

## GGC Performance Data

Economic						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
201-1	Direct Economic Value Generated					
	Sale revenues	Million baht	13,055	18,203	20,923	25,084
	Net sales plus revenues from financial investments and sales of assets	Million baht	13,202	18,325	21,075	25,200
	Economic Value Distributed					
	Employee wages and benefits	Million baht	251	343	455	523
	Operating cost	Million baht	12,885	17,346	794	904
	Payments to government: Gross taxes	Million baht	6	11	364	472
	Payments to providers of capital: Dividend payments	Million baht	222	250	358	614
	Community investments	Million baht	N/A	N/A	N/A	N/A
	Economic value retained	Million baht	151.00	376.12	0	22,687

Supply Chain Management						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
	Supply Chain					
308-1	Percentage of new suppliers that were screened using environmental criteria	% Of new suppliers	100	100	100	100
414-1	Percentage of new suppliers that were screened using social criteria	% Of new suppliers	100	100	100	100
308-1	Supplier Environmental Assessment					
	Percentage of new suppliers that were screened using environmental criteria	% Of new suppliers	100	100	100	100
414-1	Supplier Social Assessment					
	Percentage of new suppliers that were screened using social criteria	%	100	100	100	100

Customer Relation Management						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
-	Percentage of satisfied clients	%	92	92	95	96
	Data coverage	% Of key clients	100	100	100	100
	Target of satisfied clients at fiscal year	%	N/A	N/A	92	95
	Customer satisfaction results	%	91	91	92	95
	Data coverage	% Of direct customers	100	100	100	100

	Customer satisfaction target at fiscal year	%	N/A	90	92	92
	Average customer engagement	%	6.8	6.9	7.3	7.4

Corporate Governance Code of Conduct						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
<b>Compliance</b>						
307-1	<b>Non-Compliance with Environmental Laws and Regulations</b>					
	Total number of violations of legal obligations/regulations	Case	0	0	0	0
	Environmental liability accrued at year end	Baht	0	0	0	0
	<b>Significant Fines</b>					
	Total number of case	Case	0	0	0	0
	Total monetary value	Baht	0	0	0	0
	<b>Non-monetary sanctions</b>					
	Total number of case	Case	0	0	0	0
	<b>Case brought through dispute resolution mechanisms</b>					
	Total number of case	Case	0	0	0	0
205-2	<b>Anti-Bribery and Corruption (ABC)</b>					
	<b>ABC has been communicated to governance body members d to governance body members</b>					
	Governance body members that the organization's anti-corruption policies and procedures have been communicated to	Person	4	N/A	N/A	11
		% Of governance body members	100	100	100	100
	<b>Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to, by region</b>					
	Rayong	Person	0	0	0	1
		% Of governance body members	0	0	0	9
	Bangkok	Person	4	N/A	0	10
		% Of governance body members	100	N/A	0	91
	Other provinces	Person	0	0	0	0

## Corporate Governance Code of Conduct

GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
		% Of governance body members	N/A	N/A	N/A	N/A
<b>ABC has been communicated to employees</b>						
Employees that anti-corruption policies and procedures have been communicated to	Person	219	N/A	268	278	
	%	100	N/A	100	100	
<b>Total number and percentage of employees that anti-corruption policies and procedures have been communicated to, by employee category</b>						
Senior executive (VP)	Person	16	N/A	17	17	
Top management	% Of employees	7.34	N/A	6	6	
Management (middle + entry)	Person	27	N/A	79	79	
	% Of employees	12.39	N/A	29	29	
Non-management	Person	175	N/A	172	172	
	% Of employees	80.28	N/A	64	64	
<b>Total number and percentage of employees that anti-corruption policies and procedures have been communicated to, by region</b>						
Rayong	Person	159	N/A	201	152	
	% Of employees	100	N/A	75	100	
Bangkok	Person	60	N/A	67	77	
	% Of employees	100	N/A	25	100	
Other Province	Person	0	N/A	0	49	
	% Of employees	0	N/A	0	100	
<b>ABC has been communicated to business partner</b>						
Business partner that anti-corruption policies	Person	29	471	607	306	
	% Of employees	100	100	20	100	

## Corporate Governance Code of Conduct

GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
	and procedures have been communicated to					
<b>Total number and percentage of business partner that anti-corruption policies and procedures have been communicated to, by type of business partner</b>						
Contractors / Suppliers / Service Providers	Person	29	471	607	300	
	% Of business partner	100	100	20	98	
Subsidiaries	Person	N/A	N/A	2	2	
	% Of business partner	N/A	N/A	100	1	
Joint ventures (including stakes below 51%)	Person	N/A	N/A	1	4	
	% Of business partner	N/A	N/A	50	1	
<b>Total number and percentage of business partner that anti-corruption policies and procedures have been communicated to, by region</b>						
Rayong	Person	10	109	154	300	
	% Of business partner	34	23	25	98.04	
Bangkok	Person	16	274	378	6	
	% Of business partner	55	58	62	1.96	
Other provinces	Person	3	88	75	0	
	% Of business partner	10	19	12	0	
<b>Governance body members training on ABC</b>						
Governance body member training on Anti-Bribery and Corruption (ABC)	Person	4	N/A	N/A	11	
	%	100	N/A	N/A	100	

## Corporate Governance Code of Conduct

GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
<b>Total number and percentage of governance body member training on Anti-Bribery and Corruption (ABC) by region</b>						
Rayong	Person		0	N/A	0	1
	% Of business partner		0	0	0	9
Bangkok	Person		4	N/A	0	10
	% Of business partner		100	N/A	0	91
Other provinces	Person		0	N/A	0	0
	% Of business partner		0	N/A	0	0
<b>Employees training on ABC</b>						
Employee training on Anti-Bribery and Corruption (ABC)	Person		219	N/A	268	278
	%		100	N/A	100	100
<b>Total number and percentage of employee training on Anti-Bribery and Corruption (ABC) by employee category</b>						
Senior executive	Person		16	N/A	17	19
	% Of employee		7.34	N/A	6	6.83
Management	Person		27	N/A	79	79
	% Of employee		12.39	N/A	29	29
Non-management	Person		175	N/A	172	172
	% Of employee		80.28	N/A	64	64
<b>Total number and percentage of employee training on Anti-Bribery and Corruption (ABC) by region</b>						
Rayong	Person		159	N/A	201	152
	% Of employee		100	N/A	75	100
Bangkok	Person		60	N/A	67	77
	% Of employee		100	N/A	25	100
Other provinces	Person		0	N/A	0	49

## Corporate Governance Code of Conduct

GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
		% Of employee	0	N/A	0	100
<b>Code of Business Conducts: Coverage</b>						
<b>Coverage of codes of conduct has been deployed in the past three years</b>						
	Employees	% Of total employees	100	100	100	100
	Contractors / Suppliers / Service Providers	% Of total contractors/ suppliers/ service providers	100	100	100	100
	Subsidiaries	% Of total subsidiaries	100	100	100	100
	Joint ventures (including stakes below 51%)	% Of total Joint ventures	100	100	100	100
<b>Coverage of codes of conduct written acknowledgment has been obtained in the past three years</b>						
	Employees	% Of total employees	100	100	100	100
	Contractors / Suppliers / Service Providers	% Of total contractors/ suppliers/ service providers	100	N/A	100	100
	Subsidiaries	% Of total subsidiaries	100	100	100	100
	Joint ventures (including stakes below 51%)	% Of total Joint ventures	0	50	50	50
<b>Coverage of codes of conduct training has been provided in the past three years</b>						
	Employees	% Of total employees	100	100	100	100
	Contractors / Suppliers / Service Providers	% Of total contractors/ suppliers/	0	N/A	N/A	100



Corporate Governance Code of Conduct						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
		service providers				
	Subsidiaries	% Of total subsidiaries	0	100	100	100
	Joint ventures (including stakes below 51%)	% Of total Joint ventures	0	50	50	50
206-1	<b>Anticompetitive Practices</b>					
	Total amount of any fines or settlements related to antitrust/anticompetitive business practices (excluding legal fees)	Baht	0	0	0	0
	Amount of contingent liabilities for ongoing antitrust/anticompetitive investigations	% Of total revenues	0	0	0	0
		% Of total revenues	0	0	0	0
	<b>Reporting on breaches</b>					
	<b>Number of breaches reporting</b>					
	<b>Code of Conduct Complaints</b>	Case	0	1	1	0
205-3, 206-1	Corruption/ Fraud	Case	0	0	0	0
	Privacy	Case	0	0	0	0
	Regulatory compliance	Case	0	1	1	0
	Corporate compliance	Case	0	0	0	0
	Antitrust/Anticompetitive	Case	0	0	0	0
	Discrimination	Case	0	0	0	0
406-1	Sexual harassment	Case	0	0	0	0
	Non-sexual harassment	Case	0	0	0	0
	Conflict of Interest	Case	N/A	N/A	N/A	0
	Money Laundering	Case	N/A	N/A	N/A	0
	Information Security Breaches	Case	0	0	0	0
	Total Number of clients, customers and	Person	0	0	0	0

