

2020

Sustainability
Disclosure
& GRI Index



GRI Content Index 2020

General Standard Disclosures

STANDARD TITLE	GENERAL DISCLOSURE	PAGE (OR LINK)	EXTERNAL ASSURANCE	DISCLOSURE
GRI 101: FOUNDATION 2016				
Organizational Profile				
GRI 102: General Disclosures 2016	102-1	The Mosaic Company	-	Name of the organization
	102-2	PDF pg. 15	-	Primary brands, products, and services
	102-3	Tampa, Florida	-	Location of the organization's headquarters
	102-4	2020 10-K pg. F-45 and PDF pg. 16	-	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report
	102-5	2020 10-K pg. 1	-	Nature of ownership and legal form
	102-6	2020 10-K pgs. 1-2, F-89	-	Markets served
	102-7	2020 10-K pgs. 25, F-4, F-9 – F-14 For a list of our locations (70 as of the date of this report), please see our website .	-	Scale of the organization
	102-8	PDF pg. 16	-	Number of employees
	102-9	2020 10-K pgs. 22-24, Mine-to-Market Value and PDF pg. 17	-	Description of the organization's supply chain
	102-10	PDF pg. 18	-	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain
	102-11	Mosaic addresses the precautionary principle through the organization's management of risk. Please see our Proxy Statement , pg. 20 for more information. In 2013, Mosaic submitted our first United Nations Global Compact (UNGC) Communication on Progress, affirming our commitment to operate according to the UNGC's 10 universal principles, including Principle Seven, which states, "Businesses should support a precautionary approach to environmental challenges."	-	How the precautionary approach or principle is addressed by the organization
	102-12	PDF pg. 19	-	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses
	102-13	PDF pgs. 19-20	-	Memberships of associations (such as industry associations) and national or international advocacy organizations

General Standard Disclosures (continued)

STANDARD TITLE	GENERAL DISCLOSURE	PAGE (OR LINK)	EXTERNAL ASSURANCE	DISCLOSURE
Strategy				
GRI 102: General Disclosures 2016	102-14	CEO Message	-	CEO Message
	102-15	Factors affecting our market, including impacts and risks, are summarized within Mosaic's 2020 10-K, pgs. 30-43. Key opportunities are discussed in our 2020 CDP Climate Change Response, pg. 15, and 2020 10-K.	-	Key impacts, risks, and opportunities
Ethics and Integrity				
GRI 102: General Disclosures 2016	102-16	PDF pg. 21	-	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics
	102-17	PDF pg. 21	-	Mechanisms for advice and concerns about ethics
Governance				
GRI 102: General Disclosures 2016	102-18	Proxy Statement, pg. 20	-	Governance structure of the organization
	102-20	Environmental, Health, Safety and Sustainable Development Committee Charter, pg. 2 and PDF pg. 22	-	Whether the organization has an executive-level position with responsibility for economic, environmental and social topics, and whether post holder report directly to the highest governance body
	102-21	Communications with the Board of Directors Policy	-	Process for consultation between stakeholders and the Board of Directors
	102-22	Proxy Statement, pgs. 21-24	-	Composition of Board of Directors and its committees
	102-23	Gregory L. Ebel is the chair of our Board of Directors. He is an independent director and not an executive officer of the company. This information is accurate as of December 31, 2020. Proxy Statement, pg. 13	-	Chair of highest governance body
	102-24	Proxy Statement, pg. 17	-	Nomination and selection processes for the Board of Directors and its committees
	102-25	Proxy Statement, pg. 26	-	Processes for the Board of Directors to avoid conflicts of interest
	102-28	Proxy Statement, pg. 25	-	Processes for evaluating the Board's performance
	102-29	Proxy Statement, pg. 20	-	The Board's role in identification and management of impacts, risks and opportunities
	102-31	2020 CDP Climate Change Response	-	Frequency of the Board's review of economic, environmental and social impacts, risks, and opportunities
	102-33	Communications with the Board of Directors Policy	-	Process for communicating critical concerns to the Board of Directors
	102-35	Proxy Statement, pg. 27-28	-	Compensation policies for the Board and Senior Leadership Team
	102-37	Communications with the Board of Directors Policy	-	Process for considering stakeholder views on compensation policies

General Standard Disclosures (continued)

