

INTERNAL CONTROL

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

During Board of Directors Meeting 2/2020 held on February 17, 2020, the GC's system was evaluated based on an internal control assessment report prepared by the Management following the Securities and Exchange Commission, Thailand (SEC) guidelines. Together with the results of the Audit Committee's internal control review, the Board viewed that GC's internal control was adequate and effective for its businesses. No significant problems or material shortcomings were detected that could interfere with achieving internal control objectives. GC's Internal Control System was functioning properly in an adequate manner. The operation was efficiently managed with sufficient numbers of qualified and competent employees and processes. In addition, GC implemented a monitoring system to ensure the achievement of business objectives with effective, efficient operations, reliable reporting, and compliance with applicable laws and regulations as well as safeguarding GC Group's assets against misuse or unauthorized use by the Board, Management, or employees.

GC improved on internal control procedures and processes in 2019 to increase robustness and speed in identifying risks. GC's Internal Control System in accordance with COSO can be summarized in five categories:

1. CONTROL ENVIRONMENT

The Board and the Management strive to promote a corporate culture that focuses on integrity and ethics. They also supervise operations to ensure compliance with the organizational vision and mission and to ensure that GC's control environment is appropriate for implementing the Internal Control System, as detailed below.

- The Board and the Management establish the Corporate Governance Policy, Business Code of Conduct, Corporate Compliance Policy, Internal Control System Policy, and Anti-Corruption Guidelines setting out 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 are regularly communicated and promoted to all employees through training courses and other activities. These activities include monthly key meetings (Hook Talk) conducted by top management and used as a platform to communicate ethics and business code of conduct to employees, and to promote a good corporate governance culture. In 2019, GC emphasized communicating and promoting corporate governance and business code of conduct through a roadshow activity called "Hook Walk" on "How to perform duties in line with Governance and Compliance" to all departments as well as organizing a "GC Group Compliance Day" to communicate the importance of compliance to GC group employees. In addition, GC revised E-CG & Business Code of Conduct Handbook in electronic form for delivery to the Management and employees as guidelines including a written pledge to comply with the policy, principles, and business ethics. Also, an online Conflict of Interest application on intranet was developed to increase efficiency in data collection and storage, including security of information access.
- The Board is independent from the Management and is responsible for supervising overall operations as well as expressing views on the direction and strategy used as guidelines to formulate business and operating plans. Furthermore, the Board regularly monitors GC's performance and its subcommittees to ensure that GC achieve objectives and goals.
- GC's corporate structure is grouped into business units and functions that best support its business operations efficiently and with good governance. This structure comes with a system of checks and balances, with duties and responsibilities

delegated appropriately. Furthermore, all employees acknowledge their roles, authorities, responsibilities, and accountabilities.

- GC specifies qualifications for all positions: These form the basis for recruitment and personnel development aligned with corporate culture. Succession plans are in place for key management positions to ensure business continuity. Furthermore, performance-management and fair-reward systems are in place as incentives to motivate employee efficiency. In 2019, GC implemented agility testing—a tool for assessing the readiness of top talent to help plan career development. Moreover, “GC people website” was developed to gather information on human resources, employee activities, executive perspectives, recruitment, and relevant personnel information.
- GC regularly organize exhibitions to raise awareness of fraud risks and impacts from corruption, also providing related governance guidance to the Management and employees through activities and training programs such as GC Group CG Day, CG Role Model: Focus on Action and Ethical Leadership. In 2019 training programs were expanded to division managers of GC and GC group.

2. RISK ASSESSMENT

The Board and the Management recognize the importance of risk management in achieving short-term and long-term goals. The Risk Management Committee, appointed by the Board, along with the Enterprise Risk Management Committee, appointed by the CEO, are collectively responsible for overseeing risk management and ensuring that it is managed appropriately, effectively, and efficiently as specified under “Risk Management and Risk Factors”.

GC takes into consideration changes in internal and external factors along with the potential for fraud and corruption in assessing risks that can prevent GC from achieving objectives. Mitigation plans are drawn up to manage these risks. Risk-and-mitigation plans are reviewed and monitored monthly. All departments are responsible for managing risks to an acceptable

level. Furthermore, to meet the long-term goals, GC appoint taskforces to deal with specific risks that affect the business in the long run to ensure effective countermeasures.

- GC develops Key Risk Indicators (KRI) to monitor changes in risk factors so that these risks are managed efficiently and in a timely manner. GC also developed databases for risk management information to help every function access it for further analysis.
- In 2019, GC tested the robustness of “Cyber Incident Response” by simulating events (tabletop exercise) from cyberattacks with data leakage and hacking that could disrupt business operations and affect reputation. During this test, relevant operations and support functions were involved. This should assure all stakeholders that GC is well prepared to cope with such crises effectively.

3. CONTROL ACTIVITIES

GC develops efficient, effective control activities to mitigate risks to achieving goals and ensuring that risk remains acceptable. These include:

- Designing control activities aligned with internal control principles, including segregation of duties, policies, and good practices for conflict-of-interest transactions. In addition, the business is operated in a transparent, fair, and auditable manner. A transparent transaction-approval process provides the utmost benefit to the organization.
- Rules, regulations, policies, and procedures are in place with clear boundaries of authorization to limit the power and authority of the CEO, the President, the Management, and other employees. Furthermore, operations are reviewed regularly to ensure compliance with rules, regulations, policies, and procedures.
- GC implements the automated control of crucial processes: For example, SAP GRC Access Control is in place to ensure that SAP operating system access rights accord with good practices in segregation of duties. GC also use the Continuous Control Monitoring System (CCMS) for crucial processes to help detect and follow up exceptional transactions and to notify designated employees

to correct problematic transactions in a timely manner. In 2019, GC installed additional automated control systems such as blockchain for bank guarantees and Robotics Process Automation (RPA) for more efficient, effective procurement processes minimizing work process time and human errors, resulting in increased credibility and trust.

