



**Environmental Performance**

**Energy**

GRI Standards	Performance	Unit	2021				2022				2023			2024		
			Thailand	Thailand	Overseas	Total	Thailand	Thailand	Overseas	Total	Thailand	Overseas	Total	Thailand	Overseas	Total
GRI 302-1	Total energy consumption within the organization	PJ	11.27	11.17	6.40	17.57	11.52	11.52	6.02	17.54	11.31	7.23	18.54			
		MWh	3,130,445	3,102,860	1,778,787	4,881,647	3,201,129	3,201,129	1,671,836	4,872,965	3,143,014	2,007,221	5,150,235			
	Non-renewable energy	PJ	3.18	2.88	1.21	4.08	2.65	2.65	1.11	3.75	2.53	1.71	4.25			
		MWh	883,815	799,609	334,946	1,134,555	735,111	735,111	307,712	1,042,823	703,153	476,211	1,179,364			
	- Coal	PJ	0.42	0.11	0.31	0.42	0.00	0.00	0.25	0.25	0.00	0.25	0.25			
	- Fuel oil	PJ	0.83	0.86	0.13	0.99	0.78	0.78	0.10	0.88	0.74	0.13	0.87			
	- Diesel	PJ	0.23	0.21	0.40	0.60	0.21	0.21	0.47	0.67	0.20	0.47	0.66			
	- Gasoline	PJ	0.01	0.01	0.02	0.03	0.01	0.01	0.02	0.03	0.01	0.02	0.04			
	- LPG	PJ	0.35	0.41	0.03	0.44	0.45	0.45	0.03	0.48	0.57	0.03	0.61			
	- Natural gas	PJ	1.34	1.28	0.32	1.60	1.20	1.20	0.25	1.44	1.01	0.81	1.81			
	Renewable energy	PJ	3.07	3.34	2.07	5.41	3.72	3.72	1.91	5.63	3.79	1.86	5.65			
		MWh	851,966	928,629	575,285	1,503,914	1,032,294	1,032,294	530,492	1,562,786	1,053,294	516,623	1,569,917			
	- Biodiesel	PJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	- Biomass	PJ	2.00	2.31	1.92	4.23	2.59	2.59	1.71	4.30	2.47	1.59	4.06			
	- Biogas	PJ	1.02	0.96	0.08	1.04	1.03	1.03	0.12	1.15	1.20	0.17	1.37			
- Solar energy	PJ	0.04	0.07	0.07	0.14	0.09	0.09	0.08	0.17	0.13	0.10	0.22				
Electricity purchased	PJ	5.02	4.95	3.13	8.08	5.16	5.16	3.00	8.16	4.99	3.65	8.64				
	MWh	1,394,665	1,374,621	868,556	2,243,177	1,433,724	1,433,724	833,632	2,267,356	1,386,567	1,014,387	2,400,954				
	Percentage of renewable energy to total energy consumption	%	27.22%	29.93%	32.34%	30.81%	32.25%	31.73%	32.07%	33.51%	25.74%	30.48%				
GRI 302-3	Energy consumption per production unit	GJ/production ton	1.27	1.27	0.76	1.02	1.29	1.29	0.72	1.01	1.26	0.75	1.00			

**Energy Consumption of CPF (Thailand) Pic.**

GRI Standards	Indicators	Unit	2021	2022	2023	2024
GRI 302-1	Total energy consumption within the organization	PJ	8.00	8.05	8.44	8.44
	Renewable energy	PJ	2.75	2.82	3.06	3.24
	Proportion of renewable energy consumption per total energy consumption	%	34.38%	35.08%	36.24%	38.35%