STANDARD TITLE	GENERAL DISCLOSURE	PAGE (OR LINK)	EXTERNAL ASSURANCE	DISCLOSURE	SASB DISCLOSURE
Stakeholder Engagement					
GRI 102: General Disclosures 2016	102-40	PDF pg. 23	-	List of stakeholder groups engaged by the organization	
	102-41	PDF pg. 24	-	Percentage of total employees covered by collective bargaining agreements	EM-MM-310a.1
	102-42	PDF pg. 23	-	Basis for identification and selection of stakeholders with whom to engage	
	102-43	PDF pg. 23	-	Organization's approach to stakeholder engagement	
	102-44	PDF pg. 23	-	Key topics and concerns that have been raised through stakeholder engagement	
Reporting Practice					
GRI 102: General Disclosures 2016	102-45	2020 10-K and PDF pg. 27	-	Entities included in the organization's consolidated financial statements or equivalent documents	
	102-46	PDF pg. 24	-	The process for defining the report content and the Aspect Boundaries	
	102-47	PDF pg. 24	-	Material Aspects identified in the process for defining report content	
	102-48	PDF pg. 27	-	Restatements of information	
	102-49	PDF pg. 27	-	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	
	102-50	January 1, 2020– December 31, 2020	-	Reporting period	
	102-51	June 2020	-	Date of most recent previous report	
	102-52	Annual	-	Reporting cycle	
	102-53	Benjamin Pratt, Senior Vice President, Corporate Public Affairs	-	Contact point for questions regarding the report or its contents	
	102-54	This report has been prepared in accordance with the GRI Standards: core option. PDF pg. 27	-	Claims of reporting in accordance with the GRI standards	
	102-56	External assurance, where available, is noted in this Content Index. PDF pg. 27	-	External assurance policy	
Material Topic Reporting					
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26 The remainder of management approach (MA) for each material topic is included within the respective topic section.	-	Explanation of material topic and its boundary	

General Standard Disclosures (continued)

STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Economic							
MATERIAL TOPIC: ECONOMIC PERFORMANCE							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 28		-	Management approach and its components		
	103-3	PDF pg. 28		-	Evaluation of management approach		
GRI 201: Economic Performance 2016	201-1	PDF pgs. 29-30		-	Direct economic value generated and distributed		
	201-2	PDF pg. 31		-	Financial implications and other risks and opportunities for the organization's activities due to climate change		
	201-3	2020 10-K pg. F-74 and PDF pgs. 31-32		-	Coverage of the organization's defined benefit plan obligations		
	201-4	PDF pg. 32		-	Financial assistance received from government		
MATERIAL TOPIC: MARKET PRESENCE							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 33		-	Management approach and its components		
	103-3	PDF pg. 33		-	Evaluation of management approach		
GRI 202: Market Presence 2016	202-1	PDF pg. 34		-	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation		
	202-2	PDF pg. 34		-	Proportion of senior management hired from the local community at significant locations of operation		
MATERIAL TOPIC: INDIRECT ECONOMIC IMPACTS							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 33		-	Management approach and its components		
	103-3	PDF pg. 33		-	Evaluation of management approach		
GRI 203: Indirect Economic Impacts 2016	203-1	PDF pgs. 35-36		-	Development and impact of infrastructure investments and services supported		
	203-2	PDF pgs. 37-38		-	Significant indirect economic impacts, including the extent of impacts		
MATERIAL TOPIC: PROCUREMENT PRACTICES							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 33		-	Management approach and its components		
	103-3	PDF pg. 33		-	Evaluation of management approach		
GRI 204: Procurement Practices 2016	204-1	PDF pgs. 38-39		-	Proportion of spending on local suppliers at significant locations of operation		

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STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Economic (continued)							
MATERIAL TOPIC: ANTI-CORRUPTION							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 39		-	Management approach and its components		EM-MM-510a.1
	103-3	PDF pg. 39		-	Evaluation of management approach		
GRI 205: Anti-Corruption 2016	205-1	PDF pg. 39		-	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	10	EM-MM-510a.2
	205-2	PDF pg. 40		-	Communication and training on anti-corruption policies and procedures	10	
	205-3	PDF pg. 40		-	Confirmed incidents of corruption and actions taken	10	
MATERIAL TOPIC: ANTI-COMPETITIVE BEHAVIOR							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 39		-	Management approach and its components		
	103-3	PDF pg. 39		-	Evaluation of management approach		
GRI 206: Anti-Competitive Behavior 2016	206-1	PDF pg. 40		-	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes		

