

INTERNAL CONTROL

PTT Global Chemical Public Company Limited (GC) values the importance of the Internal Control System in accordance with the international standard of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to achieve internal control objectives relating to operation, reporting, and compliance with laws and regulations.

During the Board of Directors' Meeting No. 2/2019 held on February 18th, 2019, GC'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 GC's Internal Control System has been functioning properly in an adequate manner. The operation has been efficiently managed with sufficient numbers of qualified and competent personnel. In addition, GC has implemented a monitoring system to ensure the achievement of business objectives regarding effectiveness and efficiency of operations, reliability of the report, compliance with applicable laws and regulations as well as safeguarding of GC Group's assets against misuse or unauthorized use by the Board or the Management or the employee.

In 2018, GC has improved on our internal control process to increase its robustness and speed in identifying risks. GC's Internal Control System can be summarized into the following categories:

Control Environment

The Board and the Management strive to promote a corporate culture that focuses on integrity and ethics. They also supervise GC's operations to ensure compliance with the organizational vision and mission and to ensure that GC'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 provides 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. Such activities include monthly key meetings (CG Talk) conducted by management level which is used as a platform to communicate ethics and business code of conduct to employees and to promote a good corporate governance culture.

- The Board is independent from the Management and is responsible for supervising the overall operations of GC as well as expressing views on the directions and strategy of GC which will be used as guidelines to formulate business and operating plans. Furthermore, the Board regularly monitors the performance of GC and its Sub-committees to ensure achievement of GC's objectives and goals.
- GC'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.
- GC has specified qualifications for all positions. These qualifications form the basis for recruitment and personnel development whose attitude is in conjunction with the company culture. GC has also put in place succession plans for important management positions to ensure business continuity. Furthermore, it has established a performance management and fair reward system as incentives to motivate efficiency by employees.
- GC has continuously organized exhibitions to raise awareness of fraud risks, impacts from corruption and also provided related governance guidance to

Management and Employees through the "CG Role Model : Focus on Action" training program. The purpose is for Management in different levels to raise awareness of the importance of business code of conduct in conjunction with being a role model and encouraging employees to stay alert against these issues. In addition, GC has embedded and communicated corporate governance and business ethics to all functions through the "CG Roadshow", to raise awareness and understanding of corporate governance and business ethics practices.

Risk Assessment

The Board and Management recognizes the significance of Risk Management as an enabler for GC to achieve its short-term and long-term goals. The Risk Management Committee appointed by the Board, along with Enterprise Risk Management Committee (ERMC) appointed by President and Chief Executive Officer, are collectively responsible for overseeing GC's Risk Management and ensuring that they are managed in an appropriate, effective, and efficient manner;

- GC'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 GC's strategic direction.
- GC'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 Management

GC takes into consideration changes in internal and external factors along with potential of fraud and corruption in assessing risks posed against the achievement of our objectives. Mitigation Plans are drawn up to manage those risks. Risks and mitigation plans are reviewed and monitored monthly. All departments are responsible for managing risks to within an acceptable level. Furthermore, to meet the long-term goals, in 2018 GC appointed task force to deal

with specific risks that affect the business in the long run, thus ensuring its appropriate countermeasures.

- GC has developed Key Risk Indicators (KRI) to monitor changes in risks factors so that those risks are managed efficiently and in a timely manner. In 2018 GC developed a piece of software to be used as data storage for assessing risks, mitigation plan, and key risk indicators (KRIs), this will help every function to have the ability to access information relevant to risk management and use this information for further analysis.
- GC tests the robustness of Business Continuity Plan annually by simulating events which may disrupt production in our plants. Each plant assesses the impact and carries out what is stated in the mitigation plan. During these tests, both operation and support functions are involved. This provides assurance to all company stakeholders that GC has well prepared to cope with its crisis in the effective manner.

Control Activities

GC has developed efficient and effective control activities to the mitigate the risks preventing the achievement of goals and making sure they remain within acceptable levels. This includes;

- GC 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.
- GC 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.
- GC 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. GC also has the "Continuous Control Monitoring System (CCMS)" to notify responsible persons for correcting exceptional transactions in a timely manner.

