



9. Internal Control and Connected Transactions

GGC values an internal control system under the international standard of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in pursuit of its objectives of efficient operation, accuracy and completeness of reports, and full compliance with relevant laws and regulations. These would ensure righteous and transparent operation of business in line with its objectives.

At Board of Directors Meeting No. 2/2021 held on February 10, 2021, the Board of Director assessed such internal control system. Consideration was given to Management's SEC's assessment findings on the adequacy of the system and the Audit Committee's report of its review on such adequacy. The Board's view was that the system was both adequate and appropriate. To elaborate, GGC had assigned a specific unit to monitor the efficiency of the system for efficient implementation as well as for accurate and credible reports so that GGC may comply with applicable laws and regulations. The other purpose is to sufficiently prevent company assets from the malfeasance of authorized officers and related parties as well as transaction engagement with parties of conflicts and connected parties. Internal Audit reviewed the corporate internal control system against its risk-based audit plans, making several recommendations for improvement. Management focused on accelerating corrective actions without finding significant deficiencies in the system that could affect GGC's ultimate objective achievement.

GGC has adopted COSO's internal control framework of five elements:

1. Control environment
2. Risk assessment
3. Control activities
4. Information and communication
5. Monitoring and reporting activities

In 2020, GGC improved its processes and systems to increase its efficiency of internal control to strengthen the governance process and to identify risks and issue efficiently and rapidly. GGC's internal control system is summarized below.

Control Environment

The Board of Directors and Management ensure that GGC operates its businesses in a righteous and ethical manner while cultivating among its personnel corporate values in support of the corporate culture that focus on integrity, ethics, and responsibility. GGC is committed to provide a good, appropriate, and efficient control environment as follows:

- To ensure the efficiency of operations, the Board works independently of management in overseeing GGC's overall business and comments on its strategic directions to guide business plans and action plans. At the same time, it regularly monitors GGC's performance and the performance of Sub-committees to ensure achievement of goals.
- The Board of Directors has reviewed and approved the corporate structure as business groups and functions with common goals in line with its growth. This allows for efficient, transparent, and uniform business implementation for the entire group including checks and balances among relevant departments resulting from segregation of duties in key functions. Duties, responsibilities, and delegation of authority are defined under the corporate structure, which is then communicated to employees to be aware of their own roles, authority, duties, and responsibilities.
- The Board of Directors has defined policies on corporate governance and compliance with laws, regulations, internal control policy, and on anti-corruption and guidelines for the Board and the employees to abide by. It also distributed the Corporate Governance and Business Code of Conduct Handbook with the communication for their acknowledgment, and the employees signed back as a pledge by all across GGC Group to accept as work guidelines under Good Corporate Governance.
- GGC has set a whistleblower policy, stating procedures for the complaint scope and adding complaint channels for diversity, including whistleblower protective measures and fair, transparent treatment of whistleblowers. These establish credibility for the whistleblower system and the complainant's confidence.
- GGC has built awareness of corporate governance, business ethics, conflicts of interest, and anti-corruption through communication channels every month. Management and employees participated in training on good corporate governance and compliance.
- GGC's corporate culture is engrained for employees' awareness of ethical business conduct and alignment with good business practice guideline through emphasis on good practices and illustrate good behavior across the corporation to guide all employees.
- GGC's human resource management process has defined the qualifications of each job position in line with the criteria for personnel recruitment and selection. The Company also provided knowledge and skills development for staff, with close monitoring and fair, transparent appraisal of their performances.
- Strict compliance with GGC's internal control policy is required from the Board, Management, and other employees in performing their duties to achieve GGC's objectives and goals.