## Corporate Governance Code of Conduct

GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
	employees affected by the breaches					
	Number of code of conduct breaches ongoing investigation in the reporting year					
	Code of Conduct Complaints	Case	0	0	0	0
205-3, 206-1	Corruption/ Fraud	Case	0	0	0	0
	Privacy	Case	0	0	0	0
	Regulatory compliance	Case	0	0	1	0
	Corporate compliance	Case	0	0	0	0
	Antitrust/Anticompetitive	Case	0	0	0	0
	Discrimination	Case	0	0	0	0
406-1	Sexual harassment	Case	0	0	0	0
	Non-sexual harassment	Case	0	0	0	0
	Conflict of Interest	Case	N/A	N/A	N/A	0
	Money Laundering	Case	N/A	N/A	N/A	0
	Information Security Breaches	Case	0	0	0	0
	Number of confirmed cases of code of conduct breaches					
205-3, 206-1	Code of Conduct Complaints	Case	0	1	1	0
	Corruption/ Fraud	Case	0	0	0	0
	Privacy	Case	0	0	0	0
	Regulatory compliance	Case	0	1	1	0
	Corporate compliance	Case	0	0	0	0
	Antitrust/Anticompetitive	Case	0	0	0	0
	Discrimination	Case	N/A	N/A	N/A	0
406-1	Sexual harassment	Case	N/A	N/A	N/A	0
	Non-sexual harassment	Case	N/A	N/A	N/A	0
	Conflict of Interest	Case	N/A	N/A	N/A	0
	Money Laundering	Case	N/A	N/A	N/A	0
	Information Security Breaches	Case	0	0	0	0
	Details of actions taken against the substantiated cases					
206-1	Verbal warning	Case	0	1	1	0
	Written warning	Case	0	0	0	0

Corporate Governance Code of Conduct						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
	Dismissal	Case	0	0	0	0
	Other	Case	0	0	0	0
	Total number of significant instances of non-compliance with laws and regulations during the reporting period					
	Instances for which fines were incurred					
2-27	<b>Total number of cases</b>	Case	0	0	0	0
	Corruption	Case	0	0	0	0
	Social and community	Case	0	0	0	0
	Environmental	Case	0	0	0	0
	Occupational health & safety	Case	0	0	0	0
	Product and packages	Case	0	0	0	0
	Human rights	Case	0	0	0	0
	Instances for which non-monetary sanctions were incurred					
2-27	<b>Total number of cases</b>	Case	0	0	0	0
	Corruption	Case	0	0	0	0
	Social and community	Case	0	0	0	0
	Environmental	Case	0	0	0	0
	Occupational health & safety	Case	0	0	0	0
	Product and packages	Case	0	0	0	0
	Human rights	Case	0	0	0	0
	Total number of significant instances of non-compliance with laws and regulations during the reporting period					
	Fines for instances of non-compliance with laws and regulations that occurred in the current reporting period					
2-27	<b>Total monetary value</b>	Baht	0	0	0	0
	Corruption	Baht	0	0	0	0
	Social and community	Baht	0	0	0	0
	Environmental	Baht	0	0	0	0
	Occupational health & safety	Baht	0	0	0	0
	Product and packages	Baht	0	0	0	0
	Human rights	Baht	0	0	0	0

Corporate Governance						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022

Corporate Governance						
2-9	<b>Board Structure</b>					
	Total number of board members	Number	12	13	11	11
	Number of executive directors	Number	1	1	1	1
	Number of non-executive directors (excl. independent directors)	Number	4	4	3	3
	Number of independent directors <sup>[7]</sup>	Number	7	8	7	7
2-11	<b>Non-executive Chairman/Lead Director</b>					
	Number of years that company adopt approach the Chairman is non-executive and independent	Year	0	0	0	0
2-9	<b>Board Effectiveness</b>					
	Average board meeting attendance	% Of meetings of board of directors/ supervisory board	96.02	96.25	96.25	98.7
	Minimum of attendance for all members required, at least	%	75	75	75	10
	Number of non-executive/ independent directors with 4 or less other mandates	Number	10	10	8	7
	Number of other mandates for non-	Number	4	4	4	4

	executive/independent directors restricted to					
2-9	<b>Average Tenure</b>					
	Average tenure of board members in years	Year	3	3	3	3
	<b>Board Industry Experience</b>					
	Number of board members that have relevant working experience in company's sector according to GICS level 1 sector classification	Number	5	5	5	5
	<b>Executive Compensation - alignment with long-term performance</b>					
	The percentage of the short-term bonus differed in the form of shares	%	N/A	N/A	N/A	N/A
	The longest performance period covered by your executive compensation plan	Year	N/A	N/A	N/A	N/A
	The longest time vesting period for variable CEO compensation	Year	N/A	N/A	N/A	N/A
2-21	<b>Transparency of executive compensation</b>					
	Total compensation of CEO	Baht	N/A	N/A	9,691,021	11,374,578
	Salary of CEO	Baht	N/A	N/A	6,446,928	7,003,657
	Bonus of CEO	Baht	N/A	N/A	2,745,037	3,737,533
	Provident fund of CEO	Baht	N/A	N/A	499,055	633,389

Total compensation of executive (except the CEO)	Baht	N/A	N/A	87,518,224	114,128,442
Salary of executive (except the CEO)	Baht	N/A	N/A	54,132,454	75,340,165
Bonus of executive (except the CEO)	Baht	N/A	N/A	28,180,722	33,678,220
Provident fund of executive (except the CEO)	Baht	N/A	N/A	5,205,048	5,110,057
Total compensation of executive (executive vice president)	Baht	N/A	N/A	N/A	N/A
Salary of executive (executive vice president)	Baht	N/A	N/A	N/A	N/A
Bonus of executive (executive vice president)	Baht	N/A	N/A	N/A	N/A
Provident fund of executive (senior vice president)	Baht	N/A	N/A	N/A	N/A
Total compensation of executive (senior vice president)	Baht	N/A	N/A	N/A	N/A
Salary of executive (senior vice president)	Baht	N/A	N/A	N/A	N/A
Bonus of executive (senior vice president)	Baht	N/A	N/A	N/A	N/A

	Provident fund of executive (senior vice president)	Baht	N/A	N/A	N/A	N/A
2-21	<b>Disclosure of Median or Mean Compensation of all Employees &amp; CEO Compensation</b>					
	Median annual compensation of all employees, except the CEO	Baht	N/A	N/A	1,281,646.9	1,264,321.10
	Mean annual compensation of all employees, except the CEO	Baht	N/A	N/A	1,841,865.3	1,537,680.51
	Ratio of the total annual compensation of the CEO and median employee compensation	Baht	N/A	N/A	7.56	8.764
	Ratio of the total annual compensation of the CEO and mean employee compensation	Baht	N/A	N/A	5.26	8.996
	<b>Management Ownership</b>					
	Number of a company share that CEO hold	Times of the annual base salary	N/A	N/A	N/A	N/A
	Average across other executive committee members hold company shares	Times of the annual base salary	N/A	N/A	N/A	N/A
	<b>Management Ownership Requirement</b>					
	Number of a company share that CEO hold	Times of the annual base salary	N/A	N/A	N/A	N/A

	Other members of the executive committee besides the CEO have to build up a share ownership	Times of the annual base salary	N/A	N/A	N/A	N/A
<b>Government Ownership</b>						
	The total percentage of government ownership (sum of % of individual governmental institutions owning more than 5% of voting rights)	%	N/A	N/A	N/A	N/A
<b>Family Ownership</b>						
	Total percentage of voting right that (founding) family members individually have more than 5% of the voting rights.	Total % of voting rights of the company	N/A	N/A	N/A	N/A
<b>Dual Class Shares</b>						
	Amount of shares with no vote	Number of vote per share	N/A	N/A	3,543,900	3,543,900
	Amount of shares with one vote	Number of share	N/A	N/A	1,020,122,800	1,020,122,800
	Voting Power (= Votes per share x Amount of Share)	Total number of vote	N/A	N/A	1,023,666,700	1,023,666,700
<b>Risk and Crisis Management</b>						
<b>Risk Governance</b>						
	Number of non-executive members of board of directors/	Number	7	6	6	6



	supervisory board with expertise in (enterprise) risk management					
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Social Reporting						
GRI Standards	Required Data	Units	Data Collection Period			
			2019	2020	2021	2022
-	Social Reporting - Coverage					
	Coverage of publicly available social data	% Of business operations	100	100	100	100