**Remarks:**

- ND = No Data
- In 2022 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, India, Turkiye and Laos operations
- In 2023 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye and Laos operations
- In 2024 Overseas is included data of Vietnam, Republic of China (Taiwan), United States, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye, Laos, Belgium and Sri Lanka operations
- PJ equals to 10<sup>15</sup> 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	2021		2022				2023				2024																				
			Thailand		Thailand		Overseas		Total		Thailand		Overseas		Total		Thailand		Overseas		Total												
			Total		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	Freshwater	Other Water	Freshwater	Other Water											
GRI 303-3	Total water withdrawal from all areas	million m <sup>3</sup>	136.05	110.40	122.34	232.74	120.03	122.96	242.98	102.78	120.86	223.65	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	50.20	52.58	23.38	97.48	73.59	150.06	
	- Surface water	million m <sup>3</sup>	73.00	63.08	2.40	65.48	68.56	2.18	70.74	53.08	1.89	54.97	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	14.69	38.40	1.74	0.15	16.42	38.55	
	- Groundwater	million m <sup>3</sup>	22.70	22.40	16.57	38.97	23.81	17.29	41.11	24.27	15.50	39.76	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	23.43	0.84	14.78	0.72	38.21	1.55	
	- Seawater	million m <sup>3</sup>	27.67	11.92	94.88	106.80	14.55	95.02	109.57	13.29	95.14	108.44	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	0.00	13.29	0.00	95.14	0.00	108.44	
	- Rainwater	million m <sup>3</sup>	5.95	5.97	2.48	8.46	5.82	3.05	8.87	5.64	0.27	5.92	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	5.64	0.00	0.27	0.00	5.92	0.00	
	- Produced water	million m <sup>3</sup>	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	0.00	0.00	0.00	0.00	0.00	0.00	
	- Third-party water	million m <sup>3</sup>	6.73	7.03	6.01	13.04	7.29	5.41	12.70	6.50	8.06	14.56	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	6.44	0.05	6.59	1.47	13.04	1.52	
	- Municipal water supply	million m <sup>3</sup>	6.03	6.55	4.14	10.69	6.51	3.62	10.13	5.81	5.54	11.35	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	5.81	0.00	5.54	0.00	11.35	0.00	
	- Purchased water (excluded drinking water)	million m <sup>3</sup>	0.70	0.48	1.87	2.35	0.78	1.79	2.57	0.68	2.52	3.20	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	0.63	0.05	1.05	1.47	1.68	1.52	
	- Purchased water (including drinking water)	million m <sup>3</sup>	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	0.63	0.05	1.05	1.47	1.68	1.52	0.57	0.13	0.39	0.10	1.18	0.69	1.56	0.79	1.68	1.52	
	GRI 303-3 (cont'd)	Total water withdrawal from water stressed areas	million m <sup>3</sup>	41.35	41.06	3.60	44.66	64.74	2.97	67.71	58.36	2.49	60.86	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	41.86	16.50	1.82	0.67	43.69	17.17
		- Surface water	million m <sup>3</sup>	19.20	18.48	0.00	18.48	27.74	0.02	27.76	22.25	0.01	22.26	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	12.79	9.46	0.01	0.00	12.80	9.46
		- Groundwater	million m <sup>3</sup>	14.57	13.92	1.43	15.36	18.61	1.26	19.87	19.20	1.30	20.50	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	18.80	0.40	1.24	0.06	20.04	0.46
- Seawater		million m <sup>3</sup>	0.00	0.30	1.71	2.01	7.30	0.94	8.25	6.62	0.61	7.23	0.00	0.00	0.00	0.30	0.00	1.71	2.01	0.00	7.30	0.00	0.94	0.00	8.25	0.00	6.62	0.00	0.61	0.00	7.23		
- Rainwater		million m <sup>3</sup>	4.04	4.35	0.00	4.35	4.86	0.00	4.86	4.73	0.00	4.73	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	4.73	0.00	0.00	0.00	4.73		
- Produced water		million m <sup>3</sup>	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	0.00	0.00	0.00	0.00	0.00	0.00	
- Third-party water		million m <sup>3</sup>	3.48	3.98	0.45	4.43	6.19	0.03	6.90	5.55	0.57	6.14	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	5.55	0.02	0.57	0.00	6.12	0.02	
- Municipal water supply		million m <sup>3</sup>	3.24	3.92	0.12	4.05	5.84	0.61	6.45	5.24	0.53	5.77	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	5.24	0.00	0.53	0.00	5.77	0.00	
- Purchased water (excluded drinking water)		million m <sup>3</sup>	0.30	0.09	0.33	0.41	0.38	0.14	0.52	0.33	0.04	0.37	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	0.31	0.02	0.04	0.00	0.35	0.02	
- Purchased water (including drinking water)		million m <sup>3</sup>	0.24	0.06	0.06	0.03	0.33	0.00	0.39	0.03	0.35	0.03	0.37	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	0.31	0.02	0.04	0.00	0.35	0.02
Third-party water withdrawal from water stressed areas		million m <sup>3</sup>	3.48	3.98	0.45	4.43	6.19	0.03	6.90	5.55	0.57	6.14	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	5.55	0.02	0.57	0.00	6.12	0.02	
- Surface water		million m <sup>3</sup>	3.48	3.98	0.45	4.43	6.19	0.03	6.90	5.55	0.57	6.14	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	5.55	0.02	0.57	0.00	6.12	0.02	
- Groundwater		million m <sup>3</sup>	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	0.00	0.00	0.00	0.00	0.00	0.00	
- Seawater	million m <sup>3</sup>	0.06	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00	0.00	0.03	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		
- Produced water	million m <sup>3</sup>	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	0.00	0.00	0.00	0.00	0.00	0.00		
Water withdrawal per production unit	m <sup>3</sup> /ton of products	15.28	12.60	14.44	13.50	13.41	14.00	13.70	11.43	12.61	12.04																						