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STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Environmental							
MATERIAL TOPIC: MATERIALS							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 41		-	Management approach and its components		
	103-3	PDF pg. 41		-	Evaluation of management approach		
GRI 301: Materials 2016	301-1	PDF pg. 41		-	Materials used by weight or volume		
	301-2	PDF pg. 41		-	Percentage of materials used that are recycled input materials	7	
	301-3	PDF pg. 41		-	Percentage of products sold and their packaging materials that are reclaimed by category		
MATERIAL TOPIC: ENERGY							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 42		-	Management approach and its components		
	103-3	PDF pg. 42		-	Evaluation of management approach		
GRI 302: Energy 2016	302-1	PDF pgs. 47-49		+Assurance Statement	Energy consumption within the organization		RT-CH-130a.1; EM-MM-130a.1
	302-2		Energy consumed outside the organization is currently unavailable. We report GHG emissions associated with various sources in 305-3 and continue to collaborate with vendors and contractors to quantify the amount of energy consumed outside the organization.	-	Energy consumption outside of the organization		
	302-3	PDF pg. 49		-	Energy intensity		
	302-4	PDF pg. 49		-	Reduction of energy consumption	7	
	302-5			-	Reductions in energy requirements of products and services	7, 8, 9	

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STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Environmental (continued)							
MATERIAL TOPIC: WATER							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 42		-	Management approach and its components		
	103-3	PDF pg. 42		-	Evaluation of management approach		
GRI 303: Water 2016	303-1	PDF pg. 45		+Assurance Statement	Total water withdrawal by source		RT-CH-140a.1; EM-MM-140a.1
	303-2	PDF pg. 46		-	Water sources significantly affected by withdrawal of water	7	
	303-3	PDF pg. 46		-	Total volume of water recycled and reused		
MATERIAL TOPIC: BIODIVERSITY							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 42		-	Management approach and its components		
	103-3	PDF pg. 42		-	Evaluation of management approach		
GRI 304: Biodiversity 2016	304-1	PDF pg. 53		-	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		EM-MM-160a.1; EM-MM-160a.3
	304-2	PDF pg. 54		-	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	7, 8	EM-MM-160a.1
	MM1	PDF pg. 55		-	Land disturbed or rehabilitated	7	
	MM2	PDF pg. 55		-	Number and percentage of sites identified as requiring biodiversity management plans	7	
	304-3	PDF pg. 56		-	Habitats protected or restored	7, 8	
	304-4	PDF pgs. 57-58		-	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	7	
MATERIAL TOPIC: EMISSIONS							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 42		-	Management approach and its components		
	103-3	PDF pg. 42		-	Evaluation of management approach		
GRI 305: Emissions 2016	305-1	PDF pg. 50		+Assurance Statement	Direct greenhouse gas (GHG) emissions (Scope 1)	7, 8	EM-MM-110a.1; EM-MM-110a.2; RT-CH-110a.1
	305-2	PDF pg. 50		+Assurance Statement	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	7	
	305-3	PDF pg. 50		-	Other indirect greenhouse gas (GHG) emissions (Scope 3)	7	EM-MM-110a.2
	305-4	PDF pg. 51		-	Greenhouse gas (GHG) emissions intensity	7	EM-MM-110a.2; RT-CH-110a.2
	305-5	PDF pg. 51		-	Reduction of greenhouse gas (GHG) emissions	7, 9	
	305-7	PDF pg. 52		-	NO _x , SO ₂ and other significant air emissions		RT-CH-120a.1; EM-MM-120a.1

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Category: Environmental (continued)							
MATERIAL TOPIC: EFFLUENTS AND WASTE							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 42		-	Management approach and its components		
	103-3	PDF pg. 42		-	Evaluation of management approach		
GRI 306: Effluents and Waste 2016	306-1	PDF pg. 58		-	Total water discharge by quality and destination		
	306-2	PDF pg. 60		+Assurance Statement	Total weight of waste by type and disposal method	7	RT-CH-150a.1
	306-3	PDF pg. 62		-	Total number and volume of significant spills		
	MM3	PDF pg. 61		-	Overburden, rock, tailings and sludge		EM-MM-150a.1; EM-MM-150a.2
	306-4	PDF pg. 60		-	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally		
	306-5	PDF pgs. 58-59		-	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff		
MATERIAL TOPIC: ENVIRONMENTAL COMPLIANCE							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 42		-	Management approach and its components		RT-CH-140a.3
	103-3	PDF pg. 42		-	Evaluation of management approach		
GRI 307: Environmental Compliance 2016	307-1	PDF pg. 62		-	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		RT-CH-140a.2; EM-MM-140a.2
MATERIAL TOPIC: SUPPLIER ENVIRONMENTAL ASSESSMENT							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 62		-	Management approach and its components		
	103-3	PDF pg. 62		-	Evaluation of management approach		
GRI 308: Supplier Environmental Assessment 2016	308-2	PDF pg. 62		-	Significant actual and potential negative environmental impacts in the supply chain and action taken		

