

Environmental Performance							
ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023
	SASB						
E2.2C	GRI 302-1 TC-TL-130a.1.	Energy consumption within the organization					
	(1+2-3)	Net energy consumption within the organization ³ (Non-renewable + Renewable) - Energy sold	Megajoules	22,902,868.83	21,612,457.11	17,881,017.72	19,259,679.46
	(1+2)	Total energy consumption within the organization (Non-renewable + Renewable)	Megajoules	22,902,868.83	21,612,457.11	17,881,017.72	19,259,679.46
			Kilowatt-hours	6,361,908.01	6,003,460.31	4,966,949.37	5,349,910.96
	Ratio	Ratio of renewable energy use in total energy use	%	1.6%	1.7%	2.1%	2.0%
		Ratio of non-renewable energy use in total energy use	%	98%	98%	98%	98%
	1	Total Non - Renewable Energy Consumption	Megajoules	22,526,506.83	21,255,214.71	17,501,775.72	18,876,815.86
			Kilowatt-hours	6,257,363.01	5,904,226.31	4,861,604.37	5,243,559.96
		Total stationary combustion	Megajoules	88,094.52	74,879.52	70,873.32	125,649.00
			Kilowatt-hours	24,470.70	20,799.87	19,687.03	34,902.50
		- Total liquid fuel	Megajoules	88,094.52	74,879.52	70,873.32	125,649.00
		- Benzene (Gasoline)	Litres	0.00	0.00	0.00	0.00
		- Diesel fuel	Litres	2,418.85	2,056.00	1,946.00	3,450.00
		Total mobile combustion	Megajoules	1,113,236.32	1,019,989.59	1,245,136.80	1,505,221.78
			Kilowatt-hours	309,232.31	283,330.44	345,871.33	418,117.16
		- Total liquid fuel	Megajoules	1,113,236.32	1,019,989.59	1,245,136.80	1,505,221.78
		- Benzene (Gasoline)	Litres	9,670.76	4,003.96	8,467.32	7,573.74
		- Diesel fuel	Litres	22,207.60	24,545.44	26,869.45	34,783.10
		Total electricity purchased from non-renewable energy sources	Megajoules	21,325,176.00	20,160,345.60	16,185,765.60	17,245,945.08
			Kilowatt-hours	5,923,660.00	5,600,096.00	4,496,046.00	4,790,540.30
- SJ infinite business complex ² floor 28-29 (Office)	kWh	N/A	N/A	175,746.00	336,020.30		
- Thaicom Satellite Station - Ladlumkaew ²	Kilowatt-hours	4,371,660.00	4,343,096.00	4,320,300.00	4,454,520.00		
- Thaicom Satellite Station - Karai ¹	Kilowatt-hours	1,552,000.00	1,257,000.00	N/A	N/A		
E2.3C	2	Total Renewable energy consumption within the organization	Megajoules	376,362.00	357,242.40	379,242.00	382,863.60
			Kilowatt-hours	104,545.00	99,234.00	105,345.00	106,351.00
	Total electricity purchased from renewable energy sources						
	- Purchased electricity from renewable-energy sources (Solar energy)	Megajoules	0.00	0.00	0.00	0.00	
		Kilowatt-hours	0.00	0.00	0.00	0.00	
	Self-generated electricity from renewable energy sources						
- Self-generated electricity from solar panel	Megajoules	376,362.00	357,242.40	379,242.00	382,863.60		
	Kilowatt-hours	104,545.00	99,234.00	105,345.00	106,351.00		
3	Total energy sold (Electricity and heating sold)	Megajoules	0.00	0.00	0.00	0.00	
		Kilowatt-hours	0.00	0.00	0.00	0.00	
	- Non-renewable energy sold (electricity)	Megajoules	0.00	0.00	0.00	0.00	
		Kilowatt-hours	0.00	0.00	0.00	0.00	
	- Renewable energy sold (electricity)	Megajoules	0.00	0.00	0.00	0.00	
		Kilowatt-hours	0.00	0.00	0.00	0.00	
E2.5R ICT-E1.2	GRI302-3	Energy Intensity					
		Total energy usage per area ^{1 and 2}	Mwh/square metre	0.90	0.85	0.66	0.72
		World Average Accepted Levels of PUE Refer to : Demystifying PUE metric. A guide to use PUE as an operational metric https://shorturl.at/oz248	1.2	1.5	2.0	2.5	3.0
		Power Usage Effectiveness: PUE ⁵	-	N/A	N/A	N/A	1.78
ICT-E1.2	GRI302-3	- Total Facility Power	Kilowatt-hours	N/A	N/A	N/A	3,815,373.02
		- IT Load	Kilowatt-hours	N/A	N/A	N/A	2,137,472.12