**Environmental Performance**

**Water**

GRI Standards	Indicator	Unit	2021		2022				2023				2024									
			Thailand		Thailand		Overseas		Total	Thailand		Overseas		Total	Thailand		Overseas		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 303-4	Total water discharge to all areas	million m <sup>3</sup>	70.75		48.49		77.75		126.24		55.46		82.17		137.62		43.05		83.00		126.05	
			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	13.00	30.05	50.64	31.53	63.64	61.58
	- Surface water	million m <sup>3</sup>	47.57		36.72		4.51		41.23		45.10		2.83		47.93		34.86		2.86		37.72	
	- Groundwater	million m <sup>3</sup>	1.21		0.00		0.17		0.17		0.00		0.00		0.00		0.00		0.00		0.00	
	- Seawater	million m <sup>3</sup>	20.39		10.59		71.73		82.32		8.73		78.05		86.78		6.84		76.28		83.12	
	- Third-party water sent to use to others organizations (discharged water from swine farms used in farmers' agricultural areas)	million m <sup>3</sup>	1.58		1.18		1.33		2.51		1.63		1.29		2.91		1.35		3.87		5.22	
	Total water discharge to water stressed areas	million m <sup>3</sup>	12.21		13.11		2.38		15.50		25.53		1.41		26.94		20.21		0.97		21.18	
			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	11.19	9.02	0.81	0.16	12.01	9.18
	Number of incidents of non-standard of discharged water	Times	ND		2.00		0.00		2.00		17.00		5.00		22.00		0.00		0.00		0.00	
GRI 303-5	Total water consumption from all areas	million m <sup>3</sup>	65.30		61.90		44.60		106.50		65.53		40.79		106.32		59.73		38.70		98.43	
			42.47	22.85	34.69	27.21	-14.87	59.46	19.83	86.67	36.49	28.08	-24.84	65.63	11.65	93.71	37.21	22.52	-27.25	65.95	9.95	88.48
	Total water consumption from water stressed areas	million m <sup>3</sup>	29.14		27.95		1.21		29.16		40.04		1.56		41.60		38.15		1.52		39.67	
			29.02	0.11	25.70	2.25	1.15	0.06	26.85	2.31	29.31	9.90	0.83	0.73	30.14	10.63	30.67	7.48	1.01	0.51	31.68	7.99
-	Recycled and reused water	million m <sup>3</sup>	59.68		47.96		7.07		55.03		38.11		9.22		47.32		35.36		5.75		41.11	
		% of total water withdrawal	44%		43%		6%		24%		32%		7%		19%		34%		5%		18%	
GRI 303-4 (conf'd)	<b>Quality of discharged water</b>																					
	- BOD quantity	thousand tons	0.46		0.38		1.81		2.19		0.47		3.27		3.75		0.44		4.13		4.57	
	- Nitrogen quantity	thousand tons	0.92		0.65		0.31		0.96		0.57		0.18		0.76		0.76		0.23		0.98	