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STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Social							
MATERIAL TOPIC: EMPLOYMENT							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 63		-	Management approach and its components		
	103-3	PDF pg. 63		-	Evaluation of management approach		
GRI 401: Employment 2016	401-1	PDF pg. 64		-	Total number and rates of new employee hires and employee turnover by age group, gender and region		
	401-2	PDF pg. 65		-	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation		
	401-3	PDF pg. 66		-	Return to work and retention rates after parental leave, by gender		
MATERIAL TOPIC: LABOR/MANAGEMENT RELATIONS							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 63		-	Management approach and its components		
	103-3	PDF pg. 63		-	Evaluation of management approach		
GRI 402: Labor/Management Relations 2016	402-1	PDF pg. 66		-	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	3	
	MM4	PDF pg. 67		-	Number of strikes and lock-outs exceeding one week's duration, by country		EM-MM-310a.2
MATERIAL TOPIC: OCCUPATIONAL HEALTH AND SAFETY							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 68		-	Management approach and its components		
	103-3	PDF pg. 68		-	Evaluation of management approach		
GRI 403: Occupational Health and Safety 2018	403-1	PDF pg. 68		-	Occupational health and safety management system	3	
	403-2	PDF pg. 69		-	Hazard identification, risk assessment, and incident investigation		
	403-3	PDF pg. 69		-	Occupational health services		
	403-4	PDF pg. 69		-	Worker participation, consultation, and communication on occupational health and safety		
	403-5	PDF pg. 70		-	Worker training on occupational health and safety		
	403-6	PDF pg. 70		-	Promotion of worker health		
	403-7	PDF pg. 70		-	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		
	403-8	PDF pg. 68		-	Workers covered by an occupational health and safety management system		
	403-9	PDF pg. 71		-	Work-related injuries		EM-MM-320a.1; RT-CH-320a.2
	403-10	PDF pg. 72		-	Work-related ill health		RT-CH-320a.1; RT-CH-320a.2

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Category: Social (continued)							
MATERIAL TOPIC: TRAINING AND EDUCATION							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 73		-	Management approach and its components		
	103-3	PDF pg. 73		-	Evaluation of management approach		
GRI 404: Training and Education 2016	404-1	PDF pg. 73		-	Average hours of training per year per employee by gender, and by employee category	6	
	404-2	PDF pg. 74		-	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	6	
	404-3	PDF pg. 74		-	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category		
MATERIAL TOPIC: DIVERSITY AND EQUAL OPPORTUNITY							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 63		-	Management approach and its components		
	103-3	PDF pg. 63		-	Evaluation of management approach		
GRI 405: Diversity and Equal Opportunity 2016	405-1	PDF pg. 67		-	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity		
	405-2	PDF pg. 67		-	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation		
MATERIAL TOPIC: NON-DISCRIMINATION							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 75		-	Management approach and its components		
	103-3	PDF pg. 75		-	Evaluation of management approach		
GRI 406: Non-discrimination 2016	406-1	PDF pg. 75		-	Total number of incidents of discrimination and corrective actions taken	1, 2, 6	
MATERIAL TOPIC: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 75		-	Management approach and its components		
	103-3	PDF pg. 75		-	Evaluation of management approach		
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	PDF pg. 75		-	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights		