Risk Assessment

GGC focuses on promoting the corporate risk management culture by taking a part of employees' responsibilities and values the linkage between risk assessment and the strategic plan formulation, and short-term and long-term business plans. Appointed by the Board of Directors, the Risk Management Committee (RMC) sets and reviews policies, objectives, risk management scope, monitors and evaluates of compliance with the scope, and provides opinions and recommendations on GGC's corporate risk management and project risk. The Enterprise Risk Management Committee (ERMC), chaired by the Managing Director, ensures that GGC manages its risks efficiently, leading to the achievement of business goals. Below are GGC's risk management approaches:

- The Board of Directors and the RMC focus on promoting the corporate risk management culture by defining the risk management policy requiring everyone to become aware of and understand risk management as part of the culture, comply with the risk management policy, and make risk management everyone's mandate.
- GGC promotes the knowledge and understanding of risk management by training with experts on enterprise risk management, involving the Board, Management, and other employees by setting risk management as part of everyone's job description.
- GGC defines clear objectives and goals linking to its vision and mission.
- GGC manages enterprise risks under the ISO 31000 - Risk Management scope and COSO Enterprise Risk Management guidelines and institutes a risk management policy for all.
- GGC carries out the risk profiling process of identifying, analyzing, assessing and managing risks at the corporate and unit levels that could compromise enterprise goal achievement, embracing year-round risks, and specifies risk mitigations plans to systematically manage risks.
- GGC assesses risks by recognizing in external factors and emerging risks, monitors the management of GGC's risks against GGC's risk appetite, and defines key risk indicators (KRIs) to early warning any changes that may hinder the achievement of objectives, which report monthly to ERMC for acknowledgment and reports to the Board and RMC every quarter.

Control Activities

In place are control activities spanning all major processes, including risk management, to mitigate risks that may hinder the achievement of objectives:

- GGC has designed its control activities with due regard for sound internal control principles. These include the segregation of duties and systematic authorization of approval to groups of employees for checks and balances. In place are policies and good practices for conflicts of interest transactions. In addition, GGC's

business has been conducted in a transparent, fair and auditable manner. The transactions have been approved by taking into account GGC's utmost benefit.

- GGC established written rules and regulations, requirements, corporate policies, and job manuals, which define the scope of power and duties of the Managing Director, Executives, and employees by level along with clear work procedures as guidelines for their job performance. GGC also regularly reviews to ensure that business has been conducted in compliance with the Articles of Association, corporate policy, regulations, and job manuals.
- GGC specified preventive and detective mitigation plans in line with risk assessment outcomes to manage risks at GGC's risk appetite level. It monitors and reports the implementation of these plans to the RMC and the Board for acknowledgment regularly.
- GGC commands internal control of processes, both by the processes set out in the manual control and by automated control in order to greater efficiency in business operations and conduct more carefully and accuracy in every functions, including Inventory and Warehouse management process to manage feedstock and product inventory together with a system to record and report inventory items. Both controls represent preventive control and detective control.
- GGC reviews IT-based control activities, including an authorization matrix, meaning the management of access to information safely and the ability to efficiently keep critical data. GGC also revises requirements on the IT security policy to ensure that the IT system as a whole is appropriate, efficient, and secure, without interruption.
- GGC put in place processes to supervise its invested affiliates in individual businesses so that subsidiaries and associates may have compatible business guidelines that comply with GGC's policies, guidelines, and strategic directions while being able to track the work of these subsidiaries and associates regularly and continually.
- In 2020, GGC relentlessly improved its internal control system embracing key processes across the corporation by clearly assigning responsible parties and developing an improvement plans. Internal Control has also closely monitored these improvement steps and regularly reported updates to Sub-committees as seen fit. In addition, the integration of Governance Risk Management, Internal control and Compliance taskforce implemented the plans for communication on the significance of these integration to drive GGC's governance development, raise the efficiency of planning, monitoring, and assessment under sufficient internal control to achieve strategic goals.

Since GGC is an affiliate of GC Group, it was directed to follow the GC Way of Conduct, which is GC's guidance for conduct and affiliate supervision. GGC would define its own GGC Way of Conduct and deploy to its affiliates.



Information and Communication

GGC values the quality of information and communication. Internal and external channels are provided for employees to access the information required for their efficient operation as follows:

- GGC prepares various reports for submission to the Board of Directors including analysis of relevant data from internal and external sources, showing changes, trends, sales performance, production outputs, and inventory in support of presentations, including financial statements and performance reports. The Company prepares supporting adequate information for the Board's decision-making; besides, meeting documents are sent ahead of Board meetings for their analysis and decision-making. The Board can request additional information from applicable units in support of their deliberation.
- Diverse elements of the internal communication process are provided, by taking into account their compatibility with the types of data and communication objectives. GGC's business directions, goals, and key policies are communicated through the MD Town Hall, cross-functional team meetings, site visits, the intranet, and e-mail.
- GGC disseminates its information to stakeholders through various channels, including communication through its website. Investor Relations and Managerial Accounting Division, and Corporate Communication and CSR Division are responsible for information dissemination.

