

Environmental Performance

Energy

GRI Standards	Performance	Unit	2020	2021	2022			2023			
			Thailand	Thailand	Thailand	Overseas 1	Total	Thailand	Overseas 1	Overseas 2	Total
GRI 302-1	Total energy consumption within the organization	PJ	12.13	12.32	12.20	6.55	18.76	11.52	6.02	0.00	17.54
		MWh	3,368,149	3,422,442	3,389,592	1,820,728	5,210,320	3,201,129	1,671,506	330	4,872,965
	Non-renewable energy	PJ	3.35	3.18	2.88	1.21	4.08	2.65	1.11	0.00	3.75
		MWh	930,242	883,333	799,609	334,946	1,134,555	735,111	307,712	0	1,042,823
	- Coal	PJ	0.55	0.42	0.11	0.31	0.42	0.00	0.25	0.00	0.25
	- Fuel oil	PJ	0.81	0.83	0.86	0.13	0.99	0.78	0.10	0.00	0.88
	- Diesel	PJ	0.25	0.23	0.21	0.40	0.60	0.21	0.47	0.00	0.67
	- Gasoline	PJ	0.01	0.01	0.01	0.02	0.03	0.01	0.02	0.00	0.03
	- LPG	PJ	0.28	0.35	0.41	0.03	0.44	0.45	0.03	0.00	0.48
	- Natural gas	PJ	1.44	1.34	1.28	0.32	1.60	1.20	0.25	0.00	1.44
	Renewable energy	PJ	3.91	4.12	4.38	2.22	6.60	3.72	1.91	0.00	5.63
		MWh	1,085,270	1,144,444	1,215,361	617,227	1,832,588	1,032,294	530,492	0	1,562,786
	- Biodiesel	PJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	- Biomass	PJ	2.85	3.06	3.34	2.07	5.41	2.59	1.71	0.00	4.30
	- Biogas	PJ	1.04	1.02	0.96	0.08	1.04	1.03	0.12	0.00	1.15
	- Solar energy	PJ	0.02	0.04	0.07	0.07	0.14	0.09	0.08	0.00	0.17
Electricity purchased	PJ	4.87	5.02	4.95	3.13	8.08	5.16	3.00	0.00	8.16	
	MWh	1,352,638	1,394,665	1,374,621	868,556	2,243,177	1,433,724	833,302	330	2,267,356	
	Percentage of renewable energy to total energy consumption	%	32.22%	33.44%	35.86%	33.90%	35.17%	32.25%	31.74%	0.00%	32.07%
GRI 302-3	Energy per production unit	GJ/production ton	1.34	1.27	1.27	0.76	1.02	1.29	0.72	0.11	1.01

Energy Consumption of CPF (Thailand) Plc.

GRI Standards	Indicators	Unit	2020	2021	2022	2023
GRI 302-1	Total energy consumption within the organization	PJ	7.75	8.00	8.05	8.44
	Renewable energy	PJ	2.62	2.75	2.82	3.06
	Proportion of renewable energy consumption per total energy consumption	%	33.81%	34.38%	35.08%	36.24%

Remarks:

- ND = No Data
- Overseas 1 is included energy data of Cambodia, India, Laos, Malaysia, Philippines, Turkiye and Vietnam operations
- Overseas 2 is included energy data of United Kingdom operations
- Energy data of Thailand and overseas 1 has verified by LRQA (Thailand) Co., Ltd
- PJ equals to 10^{15} Joules
- The calculation is in accordance with CPF SHE&En Key Performance Indices (CPF SHE&EN KPIs) (GRI 302-1)
 - Total fuel consumption = the sum of (the consumption of each fuel type X net calorific value)
 - Unit: PJ per month (the conversion factors are based on Thailand Energy Efficiency Situation report 2020 by Department of Alternative Energy Development and Efficiency)
 - Electricity consumption = the sum of electricity consumption (in kWh) X 3.6
 - Unit: PJ per month
 - Total energy consumption = total fuel consumption + total electricity consumption
 - Unit: PJ per month
- Energy types included in the calculation of intensity per production ton are non-renewables including coal, fuel oil, diesel, gasoline, LPG, and natural gas as well as renewables including biogas, biomass (such as rice husk, corn cob, palm kernel shells, fire wood/ scrap wood/ woodchips, sawdust, charcoal and cashew nutshell, etc.) and biodiesel, and electricity within the organization only (GRI 302-3)