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Worker									
	Total worker <sup>(1)</sup>	Person	252		290		308		319	
		Person	152	100	183	107	192	116	196	123
2-7	Total employee <sup>(2)</sup>	Person	216		247		268		278	
		Person	147	69	176	71	186	82	185	93
	Contractor <sup>(3)</sup>	Person	744		982		1,970		41	
		Person	578	166	662	320	1,270	700	11	30
	Others (please specify if any)	Person	36		43		40		0	
		Person	5	31	7	36	6	34	0	0
2-7	Total employee by area									
	Rayong	Person	128	29	158	32	165	36	113	39
	Bangkok	Person	19	40	18	39	21	46	26	51
	Other provinces	Person	N/A	N/A	N/A	N/A	N/A	N/A	46	3
	Total employee by employment contract and by area									
	Permanent contract <sup>(4)</sup>	Person	147	69	176	71	186	82	185	93
	Rayong	Person	128	29	158	32	165	36	113	39
	Bangkok	Person	19	40	18	39	21	46	26	51
	Other provinces	Person	N/A	N/A	N/A	N/A	N/A	N/A	46	3
	Temporary contract <sup>(5)</sup>	Person	0	0	0	0	0	0	0	0
	Rayong	Person	0	0	0	0	0	0	0	0

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Bangkok	Person	0	0	0	0	0	0	0	0
	Other provinces	Person	N/A	N/A	N/A	N/A	N/A	N/A	0	0
	Non-guaranteed hours employees	Person	0	0	0	0	0	0	0	0
	Rayong	Person	0	0	0	0	0	0	0	0
	Bangkok	Person	0	0	0	0	0	0	0	0
	Other provinces	Person	0	0	0	0	0	0	0	0
	<b>Total employee by employment type</b>									
	Full-time	Person	147	69	176	71	186	82	185	93
	Rayong	Person	N/A	N/A	N/A	N/A	N/A	N/A	113	39
	Bangkok	Person	N/A	N/A	N/A	N/A	N/A	N/A	26	51
	Other provinces	Person	N/A	N/A	N/A	N/A	N/A	N/A	46	3
	Part-time	Person	0	0	0	0	0	0	0	0
	Rayong	Person	0	0	0	0	0	0	0	0
	Bangkok	Person	0	0	0	0	0	0	0	0
	Other provinces	Person	0	0	0	0	0	0	0	0
405-1	<b>Total employee by employee category (level)</b>									
	Executive (Level 13-18)	% Of total employees	3.24	2.31	4.05	1.62	4.85	1.49	4.10	1.49
		Person	7	5	10	4	13	4	11	4
	Middle management (Level 10-12)	% Of total employees	12.50	4.63	11.74	5.67	7.09	4.10	8.58	4.85
		Person	27	10	29	14	19	11	23	13
	Senior (Level 8-9)	% Of total employees	16.67	14.35	15.79	10.53	11.19	7.09	11.94	6.72
		Person	36	31	39	26	30	19	32	18
	Employee (Level 7 and below)	% Of total employees	35.65	10.65	39.68	10.93	46.27	17.91	44.40	21.64
		Person	77	23	98	27	124	48	119	58

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Unclassified <sup>(6)</sup>	% Of total employees	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Person		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Total employee by age group</b>										
<30 years	% Of total employees		-	-	-	-	-	-	8.27	10.07
			-		-		-		18.35	
	Person		-	-	-	-	-	-	23	28
			-		-		-			
30 - 50 years	% Of total employees		-	-	-	-	-	-	50.72	21.94
			-		-		-			
	Person		-	-	-	-	-	-	141	61
			-		-		-			
>50 years	% Of total employees		-	-	-	-	-	-	6.83	1.44
			-		-		-			
	Person		-	-	-	-	-	-	19	4
			-		-		-			
<b>Total employee hire by nationality</b>										
Thai	Person		N/A	N/A	N/A	N/A	N/A	N/A	278	
	% Of total employees		N/A	N/A	N/A	N/A	N/A	N/A	100	
Others	Person		N/A	N/A	N/A	N/A	N/A	N/A	0	
	% Of total employees		N/A	N/A	N/A	N/A	N/A	N/A	0	
<b>Total management employee by nationality</b>										
Thai	Person		N/A	N/A	N/A	N/A	N/A	N/A	100	
	% Of total management employees		N/A	N/A	N/A	N/A	N/A	N/A	0	
Others	Person		N/A	N/A	N/A	N/A	N/A	N/A	0	
	% Of total management employees		N/A	N/A	N/A	N/A	N/A	N/A	0	

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	<b>People with disability</b>									
	People with Disability	Person	N/A		2.02		4.05		0	
		% Of total employees	N/A		5		10		0	
401-1	<b>New Employee</b>									
	New employee	Person	34		55		38		42	
			14	20	41	14	19	19	17	25
	New hire rate	% Of total employees	13.89		22.27		14.18		15.22	
			6.48	9.26	16.60	5.67	7.09	7.09	6.16	9.06
	Percentage of open positions filled by internal candidates	Person	9		4		4		5	
			7	2	2	2	2	2	3	2
		% Of total employees	4.17		1.62		1.49		1.8	
			3.24	0.93	0.81	0.81	0.75	0.75	1.08	0.72
	Average hiring cost / FTE in the last fiscal year	Baht/FTE	37,364.68		54,710.53		44,880.00		64,666.43	
	<b>New employee by area</b>									
	Rayong	Person	11	8	33	8	14	5	6	10
		% Of total employees	5.09	3.70	13.36	3.24	5.22	1.87	2.17	3.62
	Bangkok	Person	3	12	8	6	5	14	11	15
		% Of total employees	1.39	5.56	3.24	2.43	1.87	5.22	3.99	5.43
Other provinces	Person	0	0	0	0	0	0	0	0	
	% Of total employees	0	0	0	0	0	0	0	0	
<b>New employee hire by age group and gender</b>										
<30 years	Person	4	7	20	4	2	11	5	15	
	% Of total employees	1.85	3.24	8.10	1.62	0.75	4.10	1.81	5.43	
30 - 50 years	Person	8	13	17	9	12	7	11	10	

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
		% Of total employees	3.70	6.02	6.88	3.64	4.48	2.61	3.99	3.62
	>50 years	Person	2	0	4	1	5	1	1	0
		% Of total employees	0.93	0	1.62	0.40	1.87	0.37	0.36	0
401-1	<b>Turnover</b>									
	Total employee turnover rate	Person	3	5	5	12	12	7	16	14
			8		17		19		30	
		% Of total employees	1.39	2.31	2.02	4.86	4.86	2.83	5.97	5.22
			3.70		6.88		7.09		11.19	
	Voluntary employee turnover rate	Person	3	5	5	12	12	7	16	14
			8		17		19		30	
		% Of total employees	1.39	2.31	2.02	4.86	4.86	2.83	5.97	5.22
			3.70		6.88		7.09		11.19	
	<b>Turnover rate by age group and gender</b>									
	< 30 years	Person	1	0	2	2	3	0	4	6
		% Of total employees	0.46	0	0.81	0.81	1.21	0	1.49	2.24
	30 - 50 years	Person	2	5	3	9	8	7	12	8
		% Of total employees	0.93	2.31	1.21	3.64	2.99	2.61	4.48	2.99
	> 50 years	Person	0	0	0	1	1	0	0	0
		% Of total employees	0	0	0	0.40	0.37	0	0	0
	<b>Turnover by area and gender</b>									
	Rayong	Person	2	2	2	4	6	1	8	3
		% Of total employees	0.93	0.93	0.81	1.62	2.24	0.37	2.99	1.12
	Bangkok	Person	0	3	2	7	6	6	4	11
% Of total employees		0	1.39	0.81	2.83	2.24	2.24	1.49	4.10	

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Other provinces	Person	1	N/A	2	N/A	N/A	N/A	4	0
		% Of total employees	0.46	N/A	0.81	N/A	N/A	N/A	1.49	0
401-2, 401-3	Parental Leave									
	Number of employees entitled to parental leave	Person	146	69	177	71	179	81	185	93
	Number of employees taking parental leave	Person	4	2	7	1	3	4	3	2
	Number of employees returning to work after parental leave	Person	4	2	7	1	3	4	3	2
	Number of employees returning to work after parental leave who were still employed for 12 months after returning	Person	4	2	7	1	3	4	3	2
	Employee returning to work retention rate	% Of total employees taking parental leave	100	100	100	100	100	100	100	100