Monitoring and Reporting Activities

In ensuring the adequacy and efficiency of internal control, GGC undertakes the following monitoring and assessment processes:

- GGC assigns a unit to take in charge of managing internal control to support the management's assessment, development, implementation, and review of the adequacy of the system, and provide opinions about overall company's internal control (the 2nd line of defense). The outcomes of internal control assessment are reported to the Management Committee to ensure efficient internal control.
- Internal Audit, reporting direct to the Audit Committee, performs audit duties independently to ensure sufficiency, suitability, and consistently practiced internal control. To this end, Internal Audit audits and assesses internal control under various activities in accordance with the audit plan approved by the Audit Committee, which conforms to GGC's strategic directions and key risks affecting operation. At the same time, it provides recommendations for high efficiency of internal control. Jointly with Management, it defines guidelines for internal control improvement. Internal Audit reports its findings to the Audit Committee each quarter. Assessment findings on accounting and finance are provided by the external auditor, who presents its findings and reviews to the Audit Committee quarterly and annually.

- GGC secured the membership status of CAC (Private Sector Collective Action against Corruption) and must review its status every three years to report its assessment findings, which is signed by the Audit Committee to guarantee the existence of policies, guidelines, and measures for risk assessment and corruption prevention. GGC's mandate is to conduct its business in line with CAC's corporate governance code.

Besides finding no significant shortcomings either in GGC's internal control system or in transactions or items that may involve conflicts of interest, the assessment in 2020 of all the five components indicated no potential conflicts of interest, corrupt practices, or violation of laws on securities and exchange, SET regulations, or other applicable laws.

9.2 Connected Transaction

For Fiscal Year 2020, GGC conducted business transactions with its subsidiaries and related companies with common shareholders or Directors. Connected transactions with the other entities of potential conflicts of interest are based on market or contractual prices if there are no reference market prices. Details of the relationship with these companies are as follows:

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
PTT Public Company Limited (PTT)	<ul style="list-style-type: none"> • Major Shareholder of GC holds 47.68 % of the shares in GC • Director who is PTT Executive 1. Mr. Kongkrapan Intarajang • Sale/purchase transactions of products and services 	Statement of Income Items			
		Sales of Goods or Services	2,333	102	-
		Purchases of Goods or Services	2,134	757	1
		Other Income	49	21	-
		Other Expenses	4	51	5
		Statement of Financial Position Items			
		Other receivables - related parties	4	-	-
		Trade payables - related parties	65	-	-
		Other payables – related parties	3	1	3
PTT Global Chemical Public Company Limited (GC)	<ul style="list-style-type: none"> • Major Shareholder of GGC holds 72.29 % of the shares of GGC • Common Director 1. Mr. Kongkrapan Intarajang • Directors who are GC Executives 1. Mr. Kongkrapan Intarajang 2. Mr. Patiparn Sukorndhama 3. Mr. Suwat Kamolpanus • Sale/purchase transactions of products and services 	Statement of Income Items			
		Sales of Goods and Services	947	1,012	1,574
		Purchases of Goods and Services	220	232	186
		Other Income	8	18	-
		Other Expenses	96	104	80
		Interest Paid	-	-	11
		Statement of Financial Position Items			
		Trade receivables - related parties	21	112	109
		Other receivables - related parties	23	19	16
		Right of Use Assets - related parties	-	-	300
		Trade payables - related parties	25	3	9
		Other payables – related parties	39	65	24
		Payable to contractor-related parties	-	-	1
Current portion of lease liabilities-related parties	-	-	19		
Finance lease liabilities-related parties	-	-	286		