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MATERIAL TOPIC: CHILD LABOR							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 75		-	Management approach and its components		
	103-3	PDF pg. 75		-	Evaluation of management approach		
GRI 408: Child Labor 2016	408-1	PDF pg. 76		-	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	1, 2, 5	
MATERIAL TOPIC: FORCED OR COMPULSORY LABOR							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 75		-	Management approach and its components		
	103-3	PDF pg. 75		-	Evaluation of management approach		
GRI 409: Forced or Compulsory Labor 2016	409-1	PDF pg. 76		-	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	1, 2, 4	
MATERIAL TOPIC: RIGHTS OF INDIGENOUS PEOPLES							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 75		-	Management approach and its components		
	103-3	PDF pg. 75		-	Evaluation of management approach		
GRI 411: Rights of Indigenous Peoples 2016	411-1	PDF pg. 76		-	Total number of incidents of violations involving rights of indigenous peoples and actions taken		
	MM5	PDF pg. 76		-	Number of operations taking place in or adjacent to indigenous peoples' territories		EM-MM-210a.2; EM-MM-210a.1; EM-MM-210b.2
MATERIAL TOPIC: LOCAL COMMUNITIES							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 77		-	Management approach and its components		
	103-3	PDF pg. 77		-	Evaluation of management approach		
GRI 413: Local Communities 2016	413-1	PDF pgs. 77-79		-	Percentage of operations with implemented local community engagement, impact assessments, and development programs	7	EM-MM-210a.3; EM-MM-210a.1; EM-MM-210b.2
	413-2	PDF pg. 79		-	Operations with significant actual and potential negative impacts on local communities		
	MM6	PDF pg. 80		-	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples		
	MM7	PDF pg. 80		-	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes		

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STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Social (continued)							
MATERIAL TOPIC: PUBLIC POLICY							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 80		-	Management approach and its components		
	103-3	PDF pg. 80		-	Evaluation of management approach		
GRI 415: Public Policy 2016	415-1	PDF pg. 81		-	Total value of political contributions by country and recipient/beneficiary		
MMSD MATERIAL TOPIC: RESETTLEMENT							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 80		-	Management approach and its components		
	103-3	PDF pg. 80		-	Evaluation of management approach		
GRI G4 Guidelines: Mining and Metals Sector Disclosures	MM9	PDF pg. 81		-	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process		
MMSD MATERIAL TOPIC: CLOSURE PLANNING							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 80		-	Management approach and its components		
	103-3	PDF pg. 80		-	Evaluation of management approach		
GRI G4 Guidelines: Mining and Metals Sector Disclosures	MM10	PDF pg. 81		-	Number and percentage of operations with closure plans		
MATERIAL TOPIC: CUSTOMER HEALTH AND SAFETY							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 82		-	Management approach and its components		
	103-3	PDF pg. 82		-	Evaluation of management approach		
GRI 416: Customer Health and Safety 2016	416-1	PDF pg. 82		-	Assessment of the health and safety impacts of product and service categories		RT-CH-410b.2

General Standard Disclosures (continued)

STANDARD TITLE	MA AND INDICATORS	PAGE (OR LINK)	OMISSIONS	EXTERNAL ASSURANCE	DESCRIPTION	UNGC COP OR FAB PRINCIPLE	SASB DISCLOSURE
Category: Social (continued)							
MATERIAL TOPIC: MARKETING AND LABELING							
GRI 103: Management Approach 2016	103-1	PDF pgs. 24-26		-	Explanation of material topic and its boundary		
	103-2	PDF pg. 82		-	Management approach and its components		
	103-3	PDF pg. 82		-	Evaluation of management approach		
GRI 417: Marketing and Labeling 2016	417-1	PDF pg. 83		-	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements		RT-CH-410b.1
	417-2	PDF pg. 83		-	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes		

General Standard Disclosures

Organizational Profile

102-2 Activities, brands, products and services

The Mosaic Company is the world's leading producer and marketer of concentrated phosphate and potash crop nutrients. Through our broad product offering, we are a single source supplier of phosphate- and potash-based crop nutrients and animal feed ingredients. We serve customers in approximately 40 countries. We are the second largest integrated phosphate producer in the world and one of the largest producers and marketers of phosphate-based animal feed ingredients in North America and Brazil. Following our January 8, 2018 acquisition (the "Acquisition") of the global phosphate and potash operations of Vale S.A. conducted through Mosaic Fertilizantes P&K Ltda (formerly Vale Fertilizantes S.A.), we are the leading fertilizer production and distribution company in Brazil.

We mine phosphate rock in Florida and Brazil. We process rock into finished phosphate products at facilities in Florida, Louisiana and Brazil. Upon completion of the Acquisition, we became the majority owner of a joint venture operating a phosphate rock mine in the Bayóvar region in Peru, in which we previously held a minority equity interest. We mine potash in Saskatchewan, New Mexico and Brazil. We have other production, blending or distribution operations in Brazil, China, India and Paraguay, as well as a joint venture that operates a phosphate rock mine and chemical complexes in the Kingdom of Saudi Arabia.