- GC has in place an Information Technology Security Policy in accordance with the ISO27001 – Information Security Management standard, and the Control Objectives for Information and Related Technologies (COBIT) to ensure the security of GC's information. Furthermore, Cyber Threat Prevention news and training is provided to all employees on a regular basis. In 2018, GC further improved upon the performance of cyber threat detection and analysis by installing electronic mail protection software to treat spam, phishing and virus e-mail. Moreover, GC promoted cybersecurity awareness and employee engagement with security initiatives by performing a Phishing Test on staff at all levels.
- GC has guidelines to govern and manage companies invested in by GC. This is to ensure that these companies align with GC in terms of operating direction as well as complying with GC's policies, procedures, and strategic direction. Operations of these companies are monitored regularly and continuously.
- GC has conducted the guidance "GC way of conduct" to govern and manage its subsidiaries. This guidance has been appropriately improved and continuously communicated to companies in GC group.
- In 2018, GC strengthen Governance, Risk Management & Internal Control and Compliance implementation by set up the personnel to be accountable for driving, executing and monitoring GRC in its key business units. Furthermore, GC appointed the GRC Committee which started in selected affiliates 6 companies as pilot projects under GC group in order to reinforce and strengthen GRC approach to ensure that Governance, Risk Management & Internal Control and Compliance are well operated within the GC Group. GRC committee are responsible to particularity govern, review, monitor and assess performance of GRC.

Information & Communication

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

- GC 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 GC and its business operations are accurate, complete, adequate, and timely.
- GC 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.
- GC 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 information on each business unit's plans that are in line with the Company's strategies.
- GC has appropriately communicated the relevant information to the Board, the Management, Employees, and Stakeholders. Crucial information relevant to GC's performance will be delivered to Directors prior to the Board of Directors meetings in order to allow sufficient time for them to study, review and make decisions. When necessary, the Board may request additional information from relevant specific departments or personnel. Furthermore, to easily and swiftly dispatch information and meeting documents, GC has implemented "Digital Join", whereby information is sent to Directors' electrical devices which are equipped with data encryption.
- GC has set up several internal communication channels, for example, Town Hall activities for facilitating communication from Senior Managements to Employees, the organization's intranet and e-mail. In addition, new employees receive important information through orientation. Employees can access useful information through Knowledge Based System and E-Learning System. GC developed "WE GC mobile phone application" that enables all employees to access the Company's news via mobile phone.

- GC has set up external communication channels to communicate with external stakeholders, such as GC website, e-mail, Facebook and Twitter. In addition, assigned departments are responsible for the disclosure of important information to all stakeholders regularly. In 2018, GC expanded communication channels for external stakeholders through the Customer Solution Center (CSC) as a one stop center for interested parties to learn and gather information relating to GC products and services.
- GC has established an open communication channel managed by a Whistle Blower System. This allows employees and external individuals to be confident that any complaints will be handled with transparency, fairness, confidentially and in a timely manner.
- GC has in place a Corporate Crisis and Business Continuity Management plan both at the corporate and business unit levels, including our subsidiaries, that is in accordance with ISO22301. GC has set up the appropriate communication channels to ensure business continuity in the case of an incident. In 2018, GC developed the Incident Management System (IMS) Mobile Application to enhance the efficiency and effectiveness of information communication in the event of a crisis.

Monitoring Activities

GC 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 GC's Internal Control System, which includes:

- GC evaluates the adequacy of the corporate internal control system on an annual basis. In addition, GC 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 to make sure problems are addressed in a timely manner.

- The Internal Audit function, which is an independent unit reporting directly to the Audit Committee, examines, and evaluates the effectiveness and operation of current internal control activities according to the audit plan approved by the Audit Committee. This audit plan is in line with the company's strategy and its associated risks, as well as provides suggestions and supports internal control. Deficiencies and recommendations are communicated to parties responsible by the management team. 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.
- GC has continually performed compliance, both in Thailand and overseas to ensure the compliance in company. The Compliance Checklist was made to monitor the deployment of the Compliance Policy.
- GC became a certified member of the Private Sector Collective Action Coalition Against Corruption (CAC) by yearly performing self – assessments and every 3 years, the results of which are audited and signed by the Chairman of the Audit Committee. This is to prove that GC has anti-corruption policies, guidelines and measures in place, as well as having operated according to good corporate governance principles as per the CAC's requirements.

In 2018, the company did not find any significant issues related to conflicts of interest, fraudulent activities, or any other major deficiencies in the Internal Control System which may have a negative impact key GC's objectives. Furthermore, no violations of SEC and SET rules and regulations or other laws related to GC were found.