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
Thai Eastern Top Seeds Oil Company Limited (TETSO)	<ul style="list-style-type: none"> • GGC holds 30 % of the shares of TETSO • Executives who are TETSO Directors <ol style="list-style-type: none"> 1. Mr. Ekaphong Govitgoongrai 2. Mr. Passakorn Srisastra • Sale/purchase transactions of products and services 	Statement of Income Items			
		Purchases of Goods and Services	249	252	5
		Statement of Financial Position Items			
		Trade payables - related parties	4	7	-
Thai Ethoxylate Company Limited (TEX)	<ul style="list-style-type: none"> • GGC holds 50% of the shares • Common Director <ol style="list-style-type: none"> 1. Mr. Suwat Kamolpanus • Executive who serves as both Director and Executive at TEX <ol style="list-style-type: none"> 1. Mr. Piya Suri • Sales and purchase transactions of products and services 	Statement of Income Items			
		Sales of goods or services	1,743	1,095	1,268
		Other income	5	5	6
		Statement of Financial Position Items			
		Trade receivables – related parties	305	165	304
		Other receivables – related parties	2	1	2
GGC KTIS Bioindustrial Company Limited (GKBI)	<ul style="list-style-type: none"> • GGC Bio holds 50% of the shares • Common Director <ol style="list-style-type: none"> 1. Mr. Suwat Kamolpanus • Executives who serve as both Director and Executive in GKBI <ol style="list-style-type: none"> 1. Mr. Suwat Kamolpanus 2. Mr. Dumrong Putiput • Service Transactions 	Statement of Income Items			
		Other Income	-	6	14
		Statement of Financial Position Items			
		Other receivables – related parties	-	6	2
GC Glycol Company Limited (GC Glycol)	<ul style="list-style-type: none"> • GC holds 100% of the shares • Sales and purchase transactions of products and services 	Statement of Income Items			
		Sales of goods or services	-	4	-
		Other expenses	11	11	2
		Statement of Financial Position Items			
		Right of Use Assets - related parties	-	-	28
		Other payables – related parties	1	2	1
		Current portion of lease liabilities-related parties	-	-	9
		Finance lease liabilities– related parties	-	-	20

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
Solution Creation Company Limited (SUN)	<ul style="list-style-type: none"> GC holds 100% of the shares Common Director <ol style="list-style-type: none"> Mr. Patiparn Sukorndhaman Sales and purchase transactions of products 	Statement of Income Items			
		Sales of goods or services	33	25	30
		Statement of Financial Position Items			
		Trade receivables – related parties	6	5	6
Global Power Synergy Public Company Limited (GPSC)	<ul style="list-style-type: none"> PTT holds 22.81%, GC holds 22.73% of the shares, and Thai Oil Power Company Limited (TOP holds 74% and PTT holds 26% of the shares) holds 20.78% of the shares Common Directors <ol style="list-style-type: none"> Mr. Payungsak Chartsutipol Mr. Kongkrapan Intarajang Service transactions 	Statement of Income Items			
		Purchases of goods or services	520	499	481
		Statement of Financial Position Items			
		Trade payables – related parties	101	34	40
GC Maintenance and Engineering Company Limited (GCME)	<ul style="list-style-type: none"> GC holds 100% of the shares Service transactions 	Statement of Income Items			
		Purchases of goods or services	20	56	62
		Statement of Financial Position Items			
		Trade receivables – related parties	-	-	-
		Other payables – related parties	8	21	23
		Payable to contractor – related parties	3	6	9
GC Logistics Solutions Company Limited (GCL)	<ul style="list-style-type: none"> GC holds 99% of the shares while SUN holds 1% of the shares Service transactions 	Statement of Income Items			
		Other expenses	14	19	17
		Statement of Financial Position Items			
		Other payables – related parties	2	5	3
Thai Tank Terminal Company Limited (TTT)	<ul style="list-style-type: none"> GC holds 51% of the shares Service transactions 	Statement of Income Items			
		Sales of goods of services	19	6	-
		Statement of Financial Position Items			
		Other payables – related parties	1	-	-
PTT Digital Solutions Company Limited (PTT Digital)	<ul style="list-style-type: none"> GC holds 40%, PTT holds 20%, TOP holds 20%, and PTTEP holds 20% of the shares 	Statements of Income Items			
		Other expenses	7	5	7
		Statement of Financial Position Items			

