Securities Portfolios, 2018 - 2019

		Shares			
No.	Name	As of Dec. 31, 2018	As of Dec. 31, 2019	Change during the Year	Remark
1.	Mr. Krairit Euchukanonchai	-	_	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
2.	Mr. Vichai Assarasakorn	-	_	-	(No PTT share held)
	Spouse and children under legal age	_	_	-	-
3.	Mr. Don Wasantapruek	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	_	-	-
4.	General Teerawat Boonyawat	N/A	-	-	Appointed on April 11, 2019 (No PTT share held)
	Spouse and children under legal age	N/A	-	-	-
5.	Prof. Dr. Kittipong Kittayarak	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
6.	Mr. Supattanapong Punmeechaow	-	-	-	Appointed on October 1, 2019 (No PTT share held)
	Spouse and children under legal age	-	-	-	-
7.	Mrs. Nuntawan Sakuntanaga	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
8.	Mr. Danucha Pichayanan	-	_	_	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
9.	Prof. Dr. Supot Teachavorasinskun	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-

		Shares			
No.	Name	As of Dec. 31, 2018	As of Dec. 31, 2019	Change during the Year	Remark
10.	Prof. Dr. Surapon Nitikraipot	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
11.	Mr. Thon Thamrongnawasawat	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
12.	Mr. Chumpol Rimsakorn	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
13.	Mr. Nuttachat Charuchinda	N/A	630	-	Appointed on January 16, 2019 (No PTT share held) * Retired from the directorship of PTT due to his completion of 65 years of age, with effect from January 17, 2020
	Spouse and children under legal age	N/A	_	_	-
14.	Mr. Sarawut Kaewtathip	N/A	_	_	Appointed on December 16, 2019 (No PTT share held)
	Spouse and children under legal age	N/A	-	-	-
15.	Mr. Chansin Treenuchagron	-	-	-	(No PTT share held)
	Spouse and children under legal age	_	_	-	-

Remarks:

No PTT share was held by directors' spouses and children under legal age.

Corporate Gov

Securities Portfolios of Directors Who Completed Their Terms or Resigned in 2019

		Shares			
No.	Name	As of Dec. 31, 2018	As of Dec. 31, 2019	Change during the Year	Remarks
1.	Mr. Thammayot Srichuai	-	N/A	N/A	Resigned on January 1, 2019 (No PTT share held during his directorship in 2019)
	Spouse and children under legal age	_	N/A	N/A	-
2.	Gen. Chatchalerm Chalermsukh	_	N/A	N/A	End of term on April 11, 2019 (No PTT share held during his directorship in 2019)
	Spouse and children under legal age	-	N/A	N/A	-
3.	Mr. Somsak Chotrattanasiri	-	N/A	N/A	Resigned on May 8, 2019 (No PTT share held during his directorship in 2019)
	Spouse and children under legal age	-	N/A	N/A	-
4.	Mr. Kulit Sombatsiri	N/A	N/A	N/A	Appointed on January 16, 2019 and resigned on October 9, 2019 (No PTT share held during his directorship in 2019)
	Spouse and children under legal age	N/A	N/A	N/A	-

Management's Ownership of Shares during 2018 - 2019

		Shares			
No.	Name	As of Dec. 31, 2018	As of Dec. 31, 2019	Change during the Year	Remarks
1.	Mr. Chansin Treenuchagron	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	_	-	-
2.	Mr. Atikom Terbsiri	-	_	-	(No PTT share held)
	Spouse and children under legal age	-	_	-	-
3.	Mr. Auttapol Rerkpiboon	225,000	225,000	-	(No trading transactions of PTT shares in 2019)
	Spouse	43,000	43,000	-	-
	Children under legal age	-	_	-	-
4.	Mr. Wittawat Svasti-xuto	554,510	554,510	-	(No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	-	_	-	-
5.	Miss Pannalin Mahawongtikul	288,120	288,120	-	(No trading transactions of PTT shares in 2019)
6.	Mrs. Arawadee Photisaro	-	_	-	(No trading transactions of PTT shares in 2019)
	Spouse	1,140	1,140	-	-
	Children under legal age	-	_	-	-
7.	Mr. Preecha Pocatanawat	-	_	-	(No PTT share held)
8.	Miss Duangporn Thiengwatanatham	77,000	77,000	-	(No trading transactions of PTT shares in 2019)
9.	Miss Peangpanor Boonklum	-	_	-	(No PTT share held)
10.	Mr. Wuttikorn Stithit	N/A	141,210	-	* Appointed on February 1, 2019 (No trading transactions of PTT shares in 2019)
	Spouse	N/A	90,960	-	-
	Children under legal age	-	_	-	-
11.	Mr. Kris Imsang	100,000	100,000	-	(No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	-	-	-	-
12.	Mr. Disathat Panyarachun	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	_	_	-

