

INTERNAL CONTROL

PTT Global Chemical Public Company Limited values the importance of the Internal Control System which has been designed in accordance with the international standard of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to achieve the objectives relating to operations, reporting, and compliance.

During the Board of Directors' Meeting No. 2/2018 held on February 19th, 2018, PTTGC's Internal Control System was evaluated based on the internal control assessment report prepared by the Management which follows the guidelines of the Securities and Exchange Commission (SEC), together with the result of the Audit Committee's internal control review. The Board viewed that PTTGC's Internal Control System has been functioning properly in an adequate and effective manner. The operation has been efficiently managed with sufficient number of qualified and competent personnel. In addition, PTTGC has implemented a monitoring system to ensure safeguarding of PTTGC Group's assets against misuse or unauthorized use by the Board or the Management.

PTTGC's Internal Control System can be summarized as follows:

CONTROL ENVIRONMENT

The Board and the Management strive to promote a corporate culture that focuses on integrity and ethics. They also provide supervision of PTTGC's operations to ensure compliance with the organizational vision and missions and to ensure that PTTGC's control environment is appropriate for the implementation of the Internal Control System, as detailed below:

- The Board and the Management have established the Corporate Governance Policy, Business Code of Conduct, Corporate Compliance Policy, Internal Control System Policy and Anti-Corruption Guidelines which provide preferred practices for all Directors, the Management and Employees. All employees are accountable for their internal control activities and for maintaining an effective internal control system. These policies have regularly been communicated and promoted to all employees through training courses and activities. In 2017, the Management further supported good corporate governance culture by

communicating ethics and business code of conduct to employees through the key meetings on a monthly basis (CG Talk).

- The Board is independent from the Management and is responsible for supervising the overall operations of PTTGC as well as expressing views on the directions and strategy of PTTGC which will be used as guidelines to formulate business and operating plans. Furthermore, the Board regularly monitors the performance of PTTGC and its Sub-committees to ensure achievement of PTTGC's objectives and goals.
- PTTGC's corporate structure has been grouped into business units and functions in a way to best support its business operations in an efficient manner and with good governance. This structure comes with a system of checks and balances which delegates duties and responsibilities appropriately. Furthermore, all employees acknowledge their roles, authorities, responsibilities and accountabilities.
- PTTGC has specified qualifications for all positions. These qualifications form the basis for recruitment and personnel development. PTTGC has also put in place succession plans for important management positions to ensure business continuity. Furthermore, it has established a performance management and fair rewarding system as incentives to motivate efficiency by employees. In 2017, PTTGC initiated the "Cultural Fit Assessment" in order to ensure that potential candidates fit the Company's core values.
- PTTGC has continuously organized exhibitions to raise awareness of Fraud risks and impact and also provided related governance guidance to the Management and Employees. In 2017, PTTGC conducted the "CG Role Model: Focus on Action" seminar for the Management in different levels to raise awareness of the importance of business code of conduct in connection with being a role model and encouraging employees to stay alert against these issues.

RISK ASSESSMENT

The Board and Management recognize the significance of Risk Management as an enabler for PTTGC in order to achieve its short-term and long-term goals. The Risk Management Committee and Enterprise Risk

Management Committee are collectively responsible PTTGC's Risk Management and ensuring that they are managed in an appropriate, effective and efficient manner;

- PTTGC's Risk Management Framework has been set up in accordance with the international standards of ISO 31000 - Risk Management and COSO Enterprise Risk Management. Furthermore, the Risk Management Policy has been drawn up and will act as a guideline for managing risks that might have an impact on business operations or PTTGC's strategic direction.
- PTTGC's Risk Management has been applied entity-wide and includes:
 - (1) Enterprise Risk Management which develops risk profiles at corporate level, business unit level and department level
 - (2) Investment Risk Management
 - (3) Business process level Risk ManagementPTTGC takes into consideration the changes within internal and external factors and the potential of fraud and corruption, in assessing risks against the achievement of objectives. Mitigation Plans are drawn up to manage those risks. Risks and mitigation plans are reviewed and monitored on a monthly basis. All departments are responsible for managing risks to maintain an acceptable level.
- PTTGC has developed Key Risk Indicators (KRI) to monitor changes in risk factors so that those risks are managed efficiently and in a timely manner.
- In 2017, PTTGC improved the "Early Warning System" to monitor important events and news which may impact the Company's target and prepare efficient mitigation plans.