**Remarks:**

- ND = No data
- In 2022 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, India, Turkiye and Laos operations
- In 2023 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, India, Turkiye and Laos operations
- In 2024 Overseas is included data of Vietnam, Republic of China (Taiwan), United States, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye, Laos, Belgium and Sri Lanka operations
- 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)
  - In Feed business, wastewater from aquatic feed mills is treated using activated sludge process
  - 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
  - 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	2021		2022		2023			2024		
			Thailand	Thailand	Overseas 1	Total	Thailand	Overseas	Total	Thailand	Overseas	Total
-	Direct and indirect GHG emissions (Scope 1 + 2 market-based)	tons of CO <sub>2</sub> e	863,045	799,752	685,998	1,485,750	803,340	652,082	1,455,422	772,685	748,613	1,521,299
GRI 305-1	Direct GHG emissions (Scope 1)	tons of CO <sub>2</sub> e	221,960	193,583	94,520	288,103	175,405	86,856	262,261	168,696	121,497	290,193
	Biogenic CO <sub>2</sub> emissions	tons of CO <sub>2</sub> e	279,231	308,734	200,436	509,170	344,300	182,652	526,952	340,984	174,780	515,764
GRI 305-2	Indirect GHG emissions (Scope 2)											
	- Gross location-based energy	tons of CO <sub>2</sub> e	647,124	611,706	591,478	1,203,184	633,706	565,226	1,198,932	610,090	627,116	1,237,205
	- Gross market-based energy	tons of CO <sub>2</sub> e	641,085	606,169	591,478	1,197,647	627,934	565,226	1,193,160	603,989	627,116	1,231,105
GRI 305-4	Direct and indirect GHG emissions per production unit (Scope 1 + 2)	kg of CO <sub>2</sub> e/production ton	96.94	91.00	80.96	86.06	89.74	78.18	84.16	85.93	78.04	81.86
GRI 305-7	Nitrogen oxide (NOx)	tons	ND	ND	ND	ND	697	288	985	691	327	1,018
	Sulfur oxides (SOx)	tons	ND	ND	ND	ND	64	250	313	61	249	310
	Carbon monoxide (CO)	tons	ND	ND	ND	ND	1,449	1,222	2,671	1,410	1,168	2,578
	Volatile Organic Carbon (VOCs)	tons	ND	ND	ND	ND	763	544	1,307	745	519	1,264
	Total Suspended Particle (TSP)	tons	ND	ND	ND	ND	376	290	666	364	272	636

