



SASB

Topic	Code	Category	Accounting Metric	Unit	Disclosure	Topic	Code	Category	Accounting Metric	Unit	Disclosure
Greenhouse Gas Emissions	RR-PP-110a.1	Quantitative	Gross global Scope 1 emissions	Metric tons of CO ₂ e	2,128,176	Water Resource Management	RR-PP-140a.1	Quantitative	(1) Total water withdrawals	Thousand cubic meters (m ³)	44,678
	RR-PP-110a.2	Qualitative	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Page:	58				(2) Total net fresh water consumption	Thousand cubic meters (m ³)	3,256
(3) Percentage of water withdrawal in areas with high or extremely high water stress									%	0.3%	
(4) Percentage of net water consumption in areas with high or extremely high water stress									%	1.4%	
Air Quality	RR-PP-120a.1	Quantitative	(1) NOx emissions *	Metric tons	980	RR-PP-140a.2	Qualitative	Water resource management risks and corresponding strategies and management policies	Page:	65	
			(2) SOx emissions *	Metric tons	704						
			(3) PM emissions	Metric tons	196						
			(4) VOCs emissions	Metric tons	153						
			(5) HAPs emissions	Metric tons	0.13						
Energy Management	RR-PP-130a.1	Quantitative	Total net energy consumption	Gigajoules (GJ)	36,001,946	Performance Metrics	RR-PP-000.A	Quantitative	Pulp production volume	Metric tons	368,660
			Percentage grid electricity	%	7%		RR-PP-000.B	Quantitative	Paper production volume	Metric tons	2,532,839
			Percentage of biomass energy usage	%	24%		RR-PP-000.C	Quantitative	Total wood fiber sourced	Metric tons	2,202,562
			Percentage of renewable energy usage (excluding biomass)	%	0.03%	Supply Chain Management	RR-PP-430a.1	Quantitative	Percentage of wood fiber sourced from (1) third-party certified forestlands and percentage to each standard	FSC CoC%	21.4%
			Total self-generated energy	Gigajoules (GJ)	33,417,787		RR-PP-430a.1	Quantitative	(2) meeting other fiber sourcing standards and percentage to each standard	FSC CW%	10.8%
			Amount of self-generated energy sold	Gigajoules (GJ)	230,565					RR-PP-430a.2	Quantitative
			Amount of self-generated renewable energy	Gigajoules (GJ)	15,239						
Percentage of SRF usage (SRF, paper reject, waste tires)	%	11%									

* Data Scope: All production sites listed in the "Entities included in the report".

* NOx: As the selected detection method is the total nitrogen oxide measurement method, it is unable to exclude N₂O. Therefore, in accordance with local regulations and GRI 305-7 reporting requirements, the NOx emissions are disclosed.

* SOx: As the chosen method is the total sulfur oxide measurement method, it is unable to individually detect SO₂. Therefore, in accordance with local regulations and GRI 305-7 reporting requirements, the SOx emissions are disclosed.

Heating Values for Energy Conversion

Energy Type	Heating Value	Unit	Energy Type	Heating Value	Unit	Energy Type	Heating Value	Unit	Energy Type	Heating Value	Unit
Electricity	860	kcal/kWh	Liquefied petroleum gas/Gas	6,635	kcal/L	SRF	5,150	kcal/kg	Barks	1,535	kcal/kg
Coal	5,600	kcal/kg	Natural gas	9,000	kcal/m ³	Lignin (black liquor)	3,513	kcal/kg	Waste woods/wood chips/sawdust	3,648	kcal/kg
Fuel oil	9,600	kcal/L	Biogas	4,941	kcal/m ³	Paper Reject	5,150	kcal/kg			
Diesel	8,400	kcal/L	Waste tires	8,643	kcal/kg	Sludge	487	kcal/kg			

*The heating value of fuel and electricity refers to the "Unit Heating Value Table of Energy Products" from the Energy Bureau of the Ministry of Economic Affairs and the measurement results of our plants.