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
404-3	Types of Performance Appraisal									
	Management by objectives: systematic use of agreed measurable targets by line superior	% Of all employees	N/A	N/A	N/A	N/A	N/A	N/A	100	100
	Multi-dimensional performance appraisal	% Of all employees	N/A	N/A	N/A	N/A	N/A	N/A	100	100
	Formal comparative ranking of employees within one employee category	% Of all employees	N/A	N/A	N/A	N/A	N/A	N/A	100	100
404-3	Employee Receiving Regular Performance and Career Development Reviews (Excl. People in Unclassified <sup>[6]</sup> Group)									
	Executive	Person	7	5	10	4	13	4	11	4
		%	100	100	100	100	100	100	73	27
	Middle Management	Person	27	10	29	14	19	11	23	13
		%	100	100	100	100	100	100	64	36
	Senior	Person	36	31	39	26	30	19	32	18
		%	100	100	100	100	100	100	64	36
	Employee (Level 7 and below)	Person	77	23	98	27	124	48	119	58
%		100	100	100	100	100	100	67	33	
405-1	Gender Diversity and Equal Remuneration									
		Person	58	58	82	92				



Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Women in workforce	% Of total workforce	26.85		23.48		30.60		33.33	
		% Target at fiscal year							N/A	
	Women in Management positions	Person	5		4		15		15	
		% Of total management workforce	2.31		1.62		5.60		5.40	
		% Target at fiscal year							N/A	
	Women in junior management positions	Person	6		9		11		15	
		% Of total junior management positions	2.78		3.64		4.10		5.40	
		% Target at fiscal year							N/A	
	Women in top management positions	Person	0		0		4		3	
		% Of total top management positions	0		0		1.49		1.08	
		% Target at fiscal year							N/A	
	Women in management positions in revenue	Person	4		0		1		7	
		% Of total managers in revenue	36.36		0.00		0.37		2.52	

Human Capital											
GRI Standards	Required Data	Unit	Data Collection Period								
			2019		2020		2021		2022		
			Male	Female	Male	Female	Male	Female	Male	Female	
	generating functions	generating functions									
		% Target at fiscal year								N/A	
	Women in STEM-related positions <sup>[8]</sup>	Person	15	16	7	6					
		% Of total STEM-related positions	6.94	6.48	2.61	2.16					
		% Target at fiscal year								N/A	
	Number of women on board of directors/supervisory board	Person	1	1	1	1					
		% of total Board of Directors	9.09	9.09	0.37	9.09					
	405-2	Gender Pay: Ratio Salary									
		Executive (Level 13-18): Base Salary	Ratio	1.00	0.83	1.00	0.78	1.00	0.78	1.00	1.22
			Baht	N/A	N/A	N/A	N/A	N/A	N/A	3,405,482.49	4,155,555.00
Executive (Level 13-18) : Base salary + other cash incentives		Ratio	1.00	0.78	1.00	0.86	1.00	0.84	1.00	1.39	
		Baht	N/A	N/A	N/A	N/A	N/A	N/A	5,536,999.44	7,710,953.65	
Management (Level 11-12): Base salary		Ratio	1.00	0.87	1.00	0.85	1.00	0.95	1.00	1.04	
		Baht	N/A	N/A	N/A	N/A	N/A	N/A	1,555,339.85	1,617,443.52	
Management (Level 11-12):		Ratio	1.00	0.86	1.00	0.79	1.00	0.87	1.00	0.95	

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Base salary + other cash incentives	Baht	N/A	N/A	N/A	N/A	N/A	N/A	3,104,846.72	2,940,271.43
	Non-management (Level 10 and below): Base salary	Ratio	1.00	0.93	1.00	0.93	1.00	0.97	1.00	1.06
		Baht	N/A	N/A	N/A	N/A	N/A	N/A	1,018,906.42	1,075,784.00
	Non-management (Level 10 and below): Base salary + other cash incentives	Ratio	1.00	0.73	1.00	0.72	1.00	0.93	1.00	0.89
		Baht	N/A	N/A	N/A	N/A	N/A	N/A	2,215,225	1,961,434
	Staff P3 Below: Base Salary	Ratio	1.00	1.12	1.00	1.09	1.00	1.01	1.00	1.00
		Baht	N/A	N/A	N/A	N/A	N/A	N/A	488,037	440,083
	Staff P3 Below: Base salary + other cash incentives	Ratio	1.00	0.67	1.00	0.65	1.00	0.78	1.00	0.66
		Baht	N/A	N/A	N/A	N/A	N/A	N/A	1,339,198	883,424
Gender Pay: Difference between Men and Women Employees										
	Mean gender pay gap	%	-3.21	-5.2	-2	94				
	Median gender pay gap	%	-9.74	-6.76	-6.87	70				
	Mean bonus gap	%	-2.16	-2.89	0.89	96				
	Median bonus gap	%	-6.18	-1.86	-6.91	83				
2-30	Labor Practice indicators									

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Employees represented by an independent trade union	%	100		100			100		
201-1	<b>Training and Development</b>									
	Quantitative financial benefit of employee development investments	Million baht	N/A		N/A			N/A		N/A
	Resulting HC ROI	-	80		50			N/A		N/A
404-1	Average hours per FTE of training and development	Hour/person/year	49		44			30.12		27.53
	Average amount spent per FTE on training and development	Baht/ person / year	20,833.33		13,793.00			14,987.94		17,540
	Total investment on employees training	Million baht	3.06	1.44	2.52	1.48	2.49	1.52	3.17	1.60
	<b>Average hours of training by employee category (management level) and gender</b>									
	Executive (Level 13-18)	Hour /person /year	N/A	N/A	N/A	N/A	23.00	47.00	29.70	26.00
	Middle management (Level 10 -12)	Hour /person /year	N/A	N/A	N/A	N/A	21.30	36.00	27.40	26.80

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Senior (Level 8-9)	Hour /person /year	N/A	N/A	N/A	N/A	31.52	12.38	22.50	21.20
	Employee (Level 7 and below)	Hour /person /year	N/A	N/A	N/A	N/A	23.54	15.21	29.70	27.80
<b>Average hours of training by age group and gender</b>										
	< 30 years	Hour /person /year	N/A	N/A	N/A	N/A	20.00	13.65	29.55	28.61
	30 - 50 years	Hour /person /year	N/A	N/A	N/A	N/A	24.53	26.12	27.19	30.45
	> 50 years	Hour /person /year	N/A	N/A	N/A	N/A	19.37	22.88	19.86	18.71
<b>Average hours of training by type of training (mandatory/non-mandatory)</b>										
	Average hours of mandatory training	Hour/person/ year	N/A	N/A	N/A	N/A	17.63	10.14	17.33	17.33
	Average hours of non-mandatory training	Hour/person/ year	N/A	N/A	N/A	N/A	5.18	9.1	9.61	9.61
<b>Average employee training spent by type (mandatory/non-mandatory)</b>										
	Average amount spent of mandatory training	Baht/ person/ year	N/A	N/A	N/A	N/A	624.73	624.73	3,725.62	3,725.62
	Average amount spent of non-mandatory training	Baht/ person/ year	N/A	N/A	N/A	N/A	9,358.71	9,358.71	13,432.93	13,432.93
<b>Average employee training spent by age group</b>										
	< 30 years	Baht/ person/ year	N/A	N/A	N/A	N/A	2,402	9,378	2,163	11,850

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	30 - 50 years	Baht/ person/ year	N/A	N/A	N/A	N/A	1,756	13,537	14,740	2,921
	> 50 years	Baht/ person/ year	N/A	N/A	N/A	N/A	15,937	34,545	44,722	43,561
	Resulting HC ROI: (a-(b-c))/c	Million baht	1.70		2.50		2.65		3.03	
	Total FTEs	Person								
<b>Employee Engagement</b>										
	Employee engagement result	% Of actively engaged employees	47		55		49		46	
		Person	74	16	106	24	178	71	97	20
	Employee engagement target	% Of actively engaged employees	50		50		58		61	
	Data Coverage	% Of employees who respond to the survey	90.74		97.17		92.91		90.65	
<b>Employee engagement by age group and gender</b>										
	Under 25 years	% Of total employees	4.05	6.25	8.49	0	5.79	0	0	0
	25 - 34 years	% Of total employees	33.78	37.50	38.68	29.17	26.45	4.96	30.93	35.00
	35 - 44 years	% Of total employees	44.59	50.00	33.96	50.00	32.23	7.44	36.08	45.00
	45 - 54 years	% Of total employees	17.57	6.25	17.92	16.67	15.70	3.31	25.77	20.00
	55 years and above	% Of total employees	0	0	0.94	4.17	3.31	0.83	6.19	0
<b>Employee engagement by management level</b>										