Remarks

1. The boundary of this energy performance Reporting of Thaicom Public Company Limited for the Fiscal Year 2020 - 2021 covers the following areas.
 - 1.1 Thaicom Satellite Station - Karai (the expiration of the operation concession was in September 2021)
 - 1.2 Thaicom Satellite Station - Ladlumkaeo
2. The boundary of this energy performance Reporting of Thaicom Public Company Limited for the Fiscal Year 2022 - 2023 covers the following areas.
 - 2.1. SJ Infinite I Business Complex FL. 28 and 29 (Office)
 - 2.2. Thaicom Satellite Station - Ladlumkaeo
3. In 2023, Thaicom Public Company Limited reported energy usage within the organization following the reporting requirements of GRI 302 Energy, version 2016, and SASB Standards: Telecommunication Services (TC-TL-130a.1). The previous values of energy data were recalculated from 2020 to 2023 for this report. Any data from 2020 to 2023 that does not conform to the new standard will be replaced with N/A.
4. The energy conversion was calculated by multiplying fuel volumes with the conversion factor provided by the Department of Alternative Energy Development and Efficiency (DEDE).
- 5 The Power Usage Effectiveness (PUE) is the ratio of Total Facility Power to IT Load, used to measure the energy efficiency of a data center. In 2023, Thaicom Public Company Limited began to report PUE data for the first year.

ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023
	SASB						
E3.2C	GRI303-3	Total water withdrawal (1 Megalitres = 1,000 Cubic metres)					
		Water withdrawal by source					
		Total third-party water withdrawal by withdrawal source	Megalitres	8.92	7.28	3.83	3.20
		Surface water - Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	7.66	6.14	3.83	3.20
		Surface water - Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	1.26	1.14	0.00	0.00
		- Third-party water (Municipal water supply) SJ infinite business complex floor 28-29 (Office) ²	Megalitres	N/A	N/A	0.079	0.120
		- Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	N/A	N/A	0.079	0.120
		- Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	N/A	N/A	0.000	0.000
		- Third-party water (Municipal water supply) Thaicom Satellite Station - Ladlumkaew ²	Megalitres	4.180	3.88	3.75	3.08
		- Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	4.18	3.88	3.75	3.08
		- Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	0.00	0.00	0.00	0.00
		- Third-party water (Municipal water supply) Thaicom Satellite Station - Karai ¹	Megalitres	4.74	3.41	N/A	N/A
		- Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	3.48	2.26	N/A	N/A
		- Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	1.26	1.14	N/A	N/A
	GRI303-3	Water stress level in the area (%)	LOW (< 10%)	Low to medium (10-20%)	Medium to high (20-40%)	High (40-80%)	Extremely high (>80%)
	Water Stress and Riverine flood risk	Refer to: https://www.wri.org/aqueduct/tools					
		- SJ infinite business complex floor 28-29 (Office) ²	High (40-80%)				
		- Thaicom Satellite Station - Ladlumkaew ²	High (40-80%)				
	Operation: Basin Risk	- Thaicom Satellite Station - Karai ¹	High (40-80%)				
		- SJ infinite business complex floor 28-29 (Office) ²	Very Low risk (1.78)				
- Thaicom Satellite Station - Ladlumkaew ²		Very Low risk (1.78)					
		- Thaicom Satellite Station - Karai ¹	Very Low risk (1.78)				
	Remarks: - Water stress refers to a condition of freshwater scarcity, measures the ratio of water demand to available renewable surface and groundwater supplies within water cycle. Total water demand includes usage for domestic, industrial, irrigation, and livestock purposes. (Source: World Resource Institute: WRI) - Thaicom Public Company Limited operates its business within Bangkok and Pathum Thani Province, these areas are classified as facing water stress and high riverine flood risk (High 40-80%) according to assessments conducted using the Aqueduct Water Risk Atlas tool by the World Resources Institute (WRI). Nevertheless, Thaicom's internal water usage aims primarily for consumption and health purposes which the evaluation of operational risks due to water scarcity using the WWF Water Risk Filter indicated a very low risk level of 1.78 (Very low risk: 1.0 - 1.8).						

ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023														
	SASB																				
E3.2C	GRI303-3	Total third-party water withdrawal from all areas in water stress areas	Megalitres	8.92	7.28	3.83	3.20														
		Surface water - Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	7.66	6.14	3.83	3.20														
		Surface water - Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	1.26	1.14	0.00	0.00														
		- Third-party water (Municipal water supply) SJ infinite business complex floor 28-29 (Office) ²	Megalitres	N/A	N/A	0.08	0.12														
		- Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	N/A	N/A	0.079	0.120														
		- Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	N/A	N/A	0.000	0.000														
		- Third-party water (Municipal water supply) Thaicom Satellite Station - Ladlumkaew ²	Megalitres	4.18	3.88	3.75	3.08														
		- Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	4.18	3.88	3.75	3.08														
		- Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	0.00	0.00	0.00	0.00														
		- Third-party water (Municipal water supply) Thaicom Satellite Station - Karai ¹	Megalitres	4.74	3.41	N/A	N/A														
		- Freshwater (≤1,000 mg/L Total Dissolved Solids)	Megalitres	3.48	2.26	N/A	N/A														
- Other water (>1,000 mg/L Total Dissolved Solids)	Megalitres	1.26	1.14	N/A	N/A																
E3.5R	GRI303-4	Water discharge																			
		Total water discharge to all areas	Megalitres	8.92	7.28	3.83	3.20														
		Water discharge by level of treatment - Treatment level: Activated Sludge System	Megalitres	8.92	7.28	3.83	3.20														
		Remarks: - Water discharge to third-party water (Municipal wastewater treatment plants) is treated according to Ministry of Natural Resources and Environment: Standards for Controlling Wastewater Discharge from Community Wastewater Treatment Systems. http://surl.li/rabfr - Ministry of Natural Resources and Environment Pollution Control Department of Thailand has announced the standard values for controlling the discharge of wastewater from community wastewater treatment systems as follows.																			
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Water Index</th> <th style="text-align: center;">Standard</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">pH</td> <td style="text-align: center;">5.5</td> </tr> <tr> <td style="text-align: center;">Biochemical Oxygen Demand</td> <td style="text-align: center;">20 mg/litre</td> </tr> <tr> <td style="text-align: center;">Suspended Solids</td> <td style="text-align: center;">30 mg/litre</td> </tr> <tr> <td style="text-align: center;">Oil and Grease</td> <td style="text-align: center;">5 mg/litre</td> </tr> <tr> <td style="text-align: center;">Total Nitrogen</td> <td style="text-align: center;">20 mg/litre</td> </tr> <tr> <td style="text-align: center;">Total Phosphorus</td> <td style="text-align: center;">2 mg/litre</td> </tr> </tbody> </table>	Water Index	Standard	pH	5.5	Biochemical Oxygen Demand	20 mg/litre	Suspended Solids	30 mg/litre	Oil and Grease	5 mg/litre	Total Nitrogen	20 mg/litre	Total Phosphorus	2 mg/litre					
		Water Index	Standard																		
		pH	5.5																		
		Biochemical Oxygen Demand	20 mg/litre																		
		Suspended Solids	30 mg/litre																		
		Oil and Grease	5 mg/litre																		
		Total Nitrogen	20 mg/litre																		
Total Phosphorus	2 mg/litre																				
Water discharge volume to third-party SJ infinite business complex floor 28-29 (Office) ²	Megalitres	N/A	N/A	0.08	0.12																
- Third-party water (Municipal wastewater treatment plants)	Megalitres	N/A	N/A	0.079	0.120																
- Percentage of treated wastewater before discharge	Megalitres	N/A	N/A	100%	100%																
- Total freshwater discharge (Freshwater (≤1,000 mg/L Total Dissolved Solids))	Megalitres	N/A	N/A	0.079	0.120																
- Total other water discharge (Other water (>1,000 mg/L Total Dissolved Solids))	Megalitres	N/A	N/A	0.00	0.00																
Water discharge volume to third-party Thaicom Satellite Station - Ladlumkaew ²	Megalitres	4.18	3.88	3.75	3.08																
- Third-party water (Municipal wastewater treatment plants)	Megalitres	4.18	3.88	3.75	3.08																
- Percentage of treated wastewater before discharge	Megalitres	1.00	100%	100%	100%																
- Total freshwater discharge (Freshwater (≤1,000 mg/L Total Dissolved Solids))	Megalitres	4.18	3.88	3.75	3.08																
- Total other water discharge (Other water (>1,000 mg/L Total Dissolved Solids))	Megalitres	0.00	0.00	0.00	0.00																

ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023
	SASB						
E3.5R	GRI303-4	Water discharge volume to third-party Thaicom Satellite Station - Karai ¹	Megalitres	4.74	3.41	N/A	N/A
		- Third-party water (Municipal wastewater treatment plants)	Megalitres	4.74	3.41	N/A	N/A
		- Percentage of treated wastewater before discharge	Megalitres	100%	100%	N/A	N/A
		- Total freshwater discharge (Freshwater ($\leq 1,000$ mg/L Total Dissolved Solids))	Megalitres	3.48	2.26	N/A	N/A
		- Total other water discharge (Other water ($>1,000$ mg/L Total Dissolved Solids))	Megalitres	1.26	1.14	N/A	N/A
		Total water discharge in water stress areas	Megalitres	8.92	7.28	3.83	3.20
		- Total freshwater discharge (Freshwater ($\leq 1,000$ mg/L Total Dissolved Solids))	Megalitres	7.66	6.14	3.83	3.20
		- Total other water discharge (Other water ($>1,000$ mg/L Total Dissolved Solids))	Megalitres	1.26	1.14	0.00	0.00
E3.2C	GRI303-5	Net water consumption					
		- Total water consumption	Megalitres	8.92	7.28	3.83	3.20
		- Total water consumption in water stress areas	Megalitres	8.92	7.28	3.83	3.20
E3.4R	-	Water Intensity (water consumption / number of employees)					
		The ratio of water consumption per total employees	Cubic meters /person	25.345	21.608	11.600	10.019
		Remarks: - The World Health Organization (WHO) specifies that the basic amount of water necessary for good health ranges from 50 to 100 liters per person per day (equivalent to 18.25 – 36.50 cubic meters per person per year) https://shorturl.at/hqyl2 - The Environmental Protection Agency (EPA) recommends a range of 10-25 gallons of water per person per work shift, equivalent to 37.85 – 94.63 liters per person per work shift (equivalent to 13.8 – 34.5 cubic meters per person per year), which the lower value is used when the facility has only toilets. The higher value is used when the facility has toilets, showers, and full kitchen services (food preparation and dishwashing). https://shorturl.at/ozEIK					

Remarks

- The boundary of this water performance Reporting of Thaicom Public Company Limited for the Fiscal Year 2020 - 2021 covers the following areas.
 - Thaicom Satellite Station - Karai (the expiration of the operation concession was in September 2021)
 - Thaicom Satellite Station - Ladlumkaeo
- The boundary of this water performance Reporting of Thaicom Public Company Limited for the Fiscal Year 2022 - 2023 covers the following areas.
 - SJ Infinite I Business Complex FL. 28 and 29 (Office)
 - Thaicom Satellite Station - Ladlumkaeo
- In 2023, Thaicom Public Company Limited reported water performance within the organization following the reporting requirements of GRI 303 Water and Effluents, version 2018. The previous values of water data were recalculated from 2020 to 2023 for this report. Any data from 2020 to 2023 that does not conform to the new standard will be replaced with N/A.
- Total volume of water withdrawal by destinations (third-party) was collected from water invoices.
- The source of Total Dissolved Solids (TDS) measurements was obtained from the following water tools websites;
 - Metropolitan Waterworks Authority : Real-time raw water quality monitoring station, Department of Water Resource, Metropolitan Waterworks Authority <http://rwc.mwa.co.th/page/info/>
 - Provincial Waterworks Authority : Raw Water Monitoring Station Project, Provincial Waterworks Authority <https://tele-wrd.pwa.co.th/web/?view=more&type=lab&site1=R2-PT-PT-02&date1=2023-01-1&date2=2023-12-31&page=1>

ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023	
	SASB							
		Organizational Greenhouse Gas Inventory (tCO ₂ e = ton carbon dioxide equivalent)						
	GRI305-1	Direct emissions from business operations (Scope 1)						Base year ^{4*}
		Direct emissions from sources owned or controlled by the company (Scope 1)		tCO ₂ e	N/A	N/A	170	308
		- Carbon dioxide (CO ₂)		tCO ₂ e	N/A	N/A	96.24	122.34
		- Fossil fuels (Fossil CH ₄)		tCO ₂ e	N/A	N/A	0.32	0.34
		- Methane (CH ₄ from Septic tank)		tCO ₂ e	N/A	N/A	42.68	28.12
		- Nitrous oxide(N ₂ O)		tCO ₂ e	N/A	N/A	1.59	1.87
		- Fugitive emissions from refrigeration leakage (HFCs)		tCO ₂ e	N/A	N/A	29.07	155.22
	Separately report	- Fugitive emissions from refrigeration leakag (R22)		tCO ₂ e	N/A	N/A	245.66	437.36
		- Fugitive emissions from Fire extinguishers (HCFCs)		tCO ₂ e	N/A	N/A	-	1.61
	GRI305-2	Indirect emissions from purchased electricity (Scope 2)						
		Indirect emissions from purchased electricity (Scope 2)		tCO ₂ e	N/A	N/A	2,248	2,395
		Indirect emissions from purchased electricity at Thaicom Satellite Station - Ladlumkaeo		tCO ₂ e	N/A	N/A	2,159.72	2,226.65
		- Carbon dioxide (CO ₂)		tCO ₂ e	N/A	N/A	2,140.44	2,206.77
		- Fossil fuels (Fossil CH ₄)		tCO ₂ e	N/A	N/A	0.00	0.00
		- Methane (CH ₄ from Septic tank)		tCO ₂ e	N/A	N/A	7.38	7.61
		- Nitrous oxide(N ₂ O)		tCO ₂ e	N/A	N/A	11.91	12.28
		Indirect emissions from purchased electricity at SJ Infinite I Business Complex Fl. 28 and 29 (Office)		tCO ₂ e	N/A	N/A	87.85	167.96
		- Carbon dioxide (CO ₂)		tCO ₂ e	N/A	N/A	87.06	166.46
		- Fossil fuels (Fossil CH ₄)		tCO ₂ e	N/A	N/A	0.00	0.00
		- Methane (CH ₄ from Septic tank)		tCO ₂ e	N/A	N/A	0.30	0.57
- Nitrous oxide(N ₂ O)		tCO ₂ e	N/A	N/A	0.48	0.93		
E5.2C		Total Direct and indirect emissions (Scope 1+2)						
	Total Direct and indirect emissions (Scope 1+2)		tCO ₂ e	N/A	N/A	2,417	2,703	
	GRI305-3	Indirect emissions, downstream sources not owned or controlled by the company (Scope 3)						
		Upstream		tCO ₂ e	N/A	N/A	491	473
		- Purchased goods and services (Category 1)		tCO ₂ e	N/A	N/A	5.40	N/A ¹⁰
		- Fuel- related emissions (Category 3)		tCO ₂ e	N/A	N/A	76.07	N/A ¹⁰
E5.5R		Total Direct and indirect emissions (Scope 1+2+3)						
		Total Direct and indirect emissions Scope 1+2+3		tCO ₂ e	N/A	N/A	2,909	3,176
E5.6R	GRI305-4	Greenhouse gas emission intensity						
		The ratio of GHG emissions per unit operation areas		tCO ₂ e/sq.m	N/A	N/A	0.324	0.362
		The ratio of GHG emissions per revenue from sales and services (Satellite business services and Internet service and media)		tCO ₂ e/million THB	N/A	N/A	0.826	1.029

Remarks

1. The boundary of Greenhouse Gas (GHG) inventory of Thaicom Public Company Limited for the Fiscal Year 2020 - 2021 covers the following areas.