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
	• Service transactions	Other payables – related parties	1	1	2
		Payables to contractor – related parties	3	-	-
Eastern Fluid Transport Company Limited (EFT)	• GC holds 15% and TTT holds 15% of the shares • Service transactions	Statements of Income Items Purchases of goods or services	-	-	-
NPC Safety and Environmental Service Company Limited (NPC S&E)	• GC holds 100% of the shares • Service transactions	Statements of Income Items Purchases of goods or services Other expenses	9 3	16 2	19 -
		Statement of Financial Position Items Other payables – related parties	3	5	4
Dhipaya Insurance Public Company Limited (DHIPAYA)	• PTT holds 13.33% of the shares • Service transactions	Statements of Income Items Purchases of goods or services Other Income	16 -	16 -	21 2
		Statement of Financial Position Items Other receivables – related parties Other payables – related parties	12 1	14 -	22 -
Thai Oil Public Company Limited (TOP)	• PTT holds 45.03% of the shares • Sales and purchase transactions of products and services	Statement of Income Items Sales of goods or services Other income	998 5	1,070 2	1,813 -
		Statement of Financial Position Items Trade receivables – related parties Other receivables – related parties Other payables – related parties	8 39 -	100 - 3	146 - -
PTT Oil and Retail Business Public Company Limited (PTTOR)	• PTT holds 100% of the shares • Sales/purchase transactions of products	Statement of Income Items Sales of goods or services Purchase of goods or services Other incomes	2,143 43 5	4,293 74 -	6,465 58 -
		Statement of Financial Position Items Trade receivables – related parties Trade payables – related parties	262 (9)	447 6	342 8

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
		Payables to contractor – related parties	21	-	-
Energy Complex Company Limited (ENCO)	<ul style="list-style-type: none"> • PTT holds 50% and PTTEP (PTT holds 64.79%) holds 50% of the shares • Service transactions 	Statements of Income Items			
		Other expenses	11	11	8
		Statement of Financial Position Items			
		Right of Use Assets - related parties	-	-	3
		Other payables – related parties	3	-	
		Current portion of lease liabilities-related parties	-	-	3
IRPC Public Company Limited (IRPC)	<ul style="list-style-type: none"> • PTT holds 47.55% of the shares • Sales/purchase transactions of products and services 	Statements of Income Items			
		Sales of goods or services	227	212	562
		Statement of Financial Position Items			
		Trade receivables – related parties	36	64	39
		Other receivables – related parties	26	-	-
Business Services Alliance Company Limited (BSA)	<ul style="list-style-type: none"> • PTT holds 100% of the shares • GC holds 25% of the preferred stock • Service transactions 	Statements of Income Items			
		Purchases of goods or services	2	2	2
		Other expenses	8	8	11
		Statement of Financial Position Items			
		Other payables – related parties	3	2	3
TOP Solvent Company Limited (TS)	<ul style="list-style-type: none"> • TOP (PTT holds 45.03% of the shares) holds 100% of the shares • Product services 	Statements of Income Items			
		Purchases of goods or services	2	-	-
NPC S&E Security Guard Company Limited (NPCSG)	<ul style="list-style-type: none"> • NPC S&E holds 100% of the shares • Service transactions 	Statement of Income Items			
		Purchases of goods or services	4	6	7
		Other expenses	2	1	1
		Statement of Financial Position Items			
		Other payables – related parties	1	1	1
Advanced Biochemical (Thailand) Company	<ul style="list-style-type: none"> • VNT (GC holds 24.98% of the shares) holds 100% of the shares 	Statement of Income Items			
		Sales of goods or services	466	272	344