		Shares			
No.	Name	As of Dec. 31, 2018	As of Dec. 31, 2019	Change during the Year	Remarks
13.	Mr. Worawat Pitayasiri	-	-	-	(No PTT share held)
	Spouse and children under legal age	-	-	-	-
14.	Mr. Phongsthorn Thavisin	10,000	10,000	-	(There were trading transactions of PTT shares during his term in 2019)
	Spouse	7,000	15,000	8,000	-
	Children under legal age	-	-	-	-
15.	Mr. Kongkrapan Intarajang	N/A	-	-	* Appointed SEVP and seconded to CEO, PTT Global Chemical Plc., with effect from October 1, 2019 (No PTT share held)
	Spouse and children under legal age	N/A	-	-	-
16.	Mr. Wirat Uanarumit	155,000	155,000	-	(No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	-	-	-	-
17.	Mr. Noppadol Pinsupa	136,000	136,000	-	(No trading transactions of PTT shares in 2019)
	Spouse	508,000	508,000	_	-
	Children under legal age	-	-	-	-
18.	Miss Jiraphon Kawswat		-	-	(No PTT shares held)
19.	Mr. Chawalit Tippawanich	10,000	10,000	-	(No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	-	_	_	-
20.	Miss Duangkamol Settanung	80,000	80,000	-	(No trading transactions of PTT shares in 2019)
21.	Mr. Yongyos Krongpanich	N/A	3,000	-	* Appointed on January 1, 2019 (No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	N/A	_	-	-
22.	Miss Wilaiwan Kanjanakanti	36,990	36,990	-	(No trading transactions of PTT shares in 2019)
23.	Mr. Chienvit Udomwatwong	15,160	15,160	-	(No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	_	_	_	-

Remarks:

No PTT share was held by executives' spouses and children under legal age except those of No. 3, 6, 10, 14 and 17.

Securities Portfolios of Executives Transferred/ Resigned/ Retired in 2019

		Shares			
No.	Name	As of Dec. 31, 2018	As of Dec. 31, 2019	Change during the Year	Remarks
1.	Mr. Sumrid Sumneing	7,000	N/A	-	Appointed to EVP and seconded to EVP, Finance and Accounting Group, PTT Exploration and Production Plc., with effect from January 1, 2019
	Spouse and children under legal age	-	N/A	-	-
2.	Mr. Supattanapong Punmeechaow	-	-	-	Retired on September 30, 2019 (No PTT share held)
	Spouse and children under legal age	-	-	-	-
3.	Mr. Sukrit Surabotsopon	20,000	N/A	N/A	Resigned on February 1, 2019 (No trading transactions of PTT shares in 2019)
	Spouse and children under legal age	_	N/A	N/A	_

Remarks

PTT has issued and offered 60,000,000 warrants to the President, management, PTT employees, and employees of PTT Group companies seconded to PTT, consisting of two batches: PTT-W1 (40,000,000 units), offered in 2005, with the last exercise date on August 31, 2010, and PTT-W2 (20,000,000 units), offered in 2006, with the last exercise date on September 28, 2011. All warrants were exercised, and no new ones have been issued.

6. Filing of Assets and Debts to NACC

Under Article 39 of the Anti-Corruption Act B.E. 2542, PTT's directors and senior management, including directors and senior management in the companies where PTT holds more than 50% of shares, are required to file a list of their own assets and debts, including their spouses and children that are not yet of legal age, to the NACC each time they take up a position, every three years during their terms, and one year after leaving their positions. To achieve this, PTT issues a reminder to each of the directors and senior management as required.

7. Declaring Vested Interests at Meetings

At every Board meeting, the Chairman reminds directors to conform to the policy on conflicts of interest on all agenda items, which requires those with vested interests to declare them to the meeting to abstain from voting or giving any views. This year a total of 6 notices were made to the Chairman at 15 Board meetings.

8. Review of Connected Transactions

The Audit Committee reviews related transactions and those with potential conflicts of interest that could harm PTT's businesses. Which have been examined for conformance to the law and SET's criteria. All of which must be reported to the Board for approval.