1.1 Thaicom Satellite Station - Karai (the expiration of the operation concession was in September 2021)

1.2 Thaicom Satellite Station - Ladlumkaeo

2. The boundary of Greenhouse Gas (GHG) inventory of Thaicom Public Company Limited for the Fiscal Year 2022 - 2023 covers the following areas.

2.1. SJ Infinite I Business Complex Fl. 28 and 29 (Office)

2.2. Thaicom Satellite Station - Ladlumkaeo

3. In 2023, Thaicom Public Company Limited reported Greenhouse Gas (GHG) inventory following the reporting requirements of GRI 305 Emissions, version 2016. The previous values of GHG emission data were recalculated from 2022 to 2023 for this report. Any data from 2020 to 2023 that does not conform to the new standard will be replaced with N/A.
4. * Thaicom Public Company Limited has disclosed its greenhouse gas inventory covering the scope of the company's operations. The GHG inventory report was verified by Third-party and registered to the report of greenhouse gas emissions with Thailand Greenhouse Gas Management Organization (TGO). The calculations of greenhouse gas emissions from electricity consumption at SJ Infinite I Business Complex, Floors 28 and 29 (Office), Chom Thong Subdistrict, Chatuchak District, Bangkok, in the year 2022 were partially incorrect because some areas were not yet occupied by employees. This resulted in the inability to reference electricity and energy consumption as a base year for the year 2022. Thus, the company has designated the year 2023 as the base year since there was full staffing and operations throughout the year.
5. The Greenhouse Gas (GHG) inventory includes Scope 1, Scope 2, and Scope 3 emissions were calculated using the "Greenhouse Gas Inventory (AR5) Version 4 (TCFO_R_01 Version 04: 21/2/2020)" calculation tool provided by Thailand Greenhouse Gas Management Organization (TGO), based on 2006 IPCC Guidelines for National Greenhouse Gas Inventories guidelines.
6. The calculation of Direct emissions Scope 1 uses the emission factors from the database of the TGO, referencing the latest IPCC report. This includes greenhouse gas emission factors and reference data sources used in the calculations, as well as the Global Warming Potential (GWP) values.
7. The calculation of Indirect emissions Scope 2 uses emission factors for electricity consumption from the database of the TGO, referencing the Thai National Life Cycle Inventory (LCI) Database, TIIS-MTEC-NSTDA (Thai National LCI Database, TIISMTEC-NSTDA, AR5 (with TGO electricity 2016-2018)).
8. The calculation of Other indirect emissions Scope 3 uses emission factors from the database of the TGO, referencing the Thai National LCI Database, TIIS-MTEC-NSTDA
9. In 2022, the other indirect emissions Scope 3 reporting consists of 2 categories:
 - Category 1: Purchased Goods and Services; quantity of A4 paper used in the office.
 - Category 3: Fuel- and energy-related activities; acquisition of fuel and electricity consumption.
10. In 2023, the other indirect emissions Scope 3 reporting consists of 1 category, based on the assessment of other indirect greenhouse gas emissions sources (Type 3) Annex 12 in the "Guidance on Other indirect emissions Scope 3" of Thailand Greenhouse Gas Management Organization (TGO), and the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. This category includes:
 - * Category 3: Fuel- and energy-related activities; acquisition of electricity consumption.
- In 2023, a new significant scope 3 assessment was conducted, referencing the assessment of other indirect greenhouse gas emissions sources (Type 3) Annex 12 in the "Guidance on Other indirect emissions Scope 3" of Thailand Greenhouse Gas Management Organization (TGO). This assessment considered factors such as Source of GHG, Size, Level of influence, Risk or opportunity, Sector Guidance, Outsourcing, and Employee engagement, with a threshold set at ≥ 2.5 points to be considered as a significant emission source, which was included in the assessment scope.
11. The calculation of Greenhouse Gas Intensity (GHG Intensity) was calculated from Direct emissions Scope 1 and Indirect emissions Scope 2.

ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023	
	SASB							
E4.2C	GRI 306-3 (HW+NHW)	Waste Generated						
		(* HW - Hazardous waste, NHW - Non-hazardous waste)						
		Total weight of waste generated ^{1and 2}	metric tons	1,408.00	1,796.00	5,377.60	10,373.34	
		Total waste intensity	metric tons/person	3.98	5.33	16.30	32.52	
		- Total weight of hazardous waste generated (HW)	metric tons	0.00	0.00	3,615.60	7,227.76	
		- Hazardous waste intensity (HW)	metric tons/person	0.00	0.00	10.96	22.66	
		- Total weight of Non-hazardous waste generated (NHW)	metric tons	1,408.00	1,796.00	1,762.00	3,145.58	
		- Non-hazardous waste intensity (NHW)	metric tons/person	3.98	5.33	5.34	9.86	
		Diversion and disposal rate (%)						
		(*Waste diverted or disposal divided by the total amount of waste)						
		- Waste diverted from disposal by reuse and recycling	%	100.00%	100.00%	100.00%	91.03%	
		- Waste diverted from disposal by other recovery operations	%	0.00%	0.00%	0.00%	0.00%	
- Waste directed to disposal by other disposal operations	%	0.00%	0.00%	0.00%	0.00%			
- Waste directed to disposal by Landfilling	%	0.00%	0.00%	0.00%	8.97%			
E4.4R	GRI 306-4	Waste diverted from disposal						
		Hazardous waste diverted from disposal (HW) (off-site)	metric tons	0.00	0.00	3,615.60	7,227.76	
		- Recycling	metric tons	0.00	0.00	3,615.60	7,227.76	
		- Reuse	metric tons	0.00	0.00	0.00	0.00	
		- Other recovery operations (.....)	metric tons	0.00	0.00	0.00	0.00	

ESG metrics	GRI STANDARD	Material Aspects	Unit	2020	2021	2022	2023
	SASB						
E4.4R	GRI 306-4	Non-hazardous waste diverted from disposal (NHW) (off-site)	metric tons	1,408.00	1,796.00	1,762.00	2,215.18
		- Recycling	metric tons	1,408.00	1,796.00	1,762.00	2,215.18
		- Reuse	metric tons	0.00	0.00	0.00	0.00
		- Other recovery operations (.....)	metric tons	0.00	0.00	0.00	0.00
	GRI 306-5	Waste directed to disposal					
		Hazardous waste directed to disposal (HW) (off-site)	metric tons	0.00	0.00	0.00	0.00
		- Landfilling	metric tons	0.00	0.00	0.00	0.00
		- Incineration (without energy recovery)	metric tons	0.00	0.00	0.00	0.00
		- Other disposal operations (.....)	metric tons	0.00	0.00	0.00	0.00
		Non- hazardous waste directed to disposal (NHW) (off-site)	metric tons	N/A	N/A	N/A	930.40
		- Landfilling	metric tons	N/A	N/A	N/A	930.40
		- Incineration (without energy recovery)	metric tons	N/A	N/A	N/A	0.00
		- Other disposal operations (.....)	metric tons	N/A	N/A	N/A	0.00

Remarks

1. The boundary of Waste Management Reporting of Thaicom Public Company Limited for the Fiscal Year 2020 - 2021 covers the following areas.
 - 1.1 Thaicom Satellite Station - Karai (the expiration of the operation concession was in September 2021)
 - 1.2 Thaicom Satellite Station - Ladlumkaeo
2. The boundary of Waste Management Reporting of Thaicom Public Company Limited for the Fiscal Year 2022 - 2023 covers the following areas.
 - 2.1. SJ Infinite I Business Complex Fl. 28 and 29 (Office)
 - 2.2. Thaicom Satellite Station - Ladlumkaeo
3. In 2023, Thaicom Public Company Limited reported Waste Management following the reporting requirements of GRI 306 Waste, version 2020. The previous values of waste generated data were recalculated from 2020 to 2023 for this report. Any data from 2020 to 2023 that does not conform to the new standard will be replaced with N/A.
4. In 2023, Thaicom began recording municipal waste data, the data reported in the "non-hazardous waste generated directed to disposal" in 2023 represents the quantity of solid waste generated over a two-month period in 2023 (specifically, from November to December 2023). The company will start recording municipal waste data for the full year in the year 2024 and set targets for municipal waste quantities.