

Sustainability Accounting Standards Board (SASB) Refining and Marketing

Topic	Accounting Metric	Category	Code	Response	Unit of Measure	Disclosure Location
Greenhouse Gas Emissions	Gross global Scope 1 emissions Percentage covered under emissions-limiting regulations	Quantitative	EM-RM-110a.1	31	million tonnes CO ₂ -e	2019 Sustainability Report - Performance Data: GHG Emissions
				27	percentage (%) of refineries covered under emissions limiting regulations	
	Discussion of long-term and short-term strategy or plan to manage Scope1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	EM-RM-110a.2	n/a	n/a	2019 Sustainability Report - Leading in Sustainable Energy 2019 Perspectives on Climate-Related Scenarios
Air Quality	Air emissions of the following pollutants: NOx (excluding N ₂ O) SO _x Particulate matter (PM ₁₀) H ₂ S Volatile organic compounds (VOCs)	Quantitative	EM-RM-120a.1	11.9	thousand tonnes NOx	2019 Sustainability Report - Performance Data: Air Emissions
				3.2	thousand tonnes SOx	
				2.8	thousand tonnes PM10	
				0.09	thousand tonnes H2S	
				7.3	thousand tonnes VOCs	
Number of refineries in or near areas of dense population	Quantitative	EM-RM-120a.2	12	number of refineries	2019 Sustainability Report - Performance Data: Other Items	
Water Management	Total fresh water withdrawn Percentage recycled Percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	EM-RM-140a.1	159,050	megaliters	2019 Sustainability Report - Performance Data: Water
				5	percentage (%) of water recycled	
				28	percentage (%) of water withdrawn in locations with high or extremely high baseline water stress as a percentage of total water withdrawn.	
	29	percentage (%) water consumed in locations with high or extremely high baseline water stress as a percentage of total water consumed.				
Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	EM-RM-140a.2	13	number of incidents	2019 Sustainability Report - Performance Data: Water	
Hazardous Materials Management	Amount of hazardous waste generated Percentage recycled	Quantitative	EM-RM-150a.1	42	thousand tonnes	2019 Sustainability Report - Performance Data: Waste
				32	percentage (%) of hazardous waste recycled	
	Number of underground storage tanks (USTs) Number of UST releases requiring cleanup Percentage in states with UST financial assurance funds	Quantitative	EM-RM-150a.2	15,876	number of USTs	2019 Sustainability Report - Performance Data: Waste
				32	number of UST releases requiring cleanup	
47	percentage (%) of USTs in states with financial assurance funds					
Workforce Health & Safety	Total recordable incident rate (TRIR) Fatality rate Near miss frequency rate (NMFR) [For full-time employees and contract employees]	Quantitative	EM-RM-320a.1	0.29	TRIR - Employees	2019 Sustainability Report - Performance Data: Personal Safety Performance
				0.27	TRIR - Contractors	
				0	Fatality Rate - # of Employees	
				0	Fatality Rate - # of Contractors	

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	Discussion of management systems used to integrate a culture of safety	Discussion and Analysis	EM-RM-320a.2	n/a	n/a	2019 Sustainability Report - Promoting Safety
Product Specifications & Clean Fuel Blends	Percentage of Renewable Volume Obligation (RVO) met through: Production of renewable fuels Purchase of "separated" renewable identification numbers (RIN)	Quantitative	EM-RM-410a.1	n/a	n/a	NA
	Total addressable market and share of market for advanced biofuels and associated infrastructure	Quantitative	EM-RM-410a.2	2,756,348,320	\$US total addressable market	2019 Sustainability Report - Performance Data: Operational Performance
				1.97	percentage (%) market share	
				3.7	\$US billion growth projected in 2020	
				4.6	\$US billions growth projected in 2021	
				3.8	\$US billions growth projected in 2022	
				42.3	% growth projected in 2020	
				24.9	% growth projected in 2021	
-16.4	% growth projected in 2022					
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceeding associated with price fixing or price manipulation	Quantitative	EM-RM-520a.1	22.5	\$US million ²	2019 Annual Report - Item 3. Legal Proceedings - Litigation
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Discussion and Analysis	EM-RM-530a.1	n/a	n/a	2019 Sustainability Report - Promoting Safety
Critical Incident Risk Management	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1) and lesser consequence (Tier 2)	Quantitative	EM-RM-540a.1	0.04	Tier 1 event rate	2019 Sustainability Report - Performance Data: Process Safety Performance
				0.18	Tier 2 event rate	
	Challenges to Safety Systems indicator rate (Tier 3)	Quantitative	EM-RM-540a.2	n/a ³	n/a	2019 Sustainability Report - Promoting Safety
	Discussion of measurement of Operating Discipline and Management System Performance through Tier 4 Indicators	Discussion and Analysis	EM-RM-540a.3	n/a ³	n/a	2019 Sustainability Report - Promoting Safety
Accounting Metric	Refining throughput of crude oil and other feedstocks	Quantitative	EM-RM-000.A	1142	Million barrels of oil equivalent (BOE)	2019 Sustainability Report - Performance Data: Operational Performance
	Refining operating capacity	Quantitative	EM-RM-000.B	3072	Thousand barrels per calendar day (BPCD)	2019 Sustainability Report - Performance Data: Operational Performance