



2017 Environment Metrics Supplement

The Mosaic Company's 2017 Sustainability Disclosure has been prepared in accordance with the GRI Standards: core option. This supplement provides additional environmental metrics, not covered under the GRI framework, that some stakeholders request as part of their review of our performance. We encourage stakeholders to read this supplement in conjunction with our [2017 State of the Business Report](#) and [2017 Sustainability Disclosure & GRI Index](#).

Water

Total Water Withdrawals and Intensity by Business Segment

2017 Global Water Withdrawals by Segment Total Water Used by Business Segment						
Megaliters (1,000 m ³)						Megalitres/Finished Product Tonnes
Business Segment	Municipal	Reclaimed Water	Groundwater	Surface Water	Total	Total Withdrawal Intensity
Phosphate	958	3,563	70,118	219,149	293,788	0.0312
Potash	0	330	6,465	13,244	20,040	0.0023
International Distribution	93	5,536	2,263	0	7,892	0.0107
Mosaic Total	1,051	9,429	78,846	232,394	321,721	0.0171

Note: Phosphate surface water withdrawals include once through cooling water totals. Values include all water withdrawals and differ from Mosaic's freshwater intensity reduction target, as reported in Mosaic's State of the Business Report.



Energy and Emissions

Energy per Tonne Finished Product by Business Segment

2017 Total Energy Intensity by Segment GJ/Finished Product Tonnes	
Business Segment	
Phosphate	2.08
Potash	2.68
International Distribution	0.86
Mosaic Total	2.31

Note: Energy values in this table are inclusive of energy generated through cogeneration.

Purchased Electricity per Tonne Finished Product by Business Segment

2017 Energy Intensity by Segment GJ/Finished Product Tonnes	
Business Segment	
Phosphate	0.59
Potash	0.50
International Distribution	0.28
Mosaic Total	0.53

Note: Energy totals in this table include purchased electricity only.



GHG Intensity Metrics

2017 GHG Intensity by Segment								
Tonnes CO ₂ e/Finished Product Tonnes								
Business Segment	Total GHG ¹	Direct GHG ¹	Indirect GHG ¹	Total CO ₂	Direct CO ₂	Indirect CO ₂	CH ₄	N ₂ O
Phosphate	0.245	0.159	0.086	0.244	0.158	0.086	0.00	0.00
Potash	0.210	0.104	0.106	0.210	0.104	0.106	0.00	0.00
International Distribution	0.070	0.044	0.026	0.069	0.043	0.026	0.00	0.00
Mosaic Total	0.221	0.129	0.092	0.221	0.129	0.092	0.00	0.00

Note: ¹Total, Direct and Indirect GHG values are measured in tonnes CO₂e per tonne of finished product. Summation of parts may be different from total due to rounding.

Absolute GHG Metrics

2017 Absolute GHGs by Segment								
Million Tonnes CO ₂ e, except CH ₄ and N ₂ O in Tonnes								
Business Segment	Total GHG ¹	Direct GHG ¹	Indirect GHG ¹	Total CO ₂	Direct CO ₂	Indirect CO ₂	CH ₄	N ₂ O
Phosphate	2.30	1.50	0.81	2.30	1.50	0.81	2,371	3,120
Potash	1.81	0.90	0.91	1.81	0.90	0.91	1,996	5,105
International Distribution	0.05	0.03	0.02	0.05	0.03	0.02	58	239
Mosaic Total	4.17	2.43	1.74	4.17	2.43	1.74	3,848	8,868

Note: ¹Total, Direct and Indirect GHG values are measured in million tonnes CO₂e; CH₄ and N₂O are presented in tonnes. Summation of parts may be different from total due to rounding.



Other Emissions

2016 Other Emissions by Segment									
Tonnes									
Business Segment	NO _x	CO	SO ₂	VOC	NH ₃	FL	H ₂ S	SAM	HF
Phosphate	1,589	872	16,552	158	1,838	110	11	159	127
Potash	1,682	554	0	80	0	0	0	0	0
International Distribution	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mosaic Total	3,271	1,426	16,552	238	1,838	110	11	159	127

Note: Saskatchewan Potash sites reported per National Pollutant Release Inventory (NPRI) Methodology.