

Internal Control and Risk Management



Internal Control System

PTT has placed great emphasis on internal control by focusing on a system that is comprehensive in all activities as well as adequate and suitable for businesses, to achieve objectives on:

1. **Operation:** To ensure efficient, effective management of resource consumption, together with stewardship of assets through prevention or reduction of errors, damage, waste, or fraud
2. **Reporting:** To ensure that financial and other reports are developed for both internal and external use are accurate, transparent, credible, and timely
3. **Compliance:** To ensure the implementation of all laws, regulations, directives, Cabinet resolutions, and policies, which include PTT management's protocols dealing with the organization's business.

PTT has established an office that is responsible for internal control system. The President & CEO has authorized the Governance, Risk, and Compliance Management Committee (GRCMC) to steer working procedures under PTT's internal control standards, appraise the outcomes, and generate report on PTT's internal control. Assigned by the

Board of Director, the Audit Committee are assigned to review the internal control evaluation that is annually conducted by the management and the Office of Corporate Audit.

At PTT, Evaluation Internal Control under the five key components of The Committee of Sponsoring Organizations of the Treadway Commission (COSO), these aspects are implemented as detailed below.

1. Control Environment

PTT requires a sound control environment that is adequate and effective for business. The executives promote a corporate culture that focusing on integrity and ethics as a role model with the following implementation:

- PTT has formulated a formal policy and protocols, called the Corporate Governance, Ethical Standards and Code of Business Ethics Handbook, which imposes the best practices to all directors, executives, and staff. As a part of corporate core values of SPIRIT, "Integrity and Ethics" accentuates all employees to work transparently. The Corporate Governance

Committee keeps CG policy in line with international standards. Disclosures are made about conflicts of interest to ward off activities of such conflicts and illegal and improper activities. The policy and the handbook are revised each year. Each director, management team member, and employee is required to sign his or her name to acknowledge and conform to such policy and handbook as part of their work, illustrating the commitment to concretely applying the CG policy and code of conduct.

- PTT has instituted an organizational structure that decentralizes power for job flexibility and alignment with prevailing circumstances. Duties and responsibilities are defined in writing, with definitions of key performance indicators (KPIs) set early in the year as guidelines for employees' performance. Performance is regularly monitored against goals and measured. Goals are revised each year. All employees are aware of their roles, authority, duties, and responsibilities.
- PTT has integrated CG with the organization's vision, missions, and values by setting a goal for PTT as a company with "sustainable growth for all", a high-performance multinational energy company with excellent capability for growing its competitiveness and a focus on creating shared value (CSV), with due benefit to stakeholders on the basis of CG.
- PTT has defined a verbal policy and procedure for human resource development, and procedures for planning and administering for overall workforce in both short term and long term. Analysis and revision of the workforce are conducted in order to make all actions compatible with business directions. And also, exercises down to relevant units to prepare for recruitment and prepare expenditure budget to meet requirement of given tasks.

2. Risk Assessment

PTT recognizes the significance of risk management under changes that impact its businesses both from internal and external factors. Viewing risk management as a key component of every business process which must be linked with one another, PTT therefore defined a policy of corporate risk management that all must conform to. At every level, risks should be assessable. As for corporate risks, management is systematically undertaken by PTT's various committees. Operational risks fall under the oversight of respective executives. An Enterprise Risk Management Committee (ERMC) was set up by the Board to steer and support corporate risk management in line with business strategies and goals as well as changing circumstances and provide recommendations on guidelines for monitoring and assessment to the Enterprise and Risk Management Plan Committee to manage overall risks for maximum efficiency. All units are committed to manage and contain risks at manageable level, as clearly stated in the functional descriptions of all units.