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
Limited (Advanced Biochemical)	<ul style="list-style-type: none"> Sales and purchase transactions of products and services 	Trade receivables — related parties	33	20	30
PTT International Trading Pte. Ltd (PTTT)	<ul style="list-style-type: none"> PTT holds 100% of the shares Sales transactions 	Statement of Income Items			
		Sales of goods or services	-	46	33
		Statement of Financial Position Items			
		Trade payables – related parties	-	15	-
Emery Oleochemicals (M) Sdn. Bhd. (EOM)	<ul style="list-style-type: none"> GC holds 50% of the shares Sales and purchase transactions of products 	Statement of Income Items			
		Purchase of goods or services	2	19	-
GC Polyols Company Limited (GCP)	<ul style="list-style-type: none"> GC holds 82.1% of the shares Sales and purchase transactions of product Common Director 1. Mr. Patiparn Sukorndhaman 	Statement of Income Items			
		Sales of goods or services	-	-	7
		Statement of Financial Position Items			
		Trade receivables — related parties	-	-	2
Emery Oleochemicals LLC (EOMUSA)	<ul style="list-style-type: none"> Emery Oleochemicals (M) Sdn.Bhd (GC hold 50%) holds 100% 	Statement of Income Items			
		Purchase of goods or services	-	-	11
		Statement of Financial Position Items			
		Trade receivables — related parties	-	-	4
PTT Phenol Company Limited (PPCL)	<ul style="list-style-type: none"> GC holds 100% of the shares Sales and purchase transactions of products 	Statement of Income Items			
		Purchase of goods or services	-	-	-
		Other Income	-	-	-
GC Estate Company Limited (GCEC)	<ul style="list-style-type: none"> GC holds 100% of the shares Sales and purchase transactions of products 	Statement of Income Items			
		Other Expenses	-	-	1
		Statement of Financial Position Items			

Company	Relationship (As of December 31, 2020)	Connected Transaction	2018	2019	2020
(Million THB)					
	● Service transactions	Right of Use Assets - related parties	-	-	9
		Current portion of lease liabilities- related parties	-	-	3
		Finance lease liabilities- related parties	-	-	7

Necessity and Reasonableness of Connected Transactions

GGC's connected transactions for the fiscal year ended on December 31, 2020 were undertaken in the course of normal businesses in line with the general business terms, as reasonable people would do with contractual partners under similar circumstances on the Arm's Length Basis.

Measures and Approval Procedures for Connected Transactions

To engage in transactions with related parties, GGC reviews the suitability of all transactions and set prices and terms on an Arm's Length Basic.

When GGC or its subsidiaries have engaged in connected transactions with applicable Stock Exchange of Thailand (SET) and Securities and Exchange Commission (SEC) announcements on information disclosure and actions by listed companies on related transactions, the Board of Directors strictly ensures such actions are in line with the criteria, provisions, and procedures of the announcements. The Board of Directors also discloses the transactions in Form 56-1 One Report to ensure transparency of related transactions and eliminate conflicts of interest.

Apart from the approval of the Board of Directors, if engagement of GGC or that of its subsidiaries in related transactions or actions result in the acquisition or sale of their significant assets, under the criteria of SEC announcements on related transactions of listed companies or the acquisition or sale of assets of listed companies, GGC or its subsidiaries (or both) must conform to the rules and procedures under such announcements.

The Audit Committee must express its views on the measures or procedures for the engagement in connected transactions. If the Committee has a dissenting opinion, they must state it.

The Company has control measures over any connected transactions in order to control, audit and execute random checks of actual transactions' conformance to contracts, policies or terms. Any transactions with related parties must be undertaken for regular businesses. To this end, the volumes of goods or feedstock traded, or services received by GGC from such related parties must match its needs and business operation. In addition, the prices, as

well as the giving or acceptance of services by related parties, must conform to contractual provisions and benefit the businesses of both GGC and the related parties without siphoning off of such benefits or any irregular items. Moreover, the Internal Audit Department also closely monitors the movements to ensure that the Company has already set such connected transactions in alignment with the regulations and in accordance with the Internal Audit Plan. The progress is regularly reported to the Audit Committee.

Policy or Trends of Connected Transactions

If GGC wishes to engage in transactions with related parties, related transactions or connected transactions with GGC group or parties perceived conflicts of interest or parties with vested interests, GGC must strictly conform to the above-mentioned policy, measures, and procedures. To this end, the Audit Committee regularly reviews the legality of connected transactions and the conformance to the SET requirements to ensure the reasonableness and maximum benefit for the Company.