#### Remarks:

- ND = No Data
- In 2022 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, India, Turkiye and Laos operations
- In 2023 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye and Laos operations
- In 2024 Overseas is included data of Vietnam, Republic of China (Taiwan), United States, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye, Laos, Belgium and Sri Lanka operations
- 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 CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. 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	2021				2022			2023			2024		
			Thailand	Thailand	Overseas	Total	Thailand	Overseas	Total	Thailand	Overseas	Total	Thailand	Overseas	Total
GRI 306-3 (2020)	Total waste generated	thousand tons	456.06	470.47	166.37	636.84	428.06	157.42	585.47	441.59	207.78	649.36			
	Total waste diverted and direct to disposal	thousand tons	456.06	470.47	166.37	636.84	428.18	158.20	586.38	441.72	207.77	649.49			
GRI 306-4 (2020)	Total waste diverted from disposal	thousand tons	433.03	452.31	143.77	596.08	411.12	140.23	551.35	425.89	178.62	604.51			
	Total non-hazardous waste diverted from disposal	thousand tons	432.66	451.85	143.40	595.25	410.75	140.12	550.87	425.48	178.42	603.90			
	<u>Industrial and agro-industrial waste recovery onsite</u>	thousand tons	0.00	39.02	39.38	78.40	3.90	48.64	52.54	3.34	45.77	49.11			
	- Reused	thousand tons	0.00	0.02	0.00	0.02	0.02	0.19	0.21	0.02	0.31	0.33			
	- Recycled	thousand tons	0.00	0.16	1.86	2.02	0.04	2.24	2.28	0.01	4.67	4.68			
	- Composting	thousand tons	0.00	37.59	37.18	74.77	3.76	46.04	49.80	3.27	40.77	44.04			
	- Used as animal feed	thousand tons	0.00	1.25	0.34	1.59	0.05	0.17	0.21	0.02	0.02	0.03			
	- Other recovery operation	thousand tons	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.02	0.00	0.02			
	<u>Industrial and agro-industrial waste recovery offsite</u>	thousand tons	432.66	412.83	104.01	516.85	406.84	90.78	497.62	422.13	132.65	554.78			
	- Reused	thousand tons	0.15	0.18	0.97	1.16	0.10	1.07	1.17	0.27	27.05	27.31			
	- Recycled	thousand tons	24.28	25.47	12.25	37.72	25.99	10.12	36.11	26.86	15.56	42.42			
	- Composting	thousand tons	343.63	315.24	76.98	392.22	306.84	66.18	373.02	322.11	58.24	380.35			
	- Used as animal feed	thousand tons	61.26	68.14	11.56	79.70	72.25	9.25	81.51	70.84	27.65	98.49			
	- Other recovery operation	thousand tons	3.34	3.81	2.25	6.06	1.67	4.16	5.83	2.05	4.16	6.22			
	<u>Domestic waste recovery offsite</u>	thousand tons	ND	ND	ND	ND	0.00	0.70	0.70	0.00	0.00	0.00			
	- Reused	thousand tons	ND	ND	ND	ND	0.00	0.00	0.00	0.00	0.00	0.00			
	- Recycled	thousand tons	ND	ND	ND	ND	0.00	0.70	0.70	0.00	0.00	0.00			
	- Composting	thousand tons	ND	ND	ND	ND	0.00	0.00	0.00	0.00	0.00	0.00			
	- Used as animal feed	thousand tons	ND	ND	ND	ND	0.00	0.00	0.00	0.00	0.00	0.00			
	- Other recovery operation	thousand tons	ND	ND	ND	ND	0.00	0.00	0.00	0.00	0.00	0.00			
	Total hazardous waste diverted from disposal	thousand tons	0.37	0.46	0.37	0.83	0.37	0.12	0.49	0.41	0.20	0.61			
	<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	0.00			
	- Reused	thousand tons	0.00	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	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	0.00			
	<u>Hazardous waste recovery offsite</u>	thousand tons	0.37	0.46	0.37	0.83	0.37	0.12	0.49	0.41	0.20	0.61			
	- Reused	thousand tons	0.01	0.05	0.04	0.09	0.04	0.04	0.09	0.06	0.10	0.16			
	- Recycled	thousand tons	0.36	0.40	0.33	0.74	0.33	0.07	0.40	0.35	0.09	0.45			
	- Other recovery operation	thousand tons	0.00	0.00	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	23.03	18.16	22.61	40.76	17.07	17.96	35.03	15.83	29.15	44.98			
	Total non-hazardous waste directed to disposal	thousand tons	22.85	17.98	22.18	40.16	16.90	17.34	34.24	15.61	29.04	44.66			
	<u>Industrial and agro-industrial waste disposal onsite</u>	thousand tons	0.47	2.10	7.35	9.44	2.16	3.87	6.03	0.48	3.39	3.87			
	- Incineration with energy recovery	thousand tons	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.27	0.27			
	- Incineration without energy recovery	thousand tons	0.25	0.65	0.82	1.47	0.38	1.01	1.39	0.26	0.73	0.99			
	- Landfill	thousand tons	0.22	1.43	6.52	7.96	1.78	2.87	4.64	0.22	2.39	2.61			
	- Other disposal operations	thousand tons	0.00	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	22.38	15.88	14.84	30.72	9.70	9.97	19.67	9.60	17.03	26.63			
	- Incineration with energy recovery	thousand tons	1.23	0.77	0.56	1.34	2.35	0.66	3.01	2.27	1.27	3.54			
	- Incineration without energy recovery	thousand tons	0.52	0.16	2.46	2.62	0.64	1.40	2.04	0.80	3.97	4.77			
	- Landfill	thousand tons	20.63	14.95	11.82	26.76	6.70	7.91	14.61	6.53	11.78	18.31			
	- Other disposal operations	thousand tons	0.00	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	0.15	0.24	0.39	0.13	1.26	1.39			
	- Incineration without energy recovery	thousand tons	ND	ND	ND	ND	0.06	0.24	0.30	0.07	0.14	0.21			
	- Landfill	thousand tons	ND	ND	ND	ND	0.08	0.01	0.09	0.06	1.12	1.18			
	<u>Domestic waste disposal offsite</u>	thousand tons	ND	ND	ND	ND	4.89	3.25	8.15	5.40	7.37	12.77			
	- Incineration without energy recovery	thousand tons	ND	ND	ND	ND	0.05	0.15	0.20	0.05	0.14	0.19			
	- Landfill	thousand tons	ND	ND	ND	ND	4.84	3.10	7.95	5.36	7.23	12.59			