Corporate Governance Promotional Activities

The Corporate Governance Committee (CGC) provides oversight, monitors, and assesses the outcomes concerning PTT's CG and anti-corruption. It issues policies and guidelines to the Governance, Risk and Compliance Management Committee (GRCMC), with duties covering good governance, operational risks, internal control and corporate compliance, including a state enterprise anti-corruption operation center chaired by a senior executive vice president and reporting directly to CGC. GRCMC implements the CG and anti-corruption operating plans and sets goals and KPIs approved by CGC and the Board. This year's tasks, both initiated and constantly developed, are described below:

- For new employees, the CG Code is communicated through orientation sessions, with tests their knowledge under the CG E-Learning system. This year there were two batches of some 200 persons. All new employees receive a CG handbook. They were to study it and sign their names as acknowledgment for implementation on their jobs.
- Communicated in meetings via various work functions and seminars, including town halls, Leadership Development Program Reunions, Chansin Camp, and GRC communication in provincial units to establish awareness among all executives and employees of GRC and emphasis on CG guidelines as well as anti-corruption measures.

- Developed CG E-learning (self-learning) on the intranet as a learning media for CG, the Code of Conduct, and anti-corruption measures for all employees. Simulated situations drummed up awareness and enabled employees to apply what they learned from their self-learning experience to real-life situations as seen fit. Employees are to take a post-test as a means to measure their understanding. To date, 3,091 employees (85% of the workforce) have joined the CG E-learning experience.
- Assessed CG and anti-corruption through internal communication channels, the results of which would be used for developing relevant activities. Assessment results showed good understanding at 92.17%; communication showed good to very good satisfaction at 89.21%, and employees agreed with PTT's performance on CG and anti-corruption.
- Periodic promotional campaigns were conducted through various media within PTT, including exhibitions, CG intranet website, two-way communication channels through GRChelpdesk@pttplc.com,a GRC Corner in the "PTT Spirit" magazine, and CG Tips through internal email on Page: CG Channel in PTT Workplace to communicate CG movements together with knowledge tips and participation in activities of interest. In addition, topics dealing with QSHE, SPIRIT, CSR, and GRC Talk are included in meeting agenda in order to communicate GRC at all units and promote CG-conscious business conduct, including MC meetings.
- GRC Camp has been organized for 6 consecutive years, to encourage participating PTT employee as representatives into functional GRC agents in communicating the GRC knowledge with fellow employees and apply the knowledge properly to work. GRC Camp activities consisted of talks and workshops to enhance GRC understanding and recreational activities interspersed with CG, risk & internal control, compliance, and cultural understanding in the form of activity bases, among others.

- PTT values PTT Group's CG to align with company management in the "PTT Group" management approach, appointing a PTT Group Corporate Governance Committee to elevate CG standards among PTT Group to comparable levels, define work plans and a proactive PR approach. A PTT Group CG Day was continually organized to campaign for, promote, and publicize CG practices among six SET-listed PTT Group companies (PTT, PTTEP, PTTGC, TOP, IRPC, and GPSC). Guests of honor from related fields and companies that shared the same visions continued to join the event, such as representatives from SET, SEC, IOD, Anti-corruption Network Foundation, and the State Audit Office of the Kingdom of Thailand, together with business partners, Board members, executives, and employees of PTT Group companies. This year PTTGC hosted the event, entitled "PTT Group CG Day 2019: Challenge for the Governance" to illustrate commitment to driving PTT Group with the CG Code in keeping with changing times while harnessing advanced IT in enhancing practical work processes.
- Striving to upgrade its CG standard, PTT shared this knowledge with external parties by agreeing to requests for visits by assorted organizations/institutions and educational institutions. PTT's top management was also invited to give various talks or join seminars on the subject.

10. Anti-Corruption

- PTT defined its annual work plan in line with the national strategies on the prevention and suppression of fraud, phase 3 (2017 - 2021) to drive CG and anti-corruption strategies in pursuit of a prototype corporation for transparency and virtue.
- In 2010 PTT enlisted in the declaration of intention to join Thailand Private Sector Collective Action Coalition against Corruption (CAC), an endeavor of IOD with the support of the government and NACC. PTT was one of the first 27 companies to do so.

- In 2012 PTT joined the United Nations Global Compact (UNGC) to show its desire to apply to its business conduct the principles of human rights, labor rights, environmental preservation, and anti-corruption at the international level. PTT presents an update of its compliance with the 10 elements of UNGC in its corporate sustainability report.
- Policy announcement:
 - Since 2014 PTT has begun enforcing PTT's and PTT Group's anti-corruption policies. This year the revised policy contains essential principles and guidelines embracing resistance to fraud by defining the anti-corruption policy as part of PTT's Corporate Governance, Ethical Standards, and Code of Conduct Handbook and requires PTT Group's Anti-Corruption Policy as part of the PTT Way of Conduct so that PTT Group companies may observe the same standards and management approaches and that all companies may achieve synergy under the investment objective.
 - PTT's Anti-Corruption Policy forbids PTT's employees
 to carry out or participate in corrupt practices
 as well as any bribery offer or acceptance (direct
 and indirect). They must seriously observe the
 Anti-Corruption Policy, which covers various
 processes, including donation to charities, HR
 administration, material procurement, and internal
 control.
 - In 2015 PTT declared its "No-Gift Policy" for any festive period. In 2016-2019 it enforced practical guidelines under PTT Group's policy on gifts, entertainment, or other benefits to establish a higher standard for business practices in the hope of having all employees do their best without expecting benefits. To this end, a letter was sent to business partners and external agencies, and signboards were put up on the premises of PTT along with assorted PR channels. PTT was the prototype company of Thailand to truly enforce this policy.

- Communication, training, and task highlights:
 - PTT communicates its Anti-Corruption Policy and guidelines to its subsidiaries, associates, and other PTT-controlled companies, business partners, and stakeholders as well as the public, through assorted channels including letters, e-mails, website, PTT intranet, seminars, and exhibitions so that all stakeholders may acknowledge and conform to PTT's guidelines.
 - PTT establishes communication with and trains its employees to develop true understanding about its anti-corruption measures, expectations, and punishment for violators, including orientation sessions, an ethics curriculum, and CG E-learning. It also arranges for its executives and employees to join external training courses on anti-corruption.
 - Conforming to CAC's certification process, PTT retained CAC membership for the second consecutive year on May 17, 2018.
 - PTT's hope is that it will become part of a transparency network for a strong Thai society. To this end, it promoted and urged its business allies to declare their own intention to join CAC to minimize corruption risks level across their supply chains. This year it informed suppliers to actively urge them to join CAC at the Annual Supplier Seminar and a Supplier Seminar involving the work functions under the EVP (NGV Vehicles) and the EVP (Natural Gas Distribution).
 - PTT uses IT systems under the PTT intranet to serve as a key tool for all employees to show their transparency, namely a system to pre-report PTT Group securities trading to prevent insider trading and a system to report employees' acceptance of presents, assets, or other benefits in view of the No-Gift Policy so that employees who find it inevitable to accept such items and cannot return them to their givers can deliver such items to Corporate Governance for collection and donation for public use.

- Recognizing that corruption undermines the nation, PTT values work integration and anti-corruption networking with the public and private sectors to drive anti-corruption suppression through several activities, such as joining NACC in developing action plans on anti-corruption in state enterprises, co-hosting a National Moral Assembly, Anti-Corruption Day, and developing a master plan and action plan on enhancing PTT's morality for the National Morality Promotion Committee, Department of Religious Affairs, Ministry of Culture.
- Oversight and monitoring of performance:
 - The Board ensures that PTT commands an efficient system in support of anti-corruption to ensure that the management recognizes and values anti-corruption and cultivates it as a corporate
 - The Audit Committee supervises internal control, financial reporting, and other procedures related to anti-corruption measures, steers conformance to anti-corruption measures, and reviews applicable measures and internal control to ensure that the measures are adequate and effective. The committee reviews risk assessment and provides recommendations to the Board on suggested practices to mitigate such risks. Executives must implement such recommendations. The committee also regularly reports internal-audit outcomes regarding anti-corruption measures to the Board and provides best practices to the Board and the executives.
 - The Corporate Governance Committee annually defines and reviews the Anti-Corruption Policy, provides recommendations and guidelines, monitors, and assesses performance.
 - The Risk Management Committee steers and advocates risk management practices related to anti-corruption by assessing corruption risks and reviewing anti-corruption measures for adequacy and suitability.

- Executives establish risk assessment for business processes that may lead to corrupt practices, review the suitability of processes and measures, and personify proper behavior as well as communicating it to all employees and related parties.
- PTT has developed a Fraud and Corruption
 Risk Assessment Manual for all units to apply as
 guidelines for assessing corruption risks in their
 respective business processes and for defining
 suitable internal control processes. This year,
 a class of Fraud Risk Management training was
 organized to foster knowledge and understanding
 of international standards on corruption risk
 management and relevant internal measures for
 employees to apply in their day-to-day work.
- PTT establishes procedures for maintaining auditable documents and records to confirm the accuracy and suitability of financial reports.
 The internal control of accounting processes and information storage is audited to verify the effectiveness of anti-corruption processes and ensure that the entry of financial items is wellevidenced for audit.
- The Office of Corporate Audit reviews items of potential conflicts of interest, the likelihood of corruption, and corporate efficiency for managing risks arising from corporate corruption and those at operating levels. The office also reviews business ethics principles and the code of conduct for executives and employees. It reviews and reports to the Audit Committee and top executives immediately when encountering items or actions that could harm PTT's performance outcomes, including corruption.

- Measures, scope, and tools for whistleblower protection:
 - PTT's HR administration process reflects its commitment to anti-corruption measures. Although refusal to take part in corruption may deprive PTT of business opportunities, its policy is not to demote, punish, or harm those that do so.
 - PTT's employees should not ignore actions in potential conflicts with anti-corruption measures.
 PTT has established channels for whistleblowing and protection of whistleblowers or those that need advice about conformance to anti-corruption measures.
 - PTT has established a requirement for complaint-making and whistleblowing to define applicable criteria and guidelines that are suitable and uniform throughout the corporation. In which, a protective measures and fair treatment are place as precaution for whistleblowers or those that provide information. In 2018, PTT MC approved a revision of the guidelines for the consideration of corruption cases to conform to corruption prevention and suppression in the public sector measures of the National Council for Peace and Order (NCPO), established to resolve corruption seriously, strictly, and more efficiently.

Punishment

PTT has established a suitable and fair process for punishing violators of anti-corruption measures. Any violation of this policy, direct or indirect, calls for disciplinary review under PTT's regulations, consisting of fact-finding, investigation, punishment, and appeal. They could also lead to punishment by law. Employees must therefore master and strictly conform to the Anti-Corruption Policy in every step of their work.

Audit Fee

This year PTT and its subsidiaries, paid THB 142,026,208 (one hundred forty-two million twenty six thousand two hundred and eight Baht) in total as audit fee to the offices of external auditors for previous fiscal year round. They also paid THB 38,019,046 (thirty-eight million nineteen thousand and forty-six Baht) for other services (Non-audit Fee) such as, fees for Comfort Letter which issue for subsidiaries' debt management plan for USD currency debenture distributed to foreign investors, fee for revisit the Updated Global Medium Term Notes, fees for certifying financial statements submitted to the Revenue Department, and other certification fees in previous fiscal year.

Compliance with CG in other areas

According to a survey on PTT's CG conducted by IOD, the overall score given to PTT on the CG Code for listed companies in 2019 was regarded as "excellent". On average, PTT earned a higher overall score and individual category scores than the field of 677 companies, and higher than the average score of SET 50 companies. The survey result was based on PTT's public information. This year PTT commands good guidelines apart from the survey criteria which can serve as best practices for other listed companies such as:

- The current Chairman of the Board, an independent director, exercises freedom in assigning policies and guidance for PTT management.
- PTT requires that independent directors make up at least half of its directors.
- Under the Budget Procedures Act B.E. 2502, PTT is regarded as a state enterprise, the Audit Committee endorsed the appointment of the State Audit Office of the Kingdom of Thailand (a credible, neutral agency) as PTT's external auditor. The committee has secured the Board's endorsement for approval by the shareholders, who will appoint and approve its audit fees.

• The Corporate Governance Committee at Meeting No. 5/2562 of December 4, 2019, and Board Meeting No. 12/2562 of December 19, 2019, acknowledged the Corporate Governance Code (CG Code) issued by SEC. They recognized very well their roles as a governing body for the corporation by implementing CG principles in supplementing sustainable values for business. Having assessed PTT's compliance with the CG Code point by point and in detail, in comparison with PTT's CG Policy and actions, they viewed PTT as commanding a policy, measures, and work processes that align with CG Code guidelines in addition to commanding short-term and long-term plans to develop a CG system to suit its business growth and trends among international leading companies.

This year PTT has observed CG, though it may not have fully covered the criteria of the Corporate Governance Report of Thai Listed Companies (CG Code) and the ASEAN CG Scorecard in the following aspects:

1. Board composition of 5 - 12 directors

The PTT Articles of Association call for 5 - 15 directors. Today it has a total of 15 directors, which agrees with the requirements for petroleum businesses that need experts a from a variety of professions. The Board has appointed five committees to screen key matters, namely the Audit Committee, the Nominating Committee, the Remuneration Committee, the Corporate Governance Committee, and the Enterprise Risk Management Committee.

(The number of subcommittee meetings has been detailed under "Board Meetings")

2. Director election through cumulative voting

The PTT Articles of Association call for director election to be decided by a majority of votes. Each shareholder carries votes equal to his or her number of shares. In addition, PTT has consistently devised other ways to preserve the rights of minor shareholders, including its encouragement for them to exercise their right to nominate additional agenda items or nominate directors in advance.