

**SCGP: Highlight Environment Performance**

<b>Performance</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>GRI Standard</b>	<b>S&amp;P CSA</b>
Production (Thousan Tons)	3243	3411	3439	3442	3359		0.1
Raw Materials (Thousand Tons)	4,795	5,224	5,483	5,177	6,405	GRI 301-1	
Recycle Materials (Thousand Tons)	2,430	2,887	2,550	2,597	4,003	GRI 301-2	
GHG Scope 1 (Million Tons CO2)	2.88	2.81	2.58	2.53	2.66	GRI 305-1	2.3.1
GHG Scope 2 (Million Tons CO2)	0.15	0.21	0.38	0.38	0.26	GRI 305-2	2.3.2
GHG Scope 1 and 2 (Million Tons CO2)	3.04	3.02	2.96	2.91	2.92		
GHG Emission Reduction compare with business as usual (BAU) at base year of 2007 (Million Tons CO2)	0.31	0.37	0.45	0.49	0.43	GRI 305-5	
GHG Emission Reduction compare with business as usual (BAU) at base year of 2007 (%)	9.2	11.0	13.2	14.4	12.8	GRI 305-5	
GHG Emission (Ton per Ton Production)	0.94	0.89	0.86	0.85	0.87		
GHG Emission Target compare with business as usual (BAU) at base year of 2007 (Million Tons CO2)	3.34	3.39	3.41	3.40	3.35		2.5.9
GHG Emission Target (Tons CO2 per Tons Production)	1.03	1.00	0.99	0.99	1.00		
Total Energy Consumption (Petajoules)	39.38	40.39	40.97	40.83	40.79	GRI 302-1	
Heating and Steam Consumption (Petajoules)	38.43	39.13	39.58	39.45	39.87	GRI 302-1	
Alternative Fuel (Petajoules) -Renewable Biomass	1.05	0.95	0.96	1.39	1.59	GRI 302-1	2.3.3
Alternative Fuel (Petajoules) -Industrial Waste	8.21	8.55	9.80	9.81	8.81	GRI 302-1	2.3.3
Alternative Fuel (Petajoules) -Non Renewable Industrial Waste	1.17	1.25	1.08	0.89	1.94	GRI 302-1	2.3.3
Portion of Alternative Fuel (%)	27.2	27.5	29.9	30.6	31.0	GRI 302-1	
Electrical Consumption (Gigawatt Hours)	264.42	351.00	385.06	383.87	256.42	GRI 302-1	
Electricity Sold (Petajoules)	NA	NA	0.07	0.15	0.45	GRI 302-1	2.3.3
Energy Consumption Reduction compare with business as usual (BAU) at base year of 2007 (Petajoules)	NA	3.03	3.67	3.76	2.31	GRI 302-4	
Energy Consumption Reduction compare with business as usual (BAU) at base year of 2007 (%)	NA	7.0	8.2	8.4	5.4	GRI 302-4	
Energy Consumpition (Gigajoules per Ton Production)	12.14	11.84	11.91	11.86	12.14		
Energy Consumption Target compare with business as usual (BAU) at base year of 2007 (Petajoules)	NA	43.42	44.64	44.59	43.10		
Energy Consumption Target (Gigajoules per Ton Production)	0.00	12.73	12.98	12.95	12.83		
Total water withdrawal (Million Cubic Meter)	65.16	67.20	65.49	61.32	54.77	GRI 303-3	

**SCGP: Highlight Environment Performance**

<b>Performance</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>GRI Standard</b>	<b>S&amp;P CSA</b>
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) (Million Cubic Meter) - Surface water	NA	21.76	21.10	19.50	17.08	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) (Million Cubic Meter) - Groundwater	NA	44.97	44.00	41.41	30.64	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) (Million Cubic Meter) - Seawater	NA	0.00	0.00	0.00	0	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) (Million Cubic Meter) - Tap water or Third-party	NA	0.48	0.40	0.41	0.42	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS > 1,000 mg/L) (Million Cubic Meter) - Surface water	NA	0.00	0.00	0.00	0	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS > 1,000 mg/L) (Million Cubic Meter) - Groundwater	NA	0.00	0.00	0.00	7	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS > 1,000 mg/L) (Million Cubic Meter) - Seawater	NA	0.00	0.00	0.00	0	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS > 1,000 mg/L) (Million Cubic Meter) - Tap water or Third-party	NA	0.00	0.00	0.00	0	GRI 303-3	2.3.4
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) in water stress area - Surface water	NA	0.00	0.00	0.00	0	GRI 303-3	
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) in water stress area - Groundwater	NA	0.00	0.00	0.00	0	GRI 303-3	
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) in water stress area - Seawater	NA	0.00	0.00	0.00	0	GRI 303-3	
Water withdrawal from freshwater (TDS ≤ 1,000 mg/L) in water stress area - Tap water or Third-party	NA	0.00	0.00	0.00	0	GRI 303-3	