Environmental Performance

Water

GRI Standards	Indicator	Unit	2020		2021		2022				2023							
			Thailand		Thailand		Thailand		Overseas 1		Total		Thailand		Overseas 1		Total	
			Total		Total		Total		Total		Total		Total		Total		Total	
			Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water
GRI 303-3	Total water withdrawal from all areas	million m ³	142.45		136.04		110.40		122.34		232.74		120.03		122.96		242.98	
			48.89	93.56	58.27	77.78	51.19	59.20	24.34	98.00	75.53	157.21	50.93	69.09	25.80	97.15	76.74	166.25
	- Surface water	million m ³	28.79		73.00		63.08		2.40		65.48		68.56		2.18		70.74	
			16.24	12.56	23.86	49.14	18.45	44.63	2.30	0.10	20.75	44.73	15.88	52.68	1.62	0.56	17.49	53.25
	- Groundwater	million m ³	20.97		22.70		22.40		16.57		38.97		23.81		17.29		41.11	
			20.49	0.48	21.86	0.84	19.84	2.56	14.23	2.34	34.08	4.89	22.03	1.78	16.50	0.79	38.54	2.57
	- Seawater	million m ³	80.44		27.67		11.92		94.88		106.80		14.55		95.02		109.57	
			0.00	80.44	0.00	27.67	0.00	11.92	0.00	94.88	0.00	106.80	0.00	14.55	0.00	95.02	0.00	109.57
	- Rainwater	million m ³	4.88		5.95		5.97		2.49		8.46		5.82		3.05		8.87	
			4.88	0.00	5.95	0.00	5.97	0.00	2.49	0.00	8.46	0.00	5.82	0.00	3.05	0.00	8.87	0.00
	- Produced water	million m ³	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	- Third-party water	million m ³	7.37		6.73		7.03		6.01		13.04		7.29		5.41		12.70	
			7.28	0.09	6.60	0.13	6.94	0.10	5.31	0.69	12.25	0.79	7.21	0.08	4.63	0.78	11.84	0.86
	- Municipal water supply	million m ³	6.67		6.03		6.55		4.14		10.69		6.51		3.62		10.13	
			6.67	0.00	6.03	0.00	6.55	0.00	4.14	0.00	10.69	0.00	6.51	0.00	3.62	0.00	10.13	0.00
- Purchased water (excluded drinking water)	million m ³	0.70		0.70		0.48		1.87		2.35		0.78		1.79		2.57		
		0.61	0.09	0.57	0.13	0.39	0.10	1.18	0.69	1.56	0.79	0.70	0.08	1.01	0.78	1.71	0.86	
GRI 303-3 (cont'd)	Total water withdrawal from water stressed areas	million m ³	37.44		41.35		41.06		3.60		44.66		64.74		2.97		67.71	
			33.45	3.99	39.36	1.99	36.66	4.40	1.64	1.96	38.30	6.36	42.27	22.47	1.96	1.01	44.23	23.48
	- Surface water	million m ³	13.97		19.20		18.48		0.00		18.48		27.74		0.02		27.76	
			12.01	1.96	17.55	1.65	15.70	2.79	0.00	0.00	15.70	2.79	13.91	13.83	0.02	0.00	13.93	13.83
	- Groundwater	million m ³	13.71		14.57		13.92		1.43		15.36		18.61		1.26		19.87	
			13.65	0.06	14.29	0.28	12.63	1.29	1.19	0.25	13.82	1.54	17.31	1.30	1.23	0.03	18.54	1.33
	- Seawater	million m ³	1.94		0.00		0.30		1.71		2.01		7.30		0.94		8.25	
			0.00	1.94	0.00	0.00	0.00	0.30	0.00	1.71	0.00	2.01	0.00	7.30	0.00	0.94	0.00	8.25
	- Rainwater	million m ³	3.53		4.04		4.35		0.00		4.35		4.86		0.00		4.86	
			3.53	0.00	4.04	0.00	4.35	0.00	0.00	0.00	4.35	0.00	4.86	0.00	0.00	0.00	4.86	0.00
	- Produced water	million m ³	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	- Third-party water	million m ³	4.28		3.54		4.01		0.45		4.46		6.22		0.75		6.97	
			4.25	0.04	3.48	0.06	3.98	0.03	0.45	0.00	4.43	0.03	6.19	0.03	0.71	0.03	6.90	0.06
	- Municipal water supply	million m ³	4.11		3.24		3.92		0.12		4.05		5.84		0.61		6.45	
			4.11	0.00	3.24	0.00	3.92	0.00	0.12	0.00	4.05	0.00	5.84	0.00	0.61	0.00	6.45	0.00
- Purchased water (excluded drinking water)	million m ³	0.17		0.30		0.09		0.33		0.41		0.38		0.14		0.52		
		0.13	0.04	0.24	0.06	0.06	0.03	0.33	0.00	0.39	0.03	0.35	0.03	0.11	0.03	0.45	0.06	