CONTROL ACTIVITIES

PTTGC has developed efficient and effective control activities that contribute to the mitigation of risks against the achievement of objectives, to acceptable levels. They include;

- PTTGC has designed its control activities in accordance with internal control principles. These include the segregation of duties, policies and good practices for conflicts of interest transactions. In addition, business is operated in a transparent, fair and auditable manner. There is a transparent transaction approval process which takes into account the utmost benefit of the organization.
- PTTGC has in place rules, regulations, policies, and procedures in which clear boundaries of authorization

have been drawn up to limit the power and authority of the Chief Executive Officer, the Management, as well as all levels of Employees. Furthermore, operations are reviewed regularly to ensure their compliance with those rules, regulations, policies, and procedures.

- PTTGC has implemented the automated control of crucial processes. For example, SAP GRC - Access Control System has been in place to ensure that access rights in SAP operating system is in accordance with good practices in segregation of duties. PTTGC also has the "Continuous Control Monitoring System (CCMS)" to notify responsible persons for correcting exceptional transactions in a timely manner.
- PTTGC has in place an Information Technology Security Policy in accordance with the ISO 27001 - Information Security Management standard, and the Control Objectives for Information and Related Technologies (COBIT) to ensure efficiency and effectiveness of PTTGC's information technology security. Furthermore, Cyber Threat Prevention news and trainings are provided to all employees on a regular basis.
- PTTGC has guidelines to govern and manage companies invested in by PTTGC. This is to ensure that these companies align with PTTGC in terms of operating direction as well as comply with PTTGC's policies, procedures and strategic direction. Operations of these companies are monitored regularly and continuously.

INFORMATION & COMMUNICATION

PTTGC recognizes the criticality of the quality of Information & Communication that supports the effectiveness of PTTGC's Internal Control System, as detailed below;

- PTTGC has set up information classification, instructions for filing important documents and controlled documents. This includes information from both internal and external sources. This process is intended to ensure that important information concerning PTTGC and its business operations are accurate, complete, adequate and timely.
- PTTGC implemented SAPECC 6.0 to process the key business transactions of the Company. This reduces duplication of small legacy systems and enhances efficiency of management reporting.
- PTTGC has in place the database to effectively maintain the key external factors information for strategic plans preparation purpose. In addition, the system has also been established to systematically maintain strategic

plan of each business unit which are in line with the Company's strategies.

- PTTGC has appropriately communicated the relevant information to the Board, the Management, Employees and Stakeholders. Crucial information relevant to PTTGC's performance will be delivered to Directors prior to the Board of Directors meetings in order that they will have sufficient time to study, review and make decisions. When necessary, the Board may request additional information from relevant specific departments or personnel.
- PTTGC has set up several internal communication channels, for example, Town Hall activities for facilitating communication from Senior Managements to Employees, the organization's intranet, e-mail, etc. In addition, new employees receive important information through orientation. Employees can access useful information through Knowledge Based System and E-Learning System. In 2017, PTTGC developed "WE GC mobile phone application" that enabled all employees to access the Company's news via mobile phone.
- PTTGC has set up external communication channels to communicate with external stakeholders, such as PTTGC website, e-mail, Facebook and Twitter. In addition, assigned departments are responsible for the disclosure of important information to all stakeholders regularly.
- PTTGC has established an open communication channel managed by Whistleblower System. This allows employees and external individuals to be confident that the complaints will be handled with transparency, fairness and confidentiality in timely manner.

MONITORING ACTIVITIES

PTTGC continuously monitors and evaluates the adequacy of its internal control system. Development and improvement processes have also been in place to ensure the efficiency and effectiveness of PTTGC's Internal Control System, and includes:

- PTTGC evaluates the adequacy of the corporate internal control system on an annual basis. In addition, PTTGC has implemented Control Self-Assessment (CSA) for process owners to evaluate internal control mechanisms at the process level. The adequacy and appropriateness of CSA results will be verified by the Internal Control System Division, which also provides recommendations for improvement on internal control deficiencies, if any. A reporting and monitoring process is also in place to report deficiencies to the Management and track remediation progress on a timely basis.
- The Internal Audit function, which is an independent unit reporting directly to the Audit Committee, examines and evaluates the effectiveness and operations of internal control activities according to the audit plan approved by the Audit Committee. Deficiencies and recommendations are communicated to parties responsible for implementation. The audit reports and findings are presented to the Audit Committee on a quarterly basis. Internal control for financial reporting is reviewed by external auditors and reported to the Audit Committee on a quarterly and yearly basis.

In 2017, the Audit Report did not find any significant issues related to conflicts of interest, fraudulent activities, or any other significant deficiencies in the Internal Control System materially in affect PTTGC's objectives. Furthermore, no violations of SEC and SET rules and regulations or other laws related to PTTGC were found.

