

Appendix

2018-2021 GHG Emissions Data

EMISSIONS	UNIT	2018	2019	2020	2021
Direct (Scope 1) GHG Emissions	Metric Tons CO2Eq	11,313,933	10,083,282	8,896,946	9,236,750
Energy Indirect (Scope 2) GHG Emissions	Metric Tons CO2Eq	277,200	261,372	241,805	229,081
Other Indirect (Scope 3) GHG Emissions (Locomotive Fuel Well-to-Tank)	Metric Tons CO2Eq	3,624,596	3,226,663	2,847,397	2,956,497
Other Indirect (Scope 3) GHG Emissions*	Metric Tons CO2Eq	2,184,882	829,069	711,063	624,330
Total Calculated Scope 1 & 2 Emissions	Metric Tons CO2Eq	11,591,133	10,344,654	9,138,751	9,466,831
Total Calculated Scope 1, 2 & 3 Emissions	Metric Tons CO2Eq	17,400,611	14,400,386	12,597,231	13,046,658
Absolute GHG Emissions for SBT	Metric Tons CO2Eq	15,215,729	13,571,317	11,986,148	12,422,328
GHG Emissions Intensity (Scope 1 & Scope 2)	Metric Tons CO2Eq/MGTM	12.5	12.2	11.8	11.6
GHG Emissions Intensity (Target Scope)	Metric Tons CO2Eq/MGTM	16.4	16.0	15.5	15.2
Emissions of Ozone-Depleting Substances (ODS)	Metric Tons CO2Eq	55,758	39,947	32,699	34,573

FUEL & ENERGY CONSUMPTION	UNIT	2018	2019	2020	2021
Total Energy Usage	Megawatt Hours	45.3 Million	40.4 Million	36.4 Million	37.4 Million
Non-Renewable Energy Consumption	Megawatt Hours	45,033,372	40,112,387	35,871,243	36,760,103
Renewable Energy Consumption	Megawatt Hours	316,422	327,309	479,185	677,481

WATER CONSUMPTION	UNIT	2018	2019	2020	2021
Withdrawal: Total Municipal Water Supplies	Million cubic meters	2,115	2,516	2,140	2,951
Withdrawal: Fresh Surface Water	Million cubic meters	0.60	0.51	0.37	0.054
Withdrawal: Fresh Groundwater	Million cubic meters	1,438	0.453	0.50	0.50
Water Discharge	Million cubic meters	1,878	2,964	1,535	1,376

WASTE	UNIT	2018	2019	2020	2021
Total Waste Generated	Tons	2,090,000	1,430,000	2,110,000	1,077,503
Total Waste Diverted from Landfill	%	71%	68%	47%	56%

* Non-Locomotive Fuels, Rail Ties, Combustion, Business Travel and Employee Commuting, and Various Purchased Products
For complete sustainability metrics and frameworks, go to [UP.com](https://www.up.com).