Human Capital										
GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Executive (Level 13-18)	% Of total employees	1.35	6.25	3.77	12.50	5.79	1.65	4.32	0
	Middle management (Level 10 -12)	% Of total employees	8.11	6.25	1.89	0	5.79	1.65	6.49	3.23
	Senior (Level 8-9)	% Of total employees	16.22	31.25	11.32	37.50	7.44	5.79	4.32	7.53
	Employee (Level 7 and below)	% Of total employees	74.32	56.25	83.02	50	64.46	7.44	35.14	8.60

Corporate Social Responsibility						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
Corporate Social Responsibility						
	<b>Philanthropic Activities</b>					
	Total contribution	Million baht	7,556,351	4,767,619	N/A	N/A
	Charitable donations	Million baht	573,869	197,358	N/A	N/A
		% Of total costs	8	4	3	3
	Community investments	Million baht	350,809	200,333	N/A	N/A
		% Of total costs	5	4	21	17
	Commercial initiatives	Million baht	6,631,673	4,369,928	N/A	N/A
		% Of total costs	88	92	76	79
	<b>Input</b>					
	Management overheads	Million baht	N/A	3,982,785	4,061,258	7,048,174
	Employee volunteering time during paid working hours	Million baht	N/A	N/A	583,354	590,831
		Hour	N/A	130	N/A	N/A

	Cash contribution	Million baht	427,494	3,571,364	1,219,328	1,545,397
	Products or services donations	Million baht	2,400	197,558	175,703	296,847
413-1	<b>Local Community</b>					
	Percentage of operations with implemented local community engagement, impact assessments, and/or development programs	%	N/A	N/A	N/A	90
	Community and Social Satisfaction	%	93.84	84.60	91.27	91.40
	Community and Social Satisfaction target at fiscal year	%	N/A	84	84	84

**Remarks:**

1. Total worker is total employees including contractors and other persons working for GGC.
2. Total employee is total workforce for GGC.
3. Worker (excluded employee) refers to significant workers that are contractors.
4. Permanent contractor is a permanent employment contract is a contract with an employee for full-time or part-time work for an indeterminate period.
5. Temporary Contract is of limited duration and terminated by a specific event, including the end of a project or work phase or return of replaced personnel.
6. Unclassified means employees who serve the Company on contract as advisors, experts and specialists.
7. GGC Independent director criteria which are aligned with the SAM's criteria (S&P Definition)
8. STEM stands for Science, Technology, Engineering and Mathematics. Positions include, but are not limited to, the following: computer programmer, web developer, statistician, logistician, engineer, physicist and scientist



## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
403-8	Workers Covered by An Occupational Health and Safety Management System									
	Employee									
	Covered by an occupational health and safety management system	Person	N/A	N/A	176	71	182	82	180	86
		%	N/A	N/A	N/A	N/A	100	100	100	100
	Covered by such a system that has been internally audited	Person	55	12	176	71	179	80	177	84
		%	32	17	N/A	N/A	100	100	100	100
	Covered by such a system that has been audited or certified by an external party	Person	70	30	176	71	179	80	177	84
		%	58	100	100	100	100	100	100	100
	Contractors <sup>(3)</sup>									
	Covered by an occupational health and safety management system	Person	310	135	320	150	13,262	3,282	3,399	916
		%	N/A	N/A	N/A	N/A	100	100	100	100
	Covered by such a system that has been internally audited	Person	100	40	320	150	13,262	3,282	3,399	916
		%	30	32	N/A	N/A	100	100	100	100

## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Covered by such a system that has been audited or certified by an external party	Person	70	30	320	150	13,262	3,282	3,399	916
%		32		100		100		100		
403-9	<b>Fatalities As A Result of Work-Related Injury</b>									
	Employee	Case	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
	Contractors <sup>(3)</sup>	Case	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
	<b>Rate Fatalities As A Result of Work-Related Injury</b>									
	Employee	Case/ 1 million man-hours	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Bangkok	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
Other provinces	Case/ 1 million man-hours	0	0	0	0	0	0	0	0	
Contractors <sup>(3)</sup>	Case/ 1 million man-hours	0	0	0	0	0	0	0	0	

## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
		1 million man-hours	0	0	0	0	0	0	0	0
	Rayong	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Bangkok	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Other provinces	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
<b>High-Consequence Work-Related Injuries (Excluding Fatalities)</b>										
	Employee	Case	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
	Contractors <sup>(3)</sup>	Case	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
<b>Rate of High-Consequence Work-Related Injuries (Excluding Fatalities)</b>										
	Employee	Case/ 1 million man-hours	0		0		0		0	
			0	0	0	0	0	0	0	
	Rayong	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Bangkok	Case/ 1 million man-hours	0	0	0	0	0	0	0	0

## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
		1 million man-hours								
	Other provinces	Case/1 million man-hours	0	0	0	0	0	0	0	0
	Contractors <sup>(3)</sup>	Case/1 million man-hours	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case/1 million man-hours	0	0	0	0	0	0	0	0
	Bangkok	Case/1 million man-hours	0	0	0	0	0	0	0	0
	Other provinces	Case/1 million man-hours	0	0	0	0	0	0	0	0
<b>Total Recordable Injuries Case<sup>(4)</sup></b>										
	Employee	Case	0		0		0		1	
			0	0	0	0	0	0	1	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	1	0
	Contractors <sup>(3)</sup>	Case	0		0		0		2	
			0	0	0	0	0	0	2	0
	Rayong	Case	0	0	0	0	0	0	1	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
<b>Recordable Injuries Rate (IR)<sup>(1)</sup></b>										
	Employee		0		0		0		0.89	

## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
		Case/ 1million Manhour	0	0	0	0	0	0	1.09	0
	Rayong	Case/ 1million Manhour	0	0	0	0	0	0	1.74	0
	Bangkok	Case/ 1million Manhour	0	0	0	0	0	0	0	0
	Other provinces	Case/ 1million Manhour	0	0	0	0	0	0	0	0
	Contractors <sup>(3)</sup>	Case/ 1million Manhour	0		0		0		1.59	
			0	0	0	0	0	0	1.87	0
	Rayong	Case/ 1million Manhour	0	0	0	0	0	0	3.69	0
	Bangkok	Case/ 1million Manhour	0	0	0	0	0	0	0	0
	Other provinces	Case/ 1million Manhour	0	0	0	0	0	0	0	0
<b>Number of Hours Worked</b>										
	Employee	Hours	402,606		423,293		568,887		1,115,642.89	
				287,761	N/A	302,721	120,752	421,383	147,054	912,738
	Rayong	Hours	212,943	N/A	222,856	86,777	244,600	53,208	573,127	94,034
	Bangkok	Hours	51,797	N/A	54,599	23,657	37,823	88,344	252,685	106,794
	Other provinces	Hours	23,021	N/A	25,266	10,138	138,960	5,952	86,926	2,078
	Contractors <sup>(3)</sup>	Hours	641,395		696,097		1,007,836		1,257,308	
				553,235	N/A	594,991	101,106	874,992	132,844	1,068,082
	Rayong	Hours	409,394	N/A	414, 879	68,823	616,473	80,924	541,755	80,530
	Bangkok	Hours	99,582	N/A	103, 856	17,999	N/A	N/A	N/A	N/A
	Other provinces	Hours	44,259	N/A	47,001	88,716	258,519	51,920	526,327	108,696
<b>Lost-Time Injury Frequency Rate (LTIFR)</b>										
	Employee	Case	0		0		0		0	
			Case/	0		0		0		0

Health & Safety											
GRI Standards	Required Data	Unit	Data Collection Period								
			2019		2020		2021		2022		
			Male	Female	Male	Female	Male	Female	Male	Female	
		1 million man-hours									
403-9	Data coverage	% Of revenue	100		100		100		100		
	Contractors <sup>(3)</sup>	Case	0		0		0		1		
		Case/1 million man-hours	0		0		0		1.6		
	Data coverage	% Of revenue	100		100		100		100		
	Lost Work Day (LWD) & Lost Day Rate (LDR)										
	Employees	Case	0		0		0		0		
		Case/1 million man-hours	0		0		0		0		
	Contractors <sup>(3)</sup>	Case	0		0		0		0		
		Case/1 million man-hours	0		0		0		0		
	403-10	Number of Fatalities As A Result of Work-Related Ill Health									
Employee		Case	0		0		0		0		
			0	0	0	0	0	0	0	0	
Rayong		Case	0	0	0	0	0	0	0	0	
Bangkok		Case	0	0	0	0	0	0	0	0	
Other provinces		Case	0	0	0	0	0	0	0	0	
Contractors <sup>(3)</sup>		Case	0		0		0		0		
			0	0	0	0	0	0	0	0	
Rayong		Case	0	0	0	0	0	0	0	0	
Bangkok		Case	0	0	0	0	0	0	0	0	
Other provinces	Case	0	0	0	0	0	0	0	0		

## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Number of Cases of Recordable Work-Related Ill Health <sup>(5)</sup>									
	Employee	Case	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
	Contractors <sup>(3)</sup>	Case	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case	0	0	0	0	0	0	0	0
	Bangkok	Case	0	0	0	0	0	0	0	0
	Other provinces	Case	0	0	0	0	0	0	0	0
	Occupational Diseases Rate (ODR) <sup>(2)</sup>									
	Employee	Case/ 1 million man-hours	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Bangkok	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Other provinces	Case/ 1 million man-hours	0	0	0	0	0	0	0	0
	Data coverage	% Of revenue	0	0	0	0	0	0	0	0
	Contractors <sup>(3)</sup>	Case/ 1 million man-hours	0		0		0		0	
			0	0	0	0	0	0	0	0
	Rayong	Case/ 1 million man-hours	0	0	0	0	0	0	0	0

## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
		1 million man-hours								
	Bangkok	Case/1 million man-hours	0	0	0	0	0	0	0	0
	Other provinces	Case/1 million man-hours	0	0	0	0	0	0	0	0
	Data coverage	% Of revenue	0	0	0	0	0	0	0	0
<b>306-3</b>	<b>Process Safety Events - Tier 1</b>									
	Number per million hours worked	Number	0		0		0		0	
	By business activity: production	Number	0		0		0		0	
	By business activity: transportation	Number	0		0		0		0	
	By business activity: storage	Number	0		0		0		0	
	By business activity: other	Number	0		0		0		0	
	Data coverage	% Of revenue	100		100		100		100	
	Target of tier 1 process safety events per million hours worked	Number	0		0		0		0	
<b>306-3</b>	<b>Process Safety Events - Tier 2</b>									



## Health & Safety

GRI Standards	Required Data	Unit	Data Collection Period							
			2019		2020		2021		2022	
			Male	Female	Male	Female	Male	Female	Male	Female
	Number per million hours worked	Number	0		0		0		0	
	By business activity: production	Number	0		0		0		0	
	By business activity: transportation	Number	0		0		0		0	
	By business activity: storage	Number	0		0		0		0	
	By business activity: other	Number	0		0		0		0	
	Data coverage	% Of revenue	0		0		0		0	

### Remarks:

1. Injury types include medical treatment, restricted work and loss time cases.
2. Occupation Disease Rate refers to Occupational Illness Frequency Rate (OIFR).
3. Worker (excluded employee) refers to significant workers that are contractors.
4. Main types of work-related injury
5. Main types of work-related illness health

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
301-1	<b>Material</b>					
	Total material use	Tonnes	405,128	376,177.17	589,991.48	573,447.00
	Non-renewable material	Tonnes	30,882	32,015	61,410.81	56,521.00
	Renewable material	Tonnes	374,246.00	344,461.28	528,580.67	516,925
301-2	Percentage of materials used that are recycled input materials	%	100	100	100	100
302-1	<b>Energy Consumption</b>					
	Total direct non-renewable energy consumption	MWh	683.81	678.48	82,682.66	94,057.71
	Natural gas	MWh	N/A	N/A	N/A	N/A
	LPG	MWh	586.69	581.36	595.39	526.56
	Diesel	MWh	97.12	97.12	128.27	632.84
	Pyrolysis gas oil	MWh	N/A	N/A	N/A	N/A
	Recovered volatile (RV)	MWh	N/A	N/A	N/A	N/A
	Oligomer	MWh	N/A	N/A	N/A	N/A
	Fuel oil	MWh	N/A	N/A	81,959.00	92,903.31
	Fuel gas	MWh	N/A	N/A	N/A	N/A
	Total indirect energy consumption by primary energy source	MWh	570,234.84	582,611.99	521,178.70	599,248.52
	Steam / heating / cooling and other energy (non-renewable) purchased for consumption	MWh	266,637.05	272,442.81	237,127.68	282,175.49
	Electricity (non-renewable) purchased	MWh	36,960.77	37,726.37	46,923.34	51,616.49
Steam (non-renewable) purchased	MWh	266,637.05	272,442.81	237,127.68	265,456.63	

## Environment

GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Cooling (non-renewable) purchased	MWh	N/A	N/A	N/A	N/A
	Total non-renewable energy (electricity and heating & cooling) sold	MWh	0	0	0	0
	Electricity sold	MWh	0	0	0	0
	Steam sold	MWh	0	0	0	0
	Return steam condensate sold	MWh	0	0	0	0
	Heating sold	MWh	0	0	0	0
	Cooling sold	MWh	0	0	0	0
	Total non-renewable energy consumption within the organization	MWh	607,879.45	621,016.84	650,784.84	676,587.45
	Total renewable energy purchased or generated	MWh	0	0	0	0
	Solar cell	MWh	0	0	0	0
	Wind turbine	MWh	0	0	0	0
	Self-generated renewable energy (Stream Boiler) <sup>13</sup>	MWh	0	0	0	0
	Total energy consumption within the organization from non-renewable sources	MWh	607,879.45	621,016.84	650,784.84	676,587.45
	Total renewable energy consumption	MWh	N/A	N/A	N/A	N/A
	Total cost of energy consumption	Total cost of energy consumption	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Percentage of data coverage	% Of Production Volume	100	100	100	100
	Total non-renewable energy consumption target at fiscal year	MWh	N/A	N/A	N/A	N/A
302-2	Total energy consumption outside organization	MWh	N/A	N/A	N/A	N/A
302-3	Total energy intensity <sup>(1)</sup>	MWh/ton production	1.21	1.17	1.47	1.60
302-4	Total energy saved by efforts to reduce energy use and increase energy efficiency	MWh	N/A	N/A	N/A	N/A
	Fuel Saving	MWh	N/A	N/A	N/A	N/A
	Total indirect energy saved from initiative to reduce indirect energy use	MWh	N/A	N/A	N/A	N/A
	Electricity Saving	MWh	N/A	N/A	N/A	N/A
	Steam Saving	MWh	N/A	N/A	N/A	N/A
305-1	<b>Greenhouse Gas Emissions (GHGs)<sup>(2)</sup></b>					
	Total direct GHG emissions (scope1) <sup>(2)</sup>	Tonnes CO <sub>2</sub> equivalent	4,128	27,714	30,708	25,613
	Direct GHG emissions from methane emission (scope 1)	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A
	Percentage of data coverage	% of Production Volume	100	100	100	100

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Total direct GHG emissions (scope1) target at fiscal year	Tonnes CO <sub>2</sub> equivalent	8,511.00	33,333.09	30,707.00	N/A
	Total biogenic CO2 emissions (scope1)	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A
305-2	Total Indirect GHGs emissions from energy purchased and consumes (scope2) <sup>(2)</sup>	Tonnes CO <sub>2</sub> equivalent	61,382	71,974	57,481.16	70,854
	Market-based energy indirect (scope 2) GHG emissions	Tonnes CO <sub>2</sub> equivalent	61,382	65,607	49,119.04	63,757
	- Target of market-based energy indirect (scope 2) GHG emissions	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A
	Location based energy indirect (scope 2) GHG emissions	Tonnes CO <sub>2</sub> equivalent	0	6,367	8,362.12	7,097.00
	- Target of location-based energy indirect (scope 2) GHG emissions	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A
	Total indirect GHGs (scope2) target at fiscal year	Tonnes CO <sub>2</sub> equivalent	61,832.00	59,481.31	N/A	N/A
	Percentage of data coverage	% Of Production Volume	100	100	100	100
305-3	Total Other relevant indirect GHG emission (scope3) <sup>(4)</sup>	Tonnes CO <sub>2</sub> equivalent	N/A	789,672	651,112	3,812 <sup>(4)</sup>