We account for approximately 13% of estimated global annual phosphate production. We also account for approximately 11% of estimated global annual potash production.

Our business was organized into three reportable business segments in 2020:

Phosphates

We sell phosphate-based crop nutrients and animal feed ingredients throughout North America and internationally. We account for approximately 73% of estimated North American annual production of concentrated phosphate nutrients.

Potash

We sell potash throughout North America and internationally, principally as fertilizer, but also for use in industrial applications and, to a lesser degree, as animal feed ingredients. We account for approximately 34% of estimated North American annual potash production.

Mosaic Fertilizantes

We produce and sell phosphate, potash and nitrogen-based crop nutrients, and animal feed ingredients, in Brazil. In addition to five phosphate rock mines, four chemical plants and a potash mine in Brazil, this segment consists of sales offices, crop nutrient blending and bagging facilities, port terminals and warehouses in Brazil and Paraguay. The Mosaic Fertilizantes segment also serves as a distribution outlet for our Phosphates and Potash segments. We account for approximately 70% of estimated annual production of concentrated phosphate crop nutrients in Brazil and 100% of estimated annual potash production in Brazil.



General Standard Disclosures

102-4 Location of operations

We mine phosphate rock in Florida, Peru and Brazil and process rock into finished phosphate products at facilities in Florida, Louisiana and Brazil. We mine potash in Saskatchewan, New Mexico and Brazil. We have other production, blending or distribution operations in Brazil, China, India and Paraguay, as well as a joint venture formed to develop a phosphate rock mine and chemical complexes in the Kingdom of Saudi Arabia.

Mosaic conducts business through wholly and majority-owned subsidiaries, as well as businesses in which we own less than a majority or a non-controlling interest. We are organized into three reportable business segments: Phosphates, Potash and Mosaic Fertilizantes. Additional information about our business and operating segments is provided in our [2020 10-K](#).

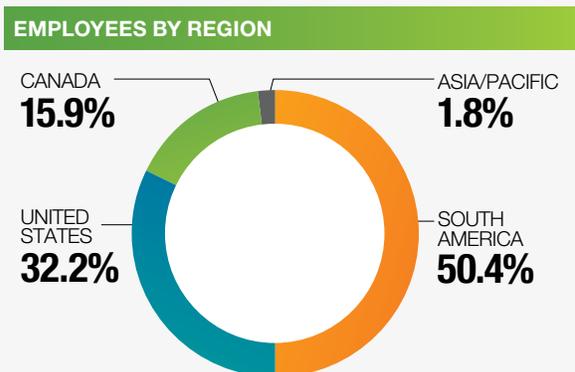
Global Operations



102-8 Information on employees and other workers

As of December 31, 2020, Mosaic employed 11,844 regular employees.

WORKFORCE BY REGION AND GENDER			
COUNTRY	MALE	FEMALE	TOTAL
Australia	1	0	1
Brazil	5,107	809	5,916
Canada	1,610	273	1,883
China	106	49	155
India	58	8	66
Paraguay	42	12	54
United States	3,218	591	3,809
Total	10,142	1,742	11,844



NOTE: Mosaic does not track individual contract worker counts or demographics. Figures differ from those reported in 10-K in that they exclude long-term leaves, co-ops, seasonal and temporary employees. Employees considered to be on long-term leave are those away from work more than 180 days. "Temporary" employees represent a very small percentage of our total workforce (less than 1%). In 2020, we had one female part-time (defined as less than 35 hours per week) employee in the United States, who is included in the totals above. 15% of Mosaic's total workforce is female.

General Standard Disclosures

102-9 Supply chain

Mining, producing and delivering millions of tonnes of fertilizer each year to customers around the globe is complex. It requires teams of dedicated professionals working to make responsible decisions each day and at every step in the production and supply chains.

MINING

We work to safely extract potash and phosphate ore from the Earth's extensive reserves.

FACT In our Florida Phosphate operations, phosphate rock is recovered using draglines. Our Brazil operations use an open pit process to extract phosphate reserves.

MANUFACTURING

We refine, process, and blend phosphate and potash minerals to create crop nutrition products, then prepare goods for shipment.

FACT We produce renewable energy through cogeneration, the process of converting waste heat to energy, satisfying approximately 40% of our phosphate operations' annual electricity consumption.