Environmental Performance

Water

GRI Standards	Indicator	Unit	2020		2021		2022				2023							
			Thailand		Thailand		Thailand		Overseas 1		Total		Thailand		Overseas 1		Total	
			Total		Total		Total		Total		Total		Total		Total		Total	
			Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water
	Third-party water withdrawal from water stressed areas																	
	- Surface water	million m ³	3.98		3.48		3.98		0.45		4.43		0.29		0.00		0.29	
	- Groundwater	million m ³	0.27		0.00		0.00		0.00		0.00		0.09		0.05		0.14	
	- Seawater	million m ³	0.04		0.06		0.03		0.00		0.03		0.00		0.00		0.00	
	- Produced water	million m ³	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
	Water withdrawal per production unit	m ³ /ton of products	17.30		15.28		12.60		14.44		13.50		13.41		14.00		13.50	
GRI 303-4	Total water discharge to all areas	million m ³	70.39		70.75		48.49		77.75		126.24		55.46		82.17		137.62	
			19.16	51.22	15.80	54.93	16.50	31.99	39.20	38.54	55.71	70.53	14.45	41.01	50.64	31.53	65.08	72.54
	- Surface water	million m ³	16.77		47.57		36.72		4.51		41.23		45.10		2.83		47.93	
	- Groundwater	million m ³	0.09		1.21		0.00		0.17		0.17		0.00		0.00		0.00	
	- Seawater	million m ³	52.19		20.39		10.59		71.73		82.32		8.73		78.05		86.78	
	- Third-party water sent to use to others organizations (discharged water from swine farms used in farmers' agricultural areas)	million m ³	1.34		1.58		1.18		1.33		2.51		1.63		1.29		2.91	
	Total water discharge to water stressed areas	million m ³	12.23		12.21		13.11		2.39		15.50		25.53		1.41		26.94	
			9.83	2.40	10.34	1.88	10.96	2.15	0.49	1.90	11.45	4.05	12.96	12.57	1.13	0.28	14.09	12.85
	Number of incidents of non-standard of discharged water	Times	ND		ND		2.00		0.00		2.00		17.00		5.00		22.00	
GRI 303-5	Total water consumption from all areas	million m ³	72.06		65.30		61.90		44.60		106.50		65.53		40.79		106.32	
	Total water consumption from water stressed areas	million m ³	25.21		29.14		27.95		1.21		29.16		40.04		1.56		41.60	
-	Recycled and reused water	million m ³	59.62		59.68		47.96		7.07		55.03		38.11		9.22		47.32	
		% of total water withdrawal	42%		44%		43%		6%		24%		32%		7%		19%	
GRI 303-4 (cont'd)	Quality of discharged water																	
	- BOD quantity	thousand tons	0.38		0.46		0.38		1.81		2.19		0.47		3.27		3.75	
	- Nitrogen quantity	thousand tons	0.73		0.92		0.65		0.31		0.96		0.57		0.18		0.76	
	BOD value																	
	- Thailand	mg/L	16.45		15.56				17.32						11.47			
	- Cambodia	mg/L	ND		ND				18.00						40.68			
	- India	mg/L	ND		ND				9.96						14.97			
	- Laos	mg/L	ND		ND				0.00						0.00			
	- Malaysia	mg/L	ND		ND				15.93						13.92			
	- Philippines	mg/L	ND		ND				6.49						3.72			
	- Turkiye	mg/L	ND		ND				140.95						152.38			
	- Vietnam	mg/L	ND		ND				25.85						27.30			