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Other relevant indirect GHG emission (scope 3): purchased of goods and services	Tonnes CO <sub>2</sub> equivalent	N/A	785,798	647,987.00	N/A
	Other relevant indirect GHG emission (scope 3): fuel and energy related activities (not included in scope 1 or scope 2)	Tonnes CO <sub>2</sub> equivalent	N/A	3,874	3,125.00	3,812
	Other relevant indirect GHG emission (scope 3): used of sold products	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	0	N/A
	Total biogenic CO <sub>2</sub> emissions (scope 3)	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A
305-4	GHG emission intensity (scope 1 & 2) <sup>(5)</sup>	Tonnes CO <sub>2</sub> equivalent/ tonnes production	0.131	0.164	0.200	0.228
305-5	Total estimated annual CO2 savings	Tonnes CO <sub>2</sub> equivalent	N/A	1,393	2,616	418.00
	GHG annual reduction target at fiscal year	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A
305-7	Emission <sup>(6)</sup>					
	Volatile organic compounds (VOCs)	Tonnes VOC	N/A	0.01	0.01	0.01
	VOC target at fiscal year	Tonnes VOC	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Percentage of data coverage	% Of Production Volume	N/A	100	100	100
	VOC intensity	Tonnes VOC / million tonne production	N/A	0.03	0.04	0.04
	NOx emissions <sup>[12]</sup>	Tonnes NOx	N/A	51.60	47.86	27.1
	NOx emissions target at fiscal year	Tonnes NOx	N/A	N/A	N/A	N/A
	Percentage of data coverage	% of Production Volume	N/A	100	100	100
	NOx intensity	Tonnes NOx / million tonne production	N/A	103.02	108.36	64.04
	SOx emissions <sup>[12]</sup>	Tonnes SOx	N/A	67.91	114.42	93.3
	SOx emissions target at fiscal year	Tonnes SOx	N/A	N/A	N/A	N/A
	Percentage of data coverage	% Of Production Volume	N/A	100	100	100
	SOx intensity	Tonnes SOx/ million tonne production	N/A	127.84	259.06	220.50
	Total Suspended Particle (TSP)	Tonnes	N/A	11.40	1.78	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	TSP Intensity	Tonnes/ million tonne production	N/A	68.28	11.27	N/A
305-7	Persistent organic pollutants (POP)	Tonnes	N/A	N/A	N/A	N/A
	POP intensity	Tonnes/ million tonne production	N/A	N/A	N/A	N/A
	Hazardous air pollutants (HAP)	Tonnes HAP	N/A	N/A	N/A	N/A
	HAP intensity	Tonnes/ million tonne production	N/A	N/A	N/A	N/A
303-3	<b>Water Consumption<sup>[7]</sup></b>					
	Total water withdrawal from all areas	m <sup>3</sup>	491,451.48	439,567.05	528,421.67	521,653.53
	Fresh water (≤1,000 mg/L Total dissolved solids)	m <sup>3</sup>	491,451.48	439,567.05	528,421.67	521,653.53
	Surface water	m <sup>3</sup>	88,068.33	44,493.22	62471.90	76,150.00
	Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Produced water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Third-party water	m <sup>3</sup>	403,383.15	395,073.83	465,949.77	445,503.53
	Other water (>1,000 mg/L Total dissolved solids)	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A



Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Produced water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Third-party water	m <sup>3</sup>	N/A	N/A	N/A	N/A
303-3	Total water withdrawal from all areas with water stress	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Fresh water (≤1,000 mg/L Total dissolved solids)	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Produced water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Third-party water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Produced water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Other water (>1,000 mg/L Total dissolved solids)	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Produced water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Third-party water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	- Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
- Produced water	m <sup>3</sup>	N/A	N/A	N/A	N/A	

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Water consumption intensity	m <sup>3</sup> /tonne production	0.31	0.11	0.31	0.11
	Water reused	m <sup>3</sup>	N/A	N/A	0.03	13,259.90
	Water recycled	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Total water reused / recycled	m <sup>3</sup>	18,720.00	23,917.00		13,259.91
		% Of total water withdrawal	8.06	10.31	10.65	4.59
303-4	<b>Water Discharge<sup>[8]</sup></b>					
	Total water discharge to all areas	m <sup>3</sup>	338,425.94	379,339.80	390,894.61	475,708.98
	Fresh water (≤1,000 mg/L Total dissolved solids)	m <sup>3</sup>	296,645.75	324,884.54	140,640.44	423,399.20
	Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Third-party water (Total)	m <sup>3</sup>	296,645.75	324,884.54	140,640.44	423,399.20
	Other water (>1,000 mg/L Total dissolved solids)	m <sup>3</sup>	41,780.19	54,455.26	250,254.17	52,309.78
	Surface water	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Groundwater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Seawater	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Third-party water (Total)	m <sup>3</sup>				
	Total water discharge to all areas with water stress	m <sup>3</sup>	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Fresh water ( $\leq 1,000$ mg/L Total dissolved solids)	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Other water ( $> 1,000$ mg/L Total dissolved solids)	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Water discharge quality					
	BOD Loading	Tonnes	0.94	8.17	N/A	312.03
	TSS Loading	Tonnes	0.85	5.34	N/A	48.8
	Oil and Grease Loading	Tonnes	0.11	0.54	N/A	7.77
	Total direct COD	Tonnes	8.84	22.67	1,655.18	589
	Percentage of data coverage	% Of Production Volume	100	100	100	100
	Total direct COD target at fiscal year	Tonnes COD	N/A	N/A	N/A	N/A
303-5	Water Consumption					
	Withdrawal: Total municipal water supplies (or from other water utilities)	m <sup>3</sup>	403,383.15	395,073.83	465,949.77	445,503.53
	Withdrawal: Fresh surface water	m <sup>3</sup>	88,068.33	44,493.22	62,471.90	76,150.00
	Withdrawal: Fresh ground water	m <sup>3</sup>	0	0	0	0
	Discharge: Water returned to the source of extraction at similar or higher quality as raw water extracted	m <sup>3</sup>	0	0	0	0
	Total net freshwater consumption	m <sup>3</sup>	491,451.48	439,567.05	528,421.67	521,653.53

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Percentage of data coverage	% Production Volume	100	100	100	100
	Target of total net freshwater consumption at fiscal year	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Total water consumption from all areas	m <sup>3</sup>	153,025.54	60,227.25	137,527.06	45,944.55
	Total water consumption from all areas with water stress	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Change in water storage (if water storage has been identified as having a significant water-related impact)	m <sup>3</sup>	N/A	N/A	N/A	N/A
306-3	<b>Waste Generated</b>					
	Total Waste generated	Tonnes	6,199.47	6,929.58	5,785.64	10,637.83
	Data coverage	% Of production volume	100	100	100	100
	<b>Routine waste generation</b>					
	Total Hazardous waste as defined by National Legislation	Tonnes	N/A	550.67	439.28	815.74
	Data Coverage	% Of Production Volume	N/A	100	100	100
	Total Hazardous waste Generated target at fiscal year	Tonnes	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Total Non-Hazardous waste as defined by National Legislation	Tonnes	6,180.19	6,378.91	5,346.36	9,822.09
	Data Coverage	% Of Production Volume	N/A	100	100	100
	Total waste generated target at fiscal year	Tonnes	N/A	N/A	N/A	N/A
	Non-routine waste generation <sup>[10]</sup>					
	Total waste generated	Tonnes	19.28	N/A	N/A	3,395.27
	Hazardous waste generated as defined by national legislation	Tonnes	N/A	N/A	N/A	N/A
	Total non-hazardous waste generated as defined by national legislation	Tonnes	19.28	N/A	N/A	3,395.27
306-4	Waste Diverted from Disposal					
	Total weight of waste diverted from disposal	Tonnes	N/A	456.07	448.19	1,186.24
	Routine waste generation					
	Total hazardous waste diverted from disposal	Tonnes	N/A	68.75	135.31	432.58
	Target of total hazardous waste diverted from disposal at fiscal year	Tonnes	N/A	N/A	N/A	N/A
	Preparation for reuse	Tonnes	N/A	N/A	0	0
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	N/A	N/A	0	0
	Recycling	Tonnes	N/A	4.60	40.42	45.52
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	N/A	4.60	40.42	45.52

