

Graphic Packaging International Sustainability Metrics

Absolute

Metric	Unit	2016	2017	2018	2019
Non Renewable Energy	MWh	8,270,588	8,149,756	8,760,439	8,636,545
Renewable Energy (Bark, Sludge, Black Liquor, and Railroad ties)	MWh	17,797,268	17,875,267	17,837,027	17,606,173
Total Energy	MWh	26,067,857	26,025,023	26,597,466	26,242,718
Non-Renewable - Renewable Energy Profile	Non Renewable	32%	31%	33%	33%
	Renewable	68%	69%	67%	67%
Water Usage (effluent)	M3	160,586,678	150,311,966	144,573,426	162,317,760
GHG Emissions - Location Based (Scope 1 = S1, Scope 2 = S2)	Metric Tonnes CO ₂ e - S1	1,257,469	1,239,304	1,350,965	1,318,747
	Metric Tonnes CO ₂ e - S2	789,906	762,821	744,003	757,538
	Metric Tonnes CO ₂ e - S1 & S2	2,047,376	2,002,125	2,094,968	2,076,285
GHG Emissions - Market Based (Scope 1 = S1, Scope 2 = S2)	Metric Tonnes CO ₂ e - S1	1,257,469	1,239,304	1,350,965	1,318,747
	Metric Tonnes CO ₂ e - S2	793,037	766,230	747,794	824,155
	Metric Tonnes CO ₂ e - S1 & S2	2,050,507	2,005,534	2,098,760	2,142,902
Scope 3 GHG Emissions (S3)	Metric Tonnes CO ₂ e - S3			1,661,916	1,987,798

Intensity

Metric	Unit	2016	2017	2018	2019
Non Renewable Energy	MMBtu/\$1,000 Sales	4.79	4.74	4.96	4.78
Renewable Energy (Bark, Sludge, Black Liquor, and Railroad ties)	MMBtu/\$1,000 Sales	10.31	10.40	10.11	9.75
Total Energy	MMBtu/\$1,000 Sales	15.10	15.15	15.07	14.54
Non-Renewable - Renewable Energy Profile	Non-Renewable	32%	31%	33%	33%
	Renewable	68%	69%	67%	67%
Water Usage (effluent)	1,000's Gal/short ton	11.05	10.16	10.00	10.91
GHG Emissions - Location Based* (S1 & S2)	Metric Tonnes CO ₂ e/\$1,000 sales	0.35	0.34	0.35	0.34
GHG Emissions - Market Based* (S1 & S2)	Metric Tonnes CO ₂ e/\$1,000 sales	0.35	0.34	0.35	0.35

Intensity Data as reported in Graphic Packaging Annual Reports

Annual Tonnage (All Mills included)	Short Tons	3,839,328	3,909,902	3,819,753	3,930,885
Net Sales \$ U.S.	Dollars	\$5,892,100,000	\$5,862,100,000	\$6,023,000,000	\$6,160,100,000

Notes:

* GHG Emission reset for years '16, '17 and '18 - change was less than +/- 5% and not material.
 * Water data: 97% of GPI facilities included representing ~97% of GPI water
 * The estimated Scope 3 emissions were calculated using the GHG Protocol Quantis Scope 3 Evaluator Tool. Financial expenditure data was collected and allocated according to purchase type (i.e. standard goods and services). Based on this allocation, Quantis applied emission factors specific to the pulp, paper, printing and publishing sector per dollar spent to calculate the respective emissions.