Environmental Performance

Water

GRI Standards	Indicator	Unit	2020		2021		2022				2023							
			Thailand		Thailand		Thailand		Overseas 1		Total		Thailand		Overseas 1		Total	
			Total		Total		Total		Total		Freshwater		Other Water		Total		Total	
			Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water	Freshwater	Other Water
	Nitrogen value																	
	- Thailand	mg/L	35.23		32.57												22.41	
	- Cambodia	mg/L	ND		ND												0.00	
	- India	mg/L	ND		ND												17.78	
	- Laos	mg/L	ND		ND												0.00	
	- Malaysia	mg/L	ND		ND												6.55	
	- Philippines	mg/L	ND		ND												0.01	
	- Turkiye	mg/L	ND		ND												2.76	
	- Vietnam	mg/L	ND		ND												7.24	

Remarks:

- ND = No data
- Overseas 1 is included water data of Cambodia, India, Laos, Malaysia, Phillipines, Turkiye and Vietnam operations
- Water data of Thailand and overseas 1 has verified by LRQA (Thailand) Co., Ltd except GHG emissions scope 3 and ozone depletion substances (ODS) data.
- Water-stressed areas are areas in which the ratio of the total annual water withdrawal to the total available annual renewable water supply is 40% and higher as assessed by Aqueduct Water Risk Atlas following the GRI Standards.
- Freshwater is the water containing Total Dissolved Solids :TDS ≤ 1,000 mg/L
- Other water is the water containing Total Dissolved Solids :TDS > 1,000 mg/L
- Total water consumption is calculated using data from water meters, water bills, flow rates of water pumps, and average volume of rainwater from Meteorological Department (GRI 303-3: 2018)
- Total reused / recycled water volume is calculated using the data from water meters and flow rates of water pumps
- Biochemical Oxygen Demand (BOD) value measures the amount of oxygen required or consumed for the microbiological decomposition of organic material in water, used for measuring water quality (GRI 303-4: 2018)
- BOD and Total Kjeldahl Nitrogen (TKN) values are derived from the results from sources of wastewater, analyzed by a laboratory certified by ISO/IEC 17025 (GRI 303-4: 2018)
- BOD quantity = volume of discharged water X average BOD intensity (GRI 303-4: 2018)
- TKN quantity = volume of discharged water X average nitrogen intensity (GRI 303-4: 2018)
- Wastewater data is collected from water meters for business units with Online BOD installed, and from wastewater volume assessment from the efficiency of wastewater pumps, for business units without water meters (GRI 303-4: 2018)
- Approaches to treating wastewater include: (GRI 303-4: 2018)
 - o In Feed business, wastewater from aquatic feed mills is treated using activated sludge process
 - o In Farm business, wastewater from swine farms is treated by anaerobic digestion, followed by in oxidation ponds, while wastewater from aquatic animal farms is treated in oxidation ponds
 - o In Food business, wastewater from food factories is treated using activated sludge process.
- The discharged water from swine farms used in farmers' agricultural areas contained TDS > 3,000 mg/L