**SCGP: Highlight Environment Performance**

Performance	2016	2017	2018	2019	2020	GRI Standard	S&P CSA
Water withdrawal from freshwater (TDS > 1,000 mg/L) in water stress area (Million Cubic Meter) - Surface water	NA	0.00	0.00	0.00	0	GRI 303-3	
Water withdrawal from freshwater (TDS > 1,000 mg/L) in water stress area (Million Cubic Meter) - Groundwater	NA	0.00	0.00	0.00	0	GRI 303-3	
Water withdrawal from freshwater (TDS > 1,000 mg/L) in water stress area (Million Cubic Meter) - Seawater	NA	0.00	0.00	0.00	0	GRI 303-3	
Water withdrawal from freshwater (TDS > 1,000 mg/L) in water stress area (Million Cubic Meter) - Tap water or Third-party	NA	0.00	0.00	0.00	0	GRI 303-3	
Water Withdrawal Reduction compare with business as usual at base year of 2014 (Million Cubic Meter)	-0.21	-0.53	2.96	7.12	11.07		
Water Withdrawal Reduction compare with business as usual at base year of 2014 (%)	-0.33	-0.80	4.32	10.40	16.81		
Recycle Water (Million Cubic Meter)	4.52	6.12	7.07	8.39	8.97	GRI 303-3	
Portion of Recycled Water (%)	6.48	8.35	9.75	12.04	14.08		
Water Withdrawal (Cubic Meter per Tons Production)	20.09	19.70	19.05	17.82	16.31		
Water Withdrawal Target compare with business as usual at base year of 2014 (Million Cubic Meter)	64.95	66.67	68.45	68.44	65.84		
Water Withdrawal Target (Million Cubic Meter per Tons Production)	20.03	19.54	19.91	19.88	19.60		
Water discharge to surface water (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	30.84	GRI 303-4	2.3.4
Water discharge to groundwater (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	1.16	GRI 303-4	2.3.4
Water discharge to seawater (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	0.00	GRI 303-4	2.3.4
Water discharge to third-party water (total) (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	4.69	GRI 303-4	2.3.4
Third-party water sent for use to other organizations (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	4.62	GRI 303-4	2.3.4
Total water discharge (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	36.69	GRI 303-4	2.3.4
Water discharge by freshwater (TDS <= 1,000 mg/L) (Million Cubic Meter)	NA	NA	NA	NA	4.31	GRI 303-4	2.3.4
Water discharge by other water (TDS > 1,000 mg/L) (Million Cubic Meter)	NA	NA	NA	NA	32.39	GRI 303-4	2.3.4
Water discharge by freshwater (TDS <= 1000 mg/L) in water stress area (Million Cubic Meter) <sup>EN3</sup>	NA	NA	NA	NA	0.00	GRI 303-4	

**SCGP: Highlight Environment Performance**

Performance	2016	2017	2018	2019	2020	GRI Standard	S&P CSA
Water discharge by other water (TDS > 1,000 mg/L) in water stress area (Million Cubic Meter)	NA	NA	NA	NA	0.00	GRI 303-4	
BOD (Tons)	415.24	355.33	214.85	147.71	153.0727758	GRI 306-1	
COD (Tons)	6292.89	5899.83	5074.51	4224.09	3623.288843	GRI 306-1	
TSS (Tons)	922.05	965.22	792.62	572.17	505.5216872	GRI 306-1	
Hazardous Waste Generation (Thousand Tons)	0.77	1.03	1.61	2.00	2.66		2.3.5
Hazardous Waste Generation (Kilograms per Ton of Production)	0.24	0.30	0.47	0.58	0.79		
Hazardous Waste Management (Thousand Tons) - Reuse / Recycled	0.40	0.74	1.24	1.77	2.66	GRI 306-2	2.3.5
Hazardous Waste Management (Thousand Tons) - Incinerated without energy recovery	0.41	0.27	0.32	0.06	0.02	GRI 306-2	2.3.5
Hazardous Waste Management (Tons) - Landfilled	0.09	1.00	0.00	0.00	0.77	GRI 306-2	2.3.5
Hazardous Waste in the storage at the end of year (Thousand Tons)	NA	NA	NA	0.13	0.11	GRI 306-2	
Non Hazardous Waste Generation (Thousand Tons)	1015.43	1025.32	1065.08	1053.91	1042.74		2.3.5
Non Hazardous Waste Generation (Kilograms per Ton of Production)	313.12	300.56	309.74	306.19	310.44		
Non Hazardous Waste Management (Thousand Tons) - Reuse / Recycled	1124.20	1044.21	1011.10	1074.48	1064.32	GRI 306-2	2.3.5
Non Hazardous Waste Management (Thousand Tons) - Incinerated without energy recovery	2.07	1.32	0.40	0.28	0.00	GRI 306-2	2.3.5
Non Hazardous Waste Management (Tons) - Landfilled	10.60	0	0	0	0	GRI 306-2	2.3.5
Non Hazardous Waste in the storage at the end of year (Thousand Tons)	NA	NA	NA	145.22	123.63	GRI 306-2	
Oxides of Nitrogen (Thousand Tons)	3.16	2.53	2.86	2.48	2.97	GRI 305-7	
Oxides of Sulfur (Thousand Tons)	2.60	2.68	2.20	1.81	2.57	GRI 305-7	
Particulate Matter (Thousand Tons)	0.60	0.41	0.39	0.34	0.31	GRI 305-7	
Operating Expenses-Environment (Million Baht)	738	889	722	681	742		2.2.3
Capital Invesments-Environment (Million Baht)	541	178	347	383	330		2.2.3
Tax Incentives linked to environment investment	NA	NA	19	17	8		2.2.3
Number of violationsof legalobligations/regulations (Numberof Cases)	0	0	0	0	0	GRI 307-1	2.2.4