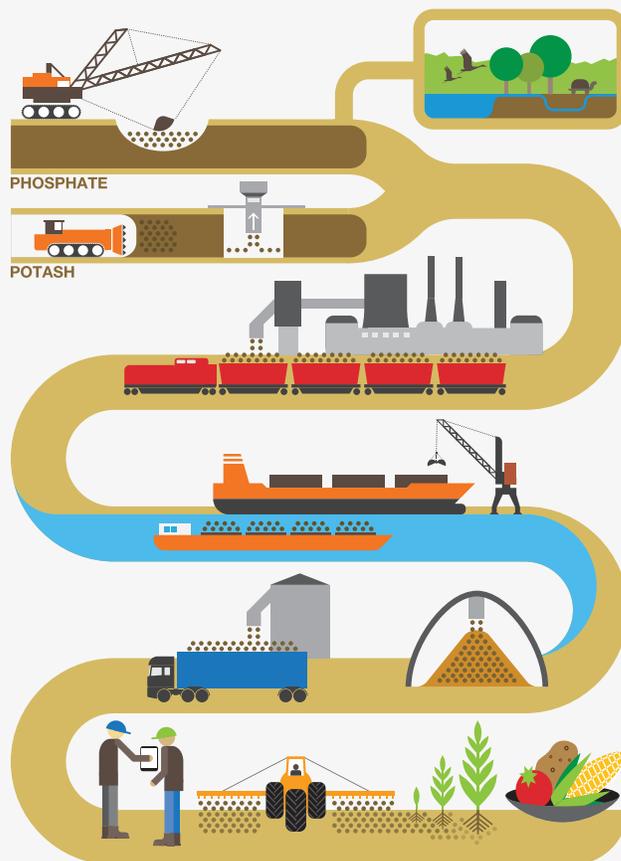
CUSTOMERS

We sell to retail customers and regional distributors, as well as large international growers.

FARMERS

We provide large and smallholder farmers with the vital crop nutrients and micronutrients they need to help grow healthy plants, achieve better yields, and grow food, feed, fuel and fiber more sustainably.

FACT Our premium MicroEssentials® product increases corn yields an average of 7.2 bushels per acre vs. traditional fertilizer.



LAND RECLAMATION & COMPENSATION

In Florida, we reclaim every acre of phosphate-mined land, creating high-quality habitats and wildlife corridors for fish, birds, and other animals, and land suitable for agriculture and other diverse beneficial uses. In Brazil, reclamation efforts include resloping and revegetating the mined area. Additionally, we set aside a portion of a mining site—approximately 20 percent of the project footprint—as a part of our efforts to preserve and protect unmined land.

FACT We reuse and recycle water to decrease our companywide consumption and increase efficient use.

TRANSPORTATION

We move raw materials, phosphate, potash and finished crop nutrition products across the supply chain using pipelines, trains, trucks, river barges and ships.

STORAGE & DISTRIBUTION

We have port terminals, warehouses and storage capacity in key geographies, with global distribution.

CONSUMERS

Our crop nutrients play a key role in growing crop yields and providing people with the healthy, affordable food they need to thrive.

FACT We partner with Field to Market®, The Nature Conservancy and other organizations on initiatives aimed at increasing agricultural productivity, sustainability and food security—while reducing environmental impacts and protecting natural resources.

Unlike many of our competitors, we have our own distribution system to sell phosphate- and potash-based crop nutrients and animal feed ingredients, whether produced by us or by other third parties, around the globe. In North America, we have one of the largest and most strategically located distribution systems for crop nutrients, including warehouse facilities in key agricultural regions. We also have an extensive network of distribution facilities internationally, including in the key growth regions of South America and Asia, with port terminals, warehouses, and blending plants in Brazil, Paraguay, China, and India. Our distribution operations serve the top four nutrient-consuming countries in the world: China, India, the United States and Brazil.

Our global presence allows us to efficiently serve customers in approximately 40 countries. See our [2020 10-K](#) for more information about our supply chain.

General Standard Disclosures

102-10 Significant changes to the organization and its supply chain

- In 2020 we announced we would combine our potash and phosphate operations under a unified North America business. This move creates new opportunities to increase efficiencies, gain synergies, share best practices and talent, and fully leverage innovative technologies. Approximately 120 roles were eliminated, but we succeeded in minimizing impacts to our workforce from the integration by pausing hiring and managing vacancies. Affected employees (fewer than 100) were offered transition timelines and support options.