- GC has in place an Information Technology Security Policy in accordance with the ISO27001 – Information Security Management standards and the Control Objectives for Information and Related Technologies (COBIT), including reviewing, revising, and updating GC's policy covering important activities to ensure information security. Furthermore, Cyberthreat-prevention news and training are provided regularly to all employees. In 2019, GC increased the efficiency of an Information Technology Security by using two-factor authentication as two-step verification when accessing critical systems. In addition, to raise GC's information technology security standards, USB drive usage was cancelled, with the Cloud and intranet used to store or transfer data instead.
- Guidelines govern companies GC has invested in 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 offers guidance called the GC Way of Conduct to govern and manage its subsidiaries, which is improved and continually communicated to affiliates in GC group. In 2019, GC provided training programs for executives of GC Group to raise understanding and awareness about the GC way of conduct and provided an assessment form to reinforce this guidance. The progress of this program was regularly reported to top management for acknowledgment.
- GC strengthens Governance, Risk Management, & Internal Control and Compliance (GRC) implementation by selecting employees to be accountable for driving, executing, and monitoring this program in its key business units. In 2019, GC provided GRC workshops for executives to raise GRC awareness as well as understanding. GRC personnel provides recommendations for improving corporate controls. GC also continually drove GRC in six subsidiaries through GRC committees by arranging quarterly meetings to govern, review, monitor, and assess GRC performance.

4. INFORMATION AND COMMUNICATION

GC values the quality of information and communication that supports the effectiveness of its Internal Control System, as detailed below.

- GC have established information classification along with instructions for filing important and controlled documents, including information from both internal and external sources. This process is intended to ensure that important information about GC and its business operations is accurate, complete, adequate and timely.
 - GC has implemented SAP ECC 6.0 to process key business transactions, reducing duplication of small legacy systems, and enhancing the efficiency of management reporting.
 - GC has in place a database for information on key external factors to aid in preparing strategic plans, including systematically maintaining information on each business unit's plans aligned with GC strategies.
 - GC also developed an Incident Management System (IMS) Mobile Application to facilitate communicating information in the event of a crisis for more efficient information management.
 - In 2019, GC established the GC EYE team of analysts with expertise in business, the economy, and market outlook from various departments to strengthen the external-factors analysis and help GC anticipate developments that could affect business operations. GC EYE's news and analysis are communicated to executives and relevant parties through mobile application platform accessible anywhere and anytime.
- GC communicate relevant information to the Board, the Management, employees, and stakeholders to support efficient operations and internal controls.
 - Crucial information related to GC's performance is delivered to directors before Board meetings to allow sufficient time for them to study, review, and make decisions. When necessary, the Board may request additional information from specific departments or employees. Furthermore, to easily and swiftly dispatch information and meeting documents, GC implements "Digital Join", with information sent to directors' electronic devices protected by data encryption.

- Several internal communication channels are available: These include Town Hall activities for facilitating communication from top management to employees, the organization's intranet, and email. In addition, new employees receive important information through orientation sessions. Employees can also access useful information through a knowledge-based system and e-learning. GC develops "WE GC mobile phone application" enables all employees to access corporate news via mobile phone.
- GC use external communication channels to communicate with external stakeholders, such as company website, Facebook, and Twitter. In addition, designated departments are responsible for disclosing important information to all stakeholders regularly. A Customer Solutions Center is a communication channel for external stakeholders, founded as a one-stop center for interested parties to learn and gather information relating to GC products and services. Moreover, shareholders are invited to propose the agenda for the Annual General Meeting of Shareholders (AGM) and names of qualified candidates to be nominated for election as company directors to enhance good corporate governance regarding the rights and equitable treatment of shareholders.
- GC has established an open communication channel for whistleblowers. This allows employees and external individuals to be confident that any complaints will be handled with transparency, straightforwardness, confidentiality, and in a timely manner. In 2019, GC assessed employees' understanding of and confidence in whistleblowing with a survey to improve the whistleblower system, with survey results reported to the CG Board for acknowledgment.
- GC evaluates the adequacy of corporate internal controls system annually. In addition, GC implements Control Self-Assessment (CSA) for process owners to evaluate internal control mechanisms at the process level. The adequacy and appropriateness of assessment results are verified by the Internal Control System Division and GRC personnel who also provide recommendations for correcting any internal control deficiencies. Reporting and monitoring procedures are also in place to report deficiencies to the Management and track remediation progress to ensure that problems are addressed in a timely manner. In 2019 information-sharing sessions between internal audit, internal control, and GRC personnel were held to develop and improve internal control efficiency.
- Internal Audit, 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 aligned with GC's strategy and its associated risks as well as providing suggestions and support for internal control. Deficiencies and recommendations are communicated by the management team to those responsible. The audit reports and findings are presented to the Audit Committee quarterly. Internal controls for financial reporting are reviewed by external auditors who report to the Audit Committee quarterly and yearly.
- GC has continually performed compliance monitoring and reporting for GC Group to ensure compliance with a compliance checklist used to monitor adherence to the corporate compliance policy.
- GC becomes also a certified member of the Private Sector Collective Action Coalition against Corruption (CAC) by performing annual self-assessments every year, with the results audited by the Audit Committee and signed by Chairman of the Audit Committee and Chairman of the Board of Directors every three years to prove that GC has indeed established anti-corruption policies, guidelines, and measures to prevent corruption as well as operating its business under GC's good corporate governance principles.

MONITORING ACTIVITIES

GC continually monitors and evaluates the adequacy of its internal controls. Development and improvement processes are also in place to ensure efficient, effective internal controls as shown below.