## Environmental Performance

### Waste

GRI Standards	Indicator	Unit	2021			2022			2023			2024		
			Thailand	Thailand	Overseas	Total	Thailand	Overseas	Total	Thailand	Overseas	Total	Thailand	Overseas
	Total hazardous waste directed to disposal	thousand tons	0.18	0.18	0.42	0.60	0.17	0.62	0.79	0.22	0.11	0.33		
	<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	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	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	0.00		
	- Secured landfill	thousand tons	0.00	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	0.00		
	<u>Hazardous waste disposal offsite</u>	thousand tons	0.18	0.18	0.42	0.60	0.17	0.62	0.79	0.22	0.11	0.33		
	- Incineration with energy recovery	thousand tons	0.11	0.14	0.00	0.14	0.07	0.00	0.07	0.19	0.00	0.19		
	- Incineration without energy recovery	thousand tons	0.05	0.02	0.16	0.18	0.01	0.06	0.08	0.01	0.04	0.05		
	- Secured landfill	thousand tons	0.02	0.02	0.16	0.18	0.07	0.53	0.60	0.02	0.06	0.08		
	- Other disposal operations	thousand tons	0.00	0.00	0.10	0.10	0.01	0.03	0.04	0.00	0.01	0.01		
-	Waste disposed by landfill and incineration	thousand tons	21.69	17.23	21.94	39.17	14.63	17.27	31.91	13.36	27.60	40.97		
-	Waste disposed by landfill and incineration per production unit	kg/production ton	2.44	1.97	2.59	2.27	1.63	2.07	1.85	1.49	2.88	2.20		

#### Remarks:

- ND = No Data
- In 2022 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, India, Turkiye and Laos operations
- In 2023 Overseas is included data of Vietnam, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye and Laos operations
- In 2024 Overseas is included data of Vietnam, Republic of China (Taiwan), United States, the Philippines, Cambodia, Malaysia, United Kingdom, India, Turkiye, Laos, Belgium and Sri Lanka operations
- 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	2021	2022	2023	2024
Food Loss & Waste Impact	Total weight food loss & waste	tons	126,069	128,515	175,640	143,224
	Total weight of food loss & waste used for alternative purposes	tons	124,114	126,400	136,655	126,959
	Total discarded	tons	1,955	2,115	38,984	16,265
	Food loss & waste intensity	kg/ton of products	2.6	2.7	28.7	11.4
	Coverage	%	17	20	41	63

#### 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 from operations in the eastern region of Thailand
- In 2023, food loss data covered chicken meat, eggs, shrimp and processed shrimp from operations in the eastern region of Thailand, and pork products  
Food waste data covers Chester's Food World and Bang Nam Prio Distribution Center. Beverages and soups are excluded.
- In 2024, food loss data covered nine product groups, including fresh pork, processed pork, fresh chicken, fresh duck, chicken eggs, fresh shrimp, processed shrimp, ready-to-eat food products, processed egg products & bakery. Operation sites excluded are; shrimp processing plant in Ranot (Songkhla province) and Surat Thani province; five chicken slaughterhouse in Maha Sarakham, Roi Et, Si Sa Ket, Songkhla and Lampang province; one food processing plant in Wang Noi (Ayutthaya province). The food waste data for transportation and distribution is derived from five distribution centers (Bang Nam Prio Distribution Center, Chachoengsao, Mahachai Distribution Center, Samut Songkhram, and Surat Thani, Lamphun, Khon Kaen Distribution Centers). The food waste data for food preparation and consumption in restaurants is estimated from waste composition analysis.  
The weight of this food waste does not include liquids such as beverages and soups. The sample area includes the operations of 8 sites of Chester's business and 5 sites of Food World business. The reporting scope covers only CPF's operational areas, excluding franchises and tenants.  
Chester's business data does not include other restaurant brands such as Taliew and Crown Bubble.
- Food loss data collected from enterprise resource planning (ERP) system
- 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	Performance	Unit	2021	2022	2023	2024
Packaging Material	Total weight of wood/paper fiber packaging	tons	25,261	24,338	37,424	34,305
	Recycled and/or certified wood/paper fiber	% of total weight	85	85	75	87
	Total weight of metal packaging	tons	71	69	76	214
	Recycled metal	% of total weight	100	100	100	58
	Total weight of glass packaging	tons	860	626	847	919
	Recycled glass	% of total weight	60	60	60	60
Plastic Packaging	Total weight of plastic packaging	tons	18,687	19,326	21,106	27,106
	Percentage of recycled content within the plastic packaging	% of the total weight of all plastic packaging	2.2	2.8	2.6	5.1
	Percentage of recyclable plastic packaging	% of the total weight of all plastic packaging	77.66	81.25	83.14	82.19
	Percentage of compostable plastic packaging	% of the total weight of all plastic packaging	0.21	0.20	0.16	0.11

#### Remarks:

- Percentage of recyclable plastic packaging excludes multimaterial plastic and alufoil.
- In 2021-2022, packaging data covered Thailand operations
- In 2023, packaging data covered Thailand, Laos, Russia and India operations
- In 2024, packaging data covered Thailand, Vietnam, Russia, the Philippines, Malaysia, Tukiye, Laos, and Belgium operations