We announced changes in senior leadership as a result of the integration.

- Bruce Bodine was named Senior Vice President — North America, effective April 2020.
Prior to his appointment to this role, Mr. Bodine served as Senior Vice President — Phosphates.
 - Karen Swager was named Senior Vice President — Supply Chain, effective April 2020.
Prior to her appointment to this role, Ms. Swager served as Senior Vice President — Potash.
 - Ben Pratt was named Senior Vice President — Government and Public Affairs in April 2020.
Prior to his promotion to this role, Mr. Pratt held the position of Vice President — Corporate Public Affairs.
- In response to Covid-19, we implemented early measures to promote the health and safety of our employees, including working remotely and alternating work schedules, to minimize the number of employees at a single location. For employees whose in-person presence was essential, we implemented safety measures such as temperature checks, plexiglass barriers between work stations, Covid-19 testing and social distancing measures. To contain the spread of the virus, many government authorities, at locations where we do business, issued “social distancing or shelter-in-place” orders. In accordance with such orders, operations at our Miski Mayo mine in Peru were closed on March 16, 2020 and resumed on May 13, 2020. Our Patrocínio operations in Brazil were also closed for ten days, restarting operations on April 7, 2020. We also delayed planned maintenance at certain locations until the fourth quarter of 2020 which resulted in increased costs. These events resulted in minimal disruptions to our operations. Our response to the pandemic was effective throughout the year in limiting the impacts on our operating facilities, employees, supply chain and logistics.

General Standard Disclosures

102-12 External initiatives

102-13 Membership of associations

Mosaic recognizes the importance and value of being active in industry associations and cross-sector business forums. These common platforms help advance cutting-edge scientific research and best management practices within our company and our industry. We consider the relevance of each engagement opportunity to our business strategies, and we pursue mutually beneficial partnerships. Many of the key organizations we engage with are listed here.

ORGANIZATION	WAYS WE ENGAGE	INVOLVEMENT
CROSS-SECTOR ORGANIZATIONS		
Brazilian Network of the United Nations Global Compact (UNGC)	Signatory and Advisory Council Member	In 2019, Mosaic Fertilizantes became a signatory to the Brazilian Network of UNGC, affirming our deep commitment to operating responsibly. In early 2020 our Mosaic Fertilizantes business became a member of the UNGC Brazil Advisory Council.
CDP	Reporter Services Member for Climate Change and Water	Mosaic supports CDP's aims to improve transparency with respect to greenhouse gas emissions goals and develop reduction strategies. We report to CDP annually.
Ethos Institute for Company Social Responsibility	Member	Mosaic is a member of the Ethos Institute, a leading civil society organization in Brazil, which is responsible for promoting sustainable and responsible management practices.
Global Reporting Initiative (GRI)	GOLD Community Business Leadership Forum	As a member of the GOLD Community, Mosaic is helping to shape the future of sustainability and reporting. Our annual sustainability disclosure is based on GRI's Standards: Core Option. We participate in GRI's Business Leadership Program, which drives participation from the private sector in measuring corporate performance on the UN Sustainable Development Goals.
Sustainability Accounting Standards Board	Standards Advisory Group	As a member of the Standards Advisory Group, Mosaic provides ongoing feedback on the implementation and use of SASB standards, as well as emerging sustainability issues to be considered as part of the standard-setting process.
United Nations Global Compact (UNGC)	Signatory	In 2011, Mosaic became a signatory to the UNGC, affirming our deep commitment to operating responsibly. In early 2019 our Mosaic Fertilizantes business became a signatory to UNGC. We communicate our progress on the UNGC's universal principles in our annual sustainability disclosure.
INDUSTRY ORGANIZATIONS		
Agriculture Nutrient Policy Council (ANPC)	Member	Our membership in the ANPC allows us to be an active stakeholder and leader in the policy process.
Agricultural Retailers Association (ARA)	Board Level	Mosaic contributes to ARA's mission to advocate, influence, educate and provide support to agricultural retailers.
Associação Nacional para Difusão de Adubos (ANANDA)	Board Level	As a member of ANANDA, Mosaic promotes the value and correct use of fertilizers in Brazil.
Brazilian Agribusiness Association (ABAG)	Member	At ABAG, Mosaic engages in policy discussions to improve the business environment for agribusiness and promote initiatives to support farmers