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Other recovery operations	Tonnes	N/A	64.15	94.89	387.06
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	N/A	64.15	94.89	387.06
	Total non-hazardous waste diverted from disposal	Tonnes	N/A	387.32	312.88	753.66
	Target of total non-hazardous waste diverted from disposal at fiscal year	Tonnes	N/A	N/A	N/A	N/A
	Preparation for reuse	Tonnes	N/A	13.41	87.15	15.66
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	N/A	13.41	87.15	15.66
	Recycling	Tonnes	N/A	25.08	26.12	328.65
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	N/A	25.08	26.12	328.65
	Other recovery operations	Tonnes	N/A	348.83	199.61	409.35
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	N/A	348.83	199.61	409.35
	Non-routine waste generation					
	Total hazardous waste diverted from disposal	Tonnes	N/A	N/A	N/A	N/A
	Preparation for reuse	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Recycling	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Other recovery operations	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Total non-hazardous waste diverted from disposal	Tonnes	N/A	N/A	N/A	N/A
	Preparation for reuse	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Recycling	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Other recovery operations	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
306-5	<b>Waste Directed to Disposals<sup>(11)</sup></b>					
	Total weight of waste directed to disposal	Tonnes	223.86	6,550.85	5,390.40	6,146.53
	Total waste disposed Target	Tonnes	N/A	N/A	N/A	N/A
	<b>Routine waste generation</b>					
	Total hazardous waste directed to disposal	Tonnes	203.53	481.92	303.97	388.69
	Target of total hazardous waste directed to disposal at fiscal year	Tonnes	N/A	N/A	N/A	N/A
	Incineration (with energy recovery)	Tonnes	186.25	476.42	297.69	382.86

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	186.25	476.42	297.69	382.86
	Incineration (without energy recovery)	Tonnes	7.41	5.24	6.28	5.83
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	7.41	5.24	6.28	5.83
	Landfilling	Tonnes	0	0	0	0
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	0	0	0	0
	Other disposal operations (storage in packing or containers (used battery))	Tonnes	9.87	0.26	0	0
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	9.87	0.26	0	0
	Total Non-hazardous waste directed to disposal	Tonnes	20.33	6,068.93	5,086.43	5,757.84
	Target of total non-hazardous waste directed to disposal at fiscal year	Tonnes	N/A	N/A	N/A	N/A
	Incineration (with energy recovery)	Tonnes	0	5,592.73	4,817.13	5,585.04
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	0	5,592.73	4,817.13	5,585.04
	Incineration (without energy recovery)	Tonnes	0	0	0	0
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	0	0	0	0
	Landfilling	Tonnes	0	0	0	0



Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	0	0	0	0
	Other disposal operations (Composted Waste and bio-oil production sewage sludge)	Tonnes	20.33	476.2	269.30	172.80
	Onsite <sup>[9]</sup>	Tonnes	0	0	0	0
	Offsite	Tonnes	20.33	476.2	269.30	172.80
Non-routine waste generation						
	Total hazardous waste directed to disposal	Tonnes	N/A	N/A	N/A	N/A
	Incineration (with energy recovery)	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Incineration (without energy recovery)	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Landfilling	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Other disposal operations (storage in packing or containers (used battery))	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Total non-hazardous waste directed to disposal	Tonnes	N/A	N/A	N/A	N/A
	Incineration (with energy recovery)	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Incineration (without energy recovery)	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Landfilling	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Municipal waste	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
	Other disposal operations (land reclamation)	Tonnes	N/A	N/A	N/A	N/A
	Onsite <sup>[9]</sup>	Tonnes	N/A	N/A	N/A	N/A
	Offsite	Tonnes	N/A	N/A	N/A	N/A
306-3	Spills					
	Oil spills	Cases	N/A	N/A	N/A	N/A
		m <sup>3</sup>	N/A	N/A	N/A	N/A
	Volume of spill recovered	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Fuel spills	Cases	N/A	N/A	N/A	N/A
		m <sup>3</sup>	N/A	N/A	N/A	N/A
	Volume of spill recovered	m <sup>3</sup>	N/A	N/A	N/A	N/A

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Water spills	Cases	N/A	N/A	N/A	N/A
		m <sup>3</sup>	N/A	N/A	N/A	N/A
	Volume of spill recovered	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Chemical spills	Cases	N/A	N/A	N/A	N/A
		m <sup>3</sup>	N/A	N/A	N/A	N/A
	Volume of spill recovered	m <sup>3</sup>	N/A	N/A	N/A	N/A
	Flared and Vented Hydrocarbon					
	Volume of flared and vented hydrocarbon	Million m <sup>3</sup>	N/A	N/A	N/A	N/A
2-27	Environmental Violations					
	Number of violations of legal obligations/ regulations	Number	0	0	0	0
	Amount of fines/penalties related to the above	Million baht	0	0	0	0
	Environmental liability accrued at year end	Number	0	0	0	0
2-25	Return on Environmental Investment					
	Total Expenditures	Baht	9,330,000	18,246,509	26,240,000	85,850,000
	Capital investments	Baht	N/A	342,000	16,570,000	69,850,000
	Operating expenses	Baht	9,330,000	17,904,509	9,670,000	16,000,000
	- Waste disposal, emission treatment, and remediation costs	Baht	N/A	N/A	N/A	N/A
	- Prevention and environmental management costs	Baht	N/A	N/A	N/A	N/A
	Savings, cost avoidance, income, tax incentives, etc.	Baht	N/A	8,300,000	21,320,000	136,500,000

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Operations covered (by revenue, production volume, or employees, etc.)	% Of Operation Covered	100	100	100	100
	<b>Denominator - Production</b>					
	Total production volume	Tonnes	500,862	531,172	441,660	423,122
	<b>Life Cycle Assessment</b>					
	Percentage of full product LCAs conducted	% Of total products	N/A	N/A	N/A	N/A
	Percentage of simplified product LCAs conducted	% Of total products	N/A	N/A	N/A	N/A
	Other	% Of total products	N/A	N/A	N/A	N/A
301-1	<b>Renewable Raw Materials</b>					
	Percent of raw materials by weight or volume are from renewable resources	% Of total products	100	100	100	100
	<b>Exposure to Hazardous Substances</b>					
	Percentage of products containing restricted substance in the Annex XVII of REACH regulation	% Of total products	0	0	0	0
	Percentage of products containing substances of the candidate list of very high concern (SVHC) for authorization above 0.1% by weight	% Of total products	0	0	0	0

Environment						
GRI Standards	Required Data	Unit	Data Collection Period			
			2019	2020	2021	2022
	Percentage of products (in terms of revenues) has undergone risk assessment for their potential impact on human health and the environment	% Of Total products	N/A	N/A	N/A	N/A
	<b>Low-Carbon Products</b>					
	Avoided GHG emissions for client's products	% Of total revenues from products	N/A	78	37	34
	Low carbon products	% Of total revenues from products	N/A	N/A	25	56
305-5	<b>Climate Strategy Impacts</b>					
	Total estimated annual CO <sub>2</sub> savings	Tonnes CO <sub>2</sub> equivalent	N/A	1,392.60	2,616.32	1,510.29
	Total annual investment required of anticipated annual CO <sub>2</sub>	Million baht	N/A	14	14	0
	Total anticipated annual cost savings	Million baht	N/A	9.40	11.14	6.561
	GHG annual reduction target at fiscal year	Tonnes CO <sub>2</sub> equivalent	N/A	N/A	N/A	N/A

**Remarks:**

1. All type of energy included in the intensity ratio and consumed within organization.
2. GHGs emissions based on report of 1) GHGs calculation standard, methodology, emission factors and GWP referred to IPCC 2006, WRI GHG protocol and ISO 14064. 2) The operational control approach for emissions.
3. All greenhouse gases include in the report.

4. Indirect GHG emissions scope 3 categories activities reported include Category 3 of Fuel and energy-related activities as it has been verified in 2022. However, there is a study of Scope 3 emissions without verification of 15 Categories and 5 categories are identified as significant to GGC. Those are comprised of
  - Category 1 Purchased goods and services
  - Category 4 Upstream transportation and distribution
  - Category 5 Waste generated in operations
  - Category 6 Business Activities
  - Category 7 Employee Commuting
5. Types of GHG emissions, which are direct (scope 1) and energy indirect (scope 2), included in the intensity ratio.
6. Standards, methodologies, source of emission factors and assumptions used are identified from relevant regulations. The measurement approaches include direct and/or continuous measurement.
7. Information drawn from water meters and calculations derived from available water data.
8. Sum of effluents, used water, and unused water released to surface water, groundwater, seawater, or a third party, for which the organization has no further use, over the course of the reporting period.
9. As defined by National Legislation and there is no on-site storage during reporting year.
10. Wastes from non-routine operations i.e. construction waste. This includes hazardous wastes and non-hazardous wastes.
11. As fully complied with the waste disposal defined by Notification of the Ministry of Industry Re: Disposal of Wastewater or Unused Materials 2005, GGC transfers all waste to external waste disposers for direct disposal (Off-site) only.
12. NOx and SOx is generated from Plant 2 only, as Plant 1 doesn't have combustion stack
13. Self-Generated renewable energy: In plant 1, GGC has utilized the excessed heat in the cooling water from the output of cooling process to generating steam used in own operation.