Environmental Performance

Emissions

GRI Standards	Indicator	Unit	2020	2021	2022		2023				
			Thailand	Thailand	Thailand	Overseas 1	Total	Thailand	Overseas 1	Overseas 2	Total
-	Direct and indirect GHG emissions (Scope 1 + 2)	tons of CO ₂ e	884,782	863,045	799,752	685,998	1,485,750	803,340	652,013	68	1,455,422
GRI 305-1	Direct GHG emissions (Scope 1)	tons of CO ₂ e	238,282	221,960	193,583	94,520	288,103	175,405	86,856	0	262,261
	Biogenic CO ₂ emissions	tons of CO ₂ e	253,914	279,231	308,734	200,436	509,170	344,300	182,652	0	526,952
GRI 305-2	Indirect GHG emissions (Scope 2)										
	- Gross location-based energy	tons of CO ₂ e	654,677	647,124	611,706	591,478	1,203,184	633,706	565,157	68	1,198,932
	- Gross market-based energy	tons of CO ₂ e	646,501	641,085	606,169	591,478	1,197,647	627,934	565,157	68	1,193,160
GRI 305-4	Direct and indirect GHG emissions per production unit (Scope 1 + 2)	kg of CO ₂ e/production ton	107.47	96.94	91.00	80.96	86.06	89.74	78.28	6.18	174.19
GRI 305-3	Indirect GHG emissions (Scope 3)	tons of CO ₂ e	ND	ND	ND	ND	ND	11,376,503	ND	ND	ND
	1. Purchased goods and services	tons of CO ₂ e	ND	ND	ND	ND	ND	8,041,998	ND	ND	ND
	2. Capital goods	tons of CO ₂ e	ND	ND	ND	ND	ND	70,654	ND	ND	ND
	3. Fuel-and-energy-related-activities	tons of CO ₂ e	ND	ND	ND	ND	ND	49,686	ND	ND	ND
	4. Upstream transportation and distribution	tons of CO ₂ e	ND	ND	ND	ND	ND	203,905	ND	ND	ND
	5. Waste generated in operations	tons of CO ₂ e	ND	ND	ND	ND	ND	11,136	ND	ND	ND
	6. Business travel	tons of CO ₂ e	ND	ND	ND	ND	ND	11,705	ND	ND	ND
	7. Employee commuting	tons of CO ₂ e	ND	ND	ND	ND	ND	758,465	ND	ND	ND
	8. Upstream leased assets	tons of CO ₂ e	NA	NA	NA	ND	ND	NA	ND	ND	ND
	9. Downstream transportation and distribution	tons of CO ₂ e	ND	ND	ND	ND	ND	2,168	ND	ND	ND
	10. Processing of sold products	tons of CO ₂ e	ND	ND	ND	ND	ND	417,182	ND	ND	ND
	11. Use of sold products	tons of CO ₂ e	ND	ND	ND	ND	ND	941,716	ND	ND	ND
	12. End of life treatment of sold products	tons of CO ₂ e	ND	ND	ND	ND	ND	216,981	ND	ND	ND
	13. Downstream leased assets	tons of CO ₂ e	NA	NA	NA	NA	NA	NA	NA	NA	NA
	14. Franchises	tons of CO ₂ e	ND	ND	ND	ND	ND	13,297	ND	ND	ND
	15. Investment	tons of CO ₂ e	ND	ND	ND	ND	ND	637,609	ND	ND	ND
GRI 305-6	Ozone Depletion Substances (ODS)										
	- HCFCs R22	tons	ND	ND	ND	ND	ND	2.73	0.88	0.00	3.60
GRI 305-7	Nitrogen oxide (NOx)	tons	ND	ND	ND	ND	ND	697	288	0.00	985
	Sulfur oxides (SOx)	tons	ND	ND	ND	ND	ND	64	250	0.00	313
	Carbon monoxide (CO)	tons	ND	ND	ND	ND	ND	1,449	1,222	0.00	2,671
	Volatile Organic Carbon (VOCs)	tons	ND	ND	ND	ND	ND	763	544	0.00	1,307
	Total Suspended Particle (TSP)	tons	ND	ND	ND	ND	ND	376	290	0.00	666

Remarks:

