

# Graphic Packaging International Sustainability Metrics

## Absolute

Metric	Unit	2016	2017	2018	2019	2020
Non Renewable Energy	MWh	8,270,588	8,149,756	8,760,439	8,636,545	9,231,991
Renewable Energy (Bark, Sludge, Black Liquor, and Railroad ties)	MWh	17,797,268	17,884,838	17,846,613	17,606,173	17,263,202
<b>Total Energy</b>	<b>MWh</b>	<b>26,067,857</b>	<b>26,025,023</b>	<b>26,597,466</b>	<b>26,242,718</b>	<b>26,495,193</b>
Non-Renewable - Renewable Energy Profile	Non Renewable	32%	31%	33%	33%	35%
	Renewable	68%	69%	67%	67%	65%
Water Discharge (Mill data only)	M3	142,371,485	140,343,903	155,087,578	152,580,792	133,741,408
Water Draw (Mill and 69% of converting)	M3	160,586,678	150,311,966	144,573,426	162,317,760	153,020,000
GHG Emissions (Location Based) (Scope 1 = S1, Scope 2 = S2)	Metric Tonnes CO <sub>2</sub> e - S1	1,257,469	1,239,304	1,350,965	1,318,747	1,441,475
	Metric Tonnes CO <sub>2</sub> e - S2	789,906	762,821	744,003	757,538	652,277
	Metric Tonnes CO <sub>2</sub> e - S1 & S2	2,047,376	2,002,125	2,094,968	2,076,285	2,093,752
GHG Emissions (Market Based) (Scope 1 = S1, Scope 2 = S2)	Metric Tonnes CO <sub>2</sub> e - S1	1,257,469	1,239,304	1,350,965	1,318,747	1,441,475
	Metric Tonnes CO <sub>2</sub> e - S2	793,037	766,230	747,794	824,155	680,468
	Metric Tonnes CO <sub>2</sub> e - S1 & S2	2,050,507	2,005,534	2,098,760	2,142,902	2,121,943
Scope 3 GHG Emissions (S3)	Metric Tonnes CO <sub>2</sub> e - S3			2,840,226	3,504,895	2,292,901

## Intensity

Metric	Unit	2016	2017	2018	2019	2020
Non Renewable Energy	MMBtu / \$1,000 Sales	4.79	4.74	4.96	4.78	4.80
Renewable Energy (Bark, Sludge, Black Liquor, and Railroad ties)	MMBtu / \$1,000 Sales	10.31	10.40	10.11	9.75	8.98
<b>Total Energy</b>	<b>MMBtu / \$1,000 Sales</b>	<b>15.10</b>	<b>15.15</b>	<b>15.07</b>	<b>14.54</b>	<b>13.78</b>
Non-Renewable - Renewable Energy Profile	Non-Renewable	32%	31%	33%	33%	35%
	Renewable	68%	69%	67%	67%	65%
Water Usage (Effluent / discharge)	1,000's Gal / short ton	9.54	9.41	10.39	10.23	8.96
Water Usage (Draw)	1,000's Gal / short ton	10.76	10.07	9.69	10.88	10.26
GHG Emissions (Location Based)*	Metric Tonnes CO <sub>2</sub> e / \$1,000 sales	0.35	0.34	0.35	0.34	0.32
GHG Emissions (Market Based)*	Metric Tonnes CO <sub>2</sub> e / \$1,000 sales	0.35	0.34	0.35	0.35	0.32

### Intensity Data as reported in Graphic Packaging Annual Reports

<b>Annual Tonnage</b> (All Mills included)	Short Tons	3,839,328	3,909,902	3,819,753	3,930,885	3,941,301
<b>Net Sales \$ U.S.</b>	Dollars	\$5,892,100,000	\$5,862,100,000	\$6,023,000,000	\$6,160,100,000	\$6,559,900,000

#### Notes:

\* Water data: 74% of GPI global facilities included representing ~99% 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.