3. Control Activities

The Management Committee is authorized to review the reports, financial and otherwise, of all business groups and regularly reviews performance to ensure conformance to regulations, protocols, and job manuals. PTT has defined policies and procedures in writing, including those for performance assessment of all employees, which relies on KPIs to make control of administrative activities suitable, adequate, and auditable. Portions of businesses have been identified for key risks, and mechanisms defined to control and minimize errors. Regular performance reviews by the management are in place, including financial, procurement, and general administrative transactions. Systematic delegation of duties to personnel groups ensures checks and balances. Authority is duly and totally segregated for approval, information processing, transaction recording, receipt and disbursement of cash, reviews of inspection and stewardship of properties. In place is an internal control system for finance and accounting, dealing with cash collection, cash retention, receipt and disbursement, bank deposits, and cash advances. These follow rules with complete, accurate, and regular recording. Systematic storage of accounting documents, both documents and information, is in place to comply with the law.

In procurement, PTT follows rules and requirements on materials and supplies, which clearly define responsible parties, including the authority, approval limits, supply need assessment, inspection, control and storage of supplies, and property counting. As for human resource administration, PTT has systematized human resource administration, complete with adequate monitoring and assessment, covering recruitment, determination of compensation, duties and responsibilities, personnel development, performance, and communication so that employees achieve competency under this suitable and efficient system.

Should PTT enter into transactions with the major shareholder, directors, management, or related parties, PTT would apply firm measures to ensure that each such transaction goes through the required approval procedure every time and for every item. Parties of vested interests will not take part in the approval of such an item. PTT also closely monitors subsequent actions.

In addition, PTT values security, safety, occupational health, and environment (SSHE), which is likened to a vital shield against risks or impacts, and efficiently and effectively lowers potential losses suffered by its employees, assets, work processes, data, and the surroundings. This would bring about business sustainability while extending corporate performance in all aspects of excellence for vision and goal attainment. The Board looks after, monitors, and provides policies as well as recommendations on SSHE, which PTT then applies as its control activities through the PTTMC, led by the President & CEO, PTT Group QSHE Policy Committee, and PTT QSHE Committee, which screens and steers management practices at the operating level for PTT Group and PTT. To this end, centralized functions are SSHE and Corporate Quality Management. This year a presentation on the key SSHE KPI performances was given to the PTTMC for review, direction, and comments once a month. SSHE management actions are detailed in the Corporate Sustainability Report 2018.

4. Information & Communication

This year PTT defined a corporate vision and mission that emphasize the strategy for growth enabling into Top Quartile Performance in a sustainable way while pursuing New S-Curve business opportunities for leapfrogging growth while developing technology and innovation in parallel with the identification of opportunities to fulfill the Thailand 4.0 policy, which stresses economy drives with innovation. Therefore, to give efficiency to digital management, which embraces information systems and data communication while aligning with corporate direction change, PTT set up the Technology and Engineering functional structure to centralize responsibility and drive technological and innovation application (from inside and outside PTT) to create value-added and new businesses.

This year the Board therefore approved and drove Digital Roadmap execution, creating innovations to raise operating efficiency, lowering operating costs and expenses for business competition by focusing on meeting the needs of all stakeholders thoroughly and equitably. For instance, development of the Smile Trade system as part of the support to strategies of the International Trading Business Unit. This system hikes the efficiency of the control and commercial risk management in several aspects, ranging from risks associated with business partners before trade engagement, price and commercial risk assessment (profit/loss), to the payment process. This move accommodates growth of the International Trading Business Unit in the foreseeable future to handle increasing and more complex business growth and to embrace trading of new commodities while competing for trade advantages. A case in point is the growth of the EV and the energy policy bent on promoting domestic EVs, which prompted PTT to develop commercial wall chargers to accommodate EV growth together with the development of EV charging platforms embracing the entire process from communication with EV chargers, online payment, data management, flexibility, to ease of application,

including mobile application to accommodate performance in wide-ranging areas. To this end, PTT in cooperation with PTT Oil and Retail Business Plc (PTTOR) and Energy Complex Co., Ltd. (EnCo) installed EV charging platforms for EnCo service users. The group is looking to expand this according to its plan, which includes the Predictive Asset Maintenance (PAM) Project, designed to add efficiency for operational excellence. In view of the fact that maintenance work is time-based with manual data recording, PTT introduced IoT sensors to transmit real-time data for performing failure prediction with higher efficiency of access, projections, and data analysis. This move indeed makes maintenance work more efficient and prolong life-time usage as well as turnaround/preventive maintenance expenses, and minimizes unplanned shutdowns. In addition, PTT introduced Big Data analytics technology that compile, in-depth analyze, and add value to the data by focusing on work process modification for efficiency for the likes of HR management and procurement processes for optimal business benefit.

The Board also values the ICT aspect of infrastructural preparedness to add OEMS efficiency by expanding internet bandwidth for greater capability to accommodate operational technology (OT) and information technology (IT) in parallel with the recognition of cyber-security. Plans were made and equipment were installed to ward off cyber-threats. Several protective measures were put in place, including internet threats. Detection of severe threats and monitoring of threats hidden through various channels, including E-mails. To control access, PTT limits access by certain users. It prevents threats for users of devices by allowing only those that can be used in PTT's network. Besides development in hardware and software, PTT together with PTT Digital Solutions (PTT Group's digital service provider) formed a Cyber-Security Operation Center to handle cyber-threats by appointing a working group to design cyber-security work processes.

To match the strategy of seeking new business opportunities, PTT and capable allies formed cooperation in development of digital technology and innovation, including financial innovation development to drive the national economy for concrete flexibility of financial transactions together with nine leading commercial banks using Blockchain technology. Another example is the Wang Chan Valley Development Project in the EECi zone, with digital driving of a Smart City and Deep Technology Development cooperation with leading global technology firms.

5. Monitoring & Evaluation

Control Self-Assessment (CSA)

To ensure all stakeholders that PTT's business operations will achieve the objectives of business and resource consumption efficiency and effectiveness, and also the stewardship of assets, prevention or reduction of losses, corrupt practices, credibility of financial and operation reports, as well as compliance with laws, regulations, requirements, Cabinet resolutions, and policies (including PTT management's protocols), PTT has integrated internal control as everyone's obligation, part of the routine operation of the management and all employees. A unit under Corporate Strategy (Internal Control and Risk Management) under the EVP, Corporate Governance, which supervises internal control, annually assesses Control Self-Assessment (CSA) within PTT in two forms:

1. Control self-assessment questionnaire: An individual internal control assessment form for vice presidents upward under PTT's structure as well as executives on secondment at PTT Group companies

Internal Control and Risk Management compiles data and develops an information system for a list of key controls. The effort consists of data on task description (FD), committee appointment orders, five-point COSO Internal Integrated Framework (namely control environment, risk assessment, control activities, information & communication, and monitoring). The response format was also developed as an e-CSA for executives to assess and look through the assessment reports with internal intranet. To enable the control self-assessment form to incorporate more activities under the key processes for individuals, this year Internal Control and Risk Management amended questions for conciseness and alignment with the fundamental principles of defining suitable internal control measures for juristic persons' prevention of bribery of public officials under Article 176 of NACC.

2. Internal control health-check: This involves workshops to assess internal control at the activity level with a focus on process control. Assessment outcomes and plans to improve internal control must have the buy-in of work process owners and monitoring by supervisors.

This year PTT focused on assessing internal control of key processes by applying COSO's five components of internal control and 17 principles together with the GRC (Governance, Risk, Compliance) to the assessment of a given unit. Consideration was given to the adequacy (Present) and efficiency/effectiveness (Functioning) of key control points. PTT also developed approaches/plans for internal control so as to achieve continuous system development, promote, and foster the awareness of internal control to serve as a basis for future internal control system design.

This year the Office of Corporate Audit also reviewed internal control practices to ensure that they are adequate, suitable, and consistently practiced. If a given item needed improvement, procedures would be defined to ensure that audit and review findings are promptly remedied. The office also reviewed internal control assessment outcomes and reported them to the Audit Committee. It indicated no significant problems or shortcomings, a view shared by the external auditor. In summary, PTT's internal control system was considered adequate and effective from a business standpoint.

Internal Control System

The Office of Corporate Audit is an independent unit which directly reports to the Audit Committee. It fosters assurance and provides consultation to ensure that business processes are duly equipped with CG, risk management, and sound internal control practices, as well as GRC in support of PTT's objectives.

The office commands an annual operating plan and three-year audit plans in line with PTT's business strategic directions and a risk-based approach to key corporate risk, encompassing PTT Group's businesses, both domestic and international. It reports findings to the Audit Committee for consideration and forwarding them to the Board for acknowledgment every quarter. Regular monitoring is undertaken for actions in response to the office's recommendations. In its course of work, the office freely expresses its opinions. No conflicts have arisen between audited units and the office that cannot be resolved.

Head of the Office of Corporate Audit



Mr. Chalot Boonlai

Head of the Office
of Corporate Audit

Age 58

Education

- Bachelor of Engineering (B.Eng.), Chulalongkorn University
- Master of Public Administration (M.P.A.), Burapha University

Training

- Leadership Development Program:
Center for Creative Leadership, Singapore
- MDD III Business & People Management Program, PLLI
- Anti-Corruption for Executive Program, Thai IOD
- Finance for Senior Executives, Sasin Graduate Institute
of Business Administration of Chulalongkorn University

Career experience

- 2009 - 2012
Manager, Maintenance Section, PTT
- 2010 - 2012
Vice President, Production Department,
Thai Lube Blending Co., Ltd.
- 2012 - 2013
Vice President,
Strategy & Audit Quality Development Department, PTT
- 2013 - 2014
Vice President, Internal Audit Department, PTT
- 2014 - 2017
Acting Managing Director, Thai Petroleum Pipeline Co., Ltd.
- Since 2017
Executive Vice President, Office of Corporate Audit, PTT

Relevant important position: None

Relationship with the management: None

Head of the Office of Corporate Audit

At Meeting No. 7/2560 (2017) of July 21, 2017, the Board appointed Mr. Chalot Boonlai Executive Vice President, Office of Corporate Audit, with effect from August 16, 2017, citing his mastery of PTT's business. Equipped with expertise, skills, and experience in internal audit, he is familiar with PTT's undertaking, good governance, risk assessment, and internal control at the business and overall levels and was therefore regarded as suitable for the position. The Audit Committee approved the appointment, transfer, performance assessment, and annual merit pay increase of this position.

Compliance Mechanism

PTT enforces the Compliance Policy and Compliance Framework for adherence by all directors, management, and the workforce as work tenets in strict compliance with applicable laws, by-laws, regulations, directives, and announcements—both inside and outside the corporation. PTT has also monitored new laws applicable to its business, as well as draft legislation, including new draft acts, to prepare itself and clarify PTT's obstacles, or both (if any), so that PTT business may comply with emerging legislation. In addition, PTT drives management under "PTT Way / PTT Way of Conduct" for PTT Group companies to operate under the same direction, whether by policy definition and instruction, performance, compliance, or execution of investment under PTT's guidelines. The company also studied the GRC approach, design, and integration so that PTT business may command principles and good governance & internal control and be free of non-compliance risks. To this end, PTT Group has developed the GRC Framework to jointly define goals and strategies; amended roles and duties of applicable key agencies and reporting requirements to the Corporate Governance Committee; integrated risk assessment processes and monitored operators' performance efficiency and compliance; communicated and developed personnel; developed technology for higher GRC efficiency; connected data; selected pilot areas for risk assessment; defined and monitored risk management plans; and systematically reported outcomes to applicable committees.

Compliance Unit

Compliance Department is structured under the Office of General Counsel. It is charged with ensuring that PTT's personnel would engage in all transactions and strictly comply with applicable laws, by-laws, rules, regulations, directives, and announcements—both inside and outside the corporation; oversight of legal matters involving investment, state enterprise laws, listed companies, energy laws, and other legislation relevant to PTT's businesses to ensure legitimate moves under all laws and regulations; counseling on legal issues for PTT's personnel and internal units to ensure compliance by all with the law and no disruption due to legal issues—to ensure that PTT's business sustainably achieve the zero non-compliance policy. Compliance reports to the SEVP, Office of General Counsel. (For profile details, please refer to PTT Executives' Profiles.)