- NA = Not Applicable
- ND = No Data
- Overseas 1 is included emissions data of Cambodia, India, Laos, Malaysia, Philippines, Turkiye and Vietnam operations
- Overseas 2 is included emissions data of United Kingdom operations
- Emissions data of Thailand and overseas 1 has verified by LRQA (Thailand) Co., Ltd except GHG emissions scope 3 and ozone depletion substances (ODS) data.
- Ozone depletion substances (ODS) data was covered operations in Thailand and Vietnam
- The chosen consolidation approach for greenhouse gas emissions is operational control (GRI 305-1 and GRI 305-2)
- Reporting of the greenhouse gas emissions covers CO₂, CH₄, and N₂O. The Global Warming Potential (GWP) used in the calculation is referred to the given values of IPCC, while the greenhouse gas emission factors are based on the information from the Thailand Greenhouse Gas Management Organization (Public Organization) and Energy Policy and Planning Office, Ministry of Energy, which is available at the time of disclosure of this Sustainability Report. (GRI 305-1, GRI 305-2, and GRI 305-4)
- GHG scope 1 includes GHG emissions from fuel combustion only, but excludes biogas combustion from flaring (GRI 305-1 and GRI 305-4)
- Reporting scope of GHG intensity includes only GHG scopes 1 and 2 (GRI 305-4)

Environmental Performance

Waste

GRI Standards	Indicator	Unit	2020		2021		2022			2023		
			Thailand	Thailand	Thailand	Overseas 1	Total	Thailand	Overseas 1	Overseas 2	Total	
GRI 306-3 (2020)	Total waste generated	thousand tons	463.45	456.06	470.47	166.37	636.84	428.06	157.42	0.85	586.32	
	Total waste diverted and direct to disposal	thousand tons	463.45	456.06	470.47	166.37	636.84	428.18	157.35	0.15	585.68	
GRI 306-4 (2020)	Total waste diverted from disposal	thousand tons	445.14	433.03	452.31	143.77	596.08	411.12	139.38	0.15	550.65	
	Total non-hazardous waste diverted from disposal	thousand tons	444.50	432.66	451.85	143.40	595.25	410.75	139.27	0.15	550.17	
	<u>Industrial and agro-industrial waste recovery onsite</u>	thousand tons	0.00	0.00	39.02	39.38	78.40	3.90	48.64	0.00	52.54	
	- Reused	thousand tons	0.00	0.00	0.02	0.00	0.02	0.02	0.19	0.00	0.21	
	- Recycled	thousand tons	0.00	0.00	0.16	1.86	2.02	0.04	2.24	0.00	2.28	
	- Composting	thousand tons	0.00	0.00	37.59	37.18	74.77	3.76	46.04	0.00	49.80	
	- Used as animal feed	thousand tons	0.00	0.00	1.25	0.34	1.59	0.05	0.17	0.00	0.21	
	- Other recovery operation	thousand tons	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.04	
	<u>Industrial and agro-industrial waste recovery offsite</u>	thousand tons	444.50	432.66	412.83	104.01	516.85	406.84	90.63	0.15	497.62	
	- Reused	thousand tons	0.11	0.15	0.18	0.97	1.16	0.10	1.07	0.00	1.17	
	- Recycled	thousand tons	26.74	24.28	25.47	12.25	37.72	25.99	9.97	0.15	36.11	
	- Composting	thousand tons	367.24	343.63	315.24	76.98	392.22	306.84	66.18	0.00	373.02	
	- Used as animal feed	thousand tons	47.89	61.26	68.14	11.56	79.70	72.25	9.25	0.00	81.51	
	- Other recovery operation	thousand tons	2.52	3.34	3.81	2.25	6.06	1.87	4.16	0.00	5.83	
	<u>Domestic waste recovery offsite</u>	thousand tons	ND	ND	ND	ND	ND	0.00	0.00	0.70	0.70	
	- Reused	thousand tons	ND	ND	ND	ND	ND	0.00	0.00	0.00	0.00	
	- Recycled	thousand tons	ND	ND	ND	ND	ND	0.00	0.00	0.70	0.70	
	- Composting	thousand tons	ND	ND	ND	ND	ND	0.00	0.00	0.00	0.00	
	- Used as animal feed	thousand tons	ND	ND	ND	ND	ND	0.00	0.00	0.00	0.00	
	- Other recovery operation	thousand tons	ND	ND	ND	ND	ND	0.00	0.00	0.00	0.00	
	Total hazardous waste diverted from disposal	thousand tons	0.64	0.37	0.46	0.37	0.83	0.37	0.12	0.00	0.49	
	<u>Hazardous waste recovery onsite</u>	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Reused	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Recycled	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Other recovery operation	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	<u>Hazardous waste recovery offsite</u>	thousand tons	0.64	0.37	0.46	0.37	0.83	0.37	0.12	0.00	0.49	
	- Reused	thousand tons	0.02	0.01	0.05	0.04	0.09	0.04	0.04	0.00	0.09	
	- Recycled	thousand tons	0.48	0.36	0.40	0.33	0.74	0.33	0.07	0.00	0.40	
	- Other recovery operation	thousand tons	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
GRI 306-5 (2020)	Total waste directed to disposal	thousand tons	18.31	23.03	18.16	22.61	40.76	17.07	17.96	0.00	35.03	
	Total non-hazardous waste directed to disposal	thousand tons	18.01	22.85	17.98	22.18	40.16	16.90	17.34	0.00	34.24	
	<u>Industrial and agro-industrial waste disposal onsite</u>	thousand tons	0.00	0.47	2.10	7.35	9.44	2.16	3.87	0.00	6.03	
	- Incineration with energy recovery	thousand tons	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	
	- Incineration without energy recovery	thousand tons	0.00	0.25	0.65	0.82	1.47	0.38	1.01	0.00	1.39	
	- Landfill	thousand tons	0.00	0.22	1.43	6.52	7.96	1.78	2.87	0.00	4.64	
	- Other disposal operations	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	<u>Industrial and agro-industrial waste disposal offsite</u>	thousand tons	18.01	22.38	15.88	14.84	30.72	9.70	9.97	0.00	19.67	
	- Incineration with energy recovery	thousand tons	0.00	1.23	0.77	0.56	1.34	2.35	0.66	0.00	3.01	
	- Incineration without energy recovery	thousand tons	0.97	0.52	0.16	2.46	2.62	0.64	1.40	0.00	2.04	
	- Landfill	thousand tons	17.04	20.63	14.95	11.82	26.76	6.70	7.91	0.00	14.61	
	- Other disposal operations	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	<u>Domestic waste disposal onsite</u>	thousand tons	ND	ND	ND	ND	ND	0.15	0.24	0.00	0.39	
	- Incineration without energy recovery	thousand tons	ND	ND	ND	ND	ND	0.06	0.24	0.00	0.30	
	- Landfill	thousand tons	ND	ND	ND	ND	ND	0.08	0.01	0.00	0.09	
	<u>Domestic waste disposal offsite</u>	thousand tons	ND	ND	ND	ND	ND	4.89	3.25	0.00	8.15	
	- Incineration without energy recovery	thousand tons	ND	ND	ND	ND	ND	0.05	0.15	0.00	0.20	
	- Landfill	thousand tons	ND	ND	ND	ND	ND	4.84	3.10	0.00	7.95	

Environmental Performance

Waste

GRI Standards	Indicator	Unit	2020		2021		2022			2023		
			Thailand	Thailand	Thailand	Overseas 1	Total	Thailand	Overseas 1	Overseas 2	Total	
	Total hazardous waste directed to disposal	thousand tons	0.30	0.18	0.18	0.42	0.60	0.17	0.62	0.00	0.79	
	<u>Hazardous waste disposal onsite</u>	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Incineration with energy recovery	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Incineration without energy recovery	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Secured landfill	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	- Other disposal operations	thousand tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	<u>Hazardous waste disposal offsite</u>	thousand tons	0.30	0.18	0.18	0.42	0.60	0.17	0.62	0.00	0.79	
	- Incineration with energy recovery	thousand tons	0.00	0.11	0.14	0.00	0.14	0.07	0.00	0.00	0.07	
	- Incineration without energy recovery	thousand tons	0.01	0.05	0.02	0.16	0.18	0.01	0.06	0.00	0.08	
	- Secured landfill	thousand tons	0.29	0.02	0.02	0.16	0.18	0.07	0.53	0.00	0.60	
	- Other disposal operations	thousand tons	0.00	0.00	0.00	0.10	0.10	0.01	0.03	0.00	0.04	
-	Waste disposed by landfill and incineration	thousand tons	18.31	21.69	17.23	21.94	39.17	14.63	17.27	0.00	31.91	
-	Waste disposed by landfill and incineration per production unit	kg/production ton	2.23	2.44	1.97	2.59	2.27	1.63	2.08	0.00	1.35	

Remarks:

- ND = No Data
- Overseas 1 is included waste data of Cambodia, India, Laos, Malaysia, Philippines, Turkiye and Vietnam operations
- Overseas 2 is included energy data of United Kingdom operation
- Waste data of Thailand and overseas 1 has verified by LRQA (Thailand) Co., Ltd
- Waste disposal information was obtained from disposal method or waste manifest provided by waste disposer (GRI 306-2)
- Data on waste volumes from manufacturing units is collected from quantities reported to the Department of Industrial Works and data on waste volumes from other business units is collected from monthly waste weighing of each business unit
- Offsite landfill is carried out by a local government agency or a dispatcher assigned by a local government agency
- In 2020-2022, the amount of hazardous waste generated was assumed to be equal to the amount of hazardous waste utilized and disposed and industrial and agro-industrial waste and domestic waste directed to disposal were consolidated and report as non-hazardous waste directed to disposal

Environmental Performance



Food Loss & Waste (Thailand Operations)

DJSI	Indicator	Unit	2020	2021	2022	2023	Target 2023
Food Loss & Waste Impact	Total weight food loss & waste	tons	117,303	126,069	128,515	175,640	176,300
	Total weight of food loss & waste used for alternative purposes	tons	115,225	124,114	126,400	136,655	136,800
	Total discarded	tons	2,078	1,955	2,115	38,984	39,550
	Food loss & waste intensity	kg/ton of products	2.8	2.6	2.7	28.7	29.2
	Coverage	%	16	17	20	41	

Remarks:

- Food loss and waste data was covered operations in Thailand and verified by LRQA (Thailand) Co., Ltd
- In 2020-2021, food loss data covered chicken meat and eggs products
- In 2022, food loss data covered chicken meat, eggs, and shrimp and processed shrimp products in operations of eastern of Thailand
- In 2023, food loss data covered chicken meat, eggs, shrimp and processed shrimp in operations of eastern of Thailand, and pork products
- Food loss data collected from enterprise resource planning (ERP) system
- In 2023, food waste data was covered Chester's, Food World and Ban Nam Prio Distribution Center and excluded beverage data
- The calculation of the food loss & waste intensity is based on weight of total food loss & waste discarded divided by weight of total edible food sale.
- The coverage is calculated by the sales revenue of food loss & waste reporting products divided by the total sales revenue of farm-primary processing and food businesses in Thailand operations

Environmental Performance



Packaging for Food Products

DJSI	Indicator	Unit	2020	2021	2022	2023	2023 Target
Packaging Materials	Total weight of wood/paper fiber packaging	tons	32,566	25,261	24,338	37,424	
	Recycled and/or certified wood/paper fiber	% of total weight	85	85	85	75	75
	Total weight of metal packaging	tons	101	71	69	76	
	Recycled metal	% of total weight	100	100	100	100	100
	Total weight of glass packaging	tons	988	860	626	847	
	Recycled glass	% of total weight	60	60	60	60	60
Plastic Packaging	Total weight of plastic packaging	tons	20,560	18,687	19,326	21,106	22,000
	Percentage of recycled content within the plastic packaging	% of the total weight of all plastic packaging	1.7	2.2	2.8	2.6	2.5
	Percentage of recyclable plastic packaging	% of the total weight of all plastic packaging	83.26	77.66	81.25	83.14	80.00
	Percentage of compostable plastic packaging	% of the total weight of all plastic packaging	0.16	0.21	0.20	0.16	0.15

Remarks:

- In 2020-2022, packaging data covered Thailand operations
- In 2023, packaging data covered Thailand, Laos, Russia and India operations
- Percentage of recyclable plastic packaging in 2020-2022 were adjusted to exclude PS and multimaterial plastic out of recyclable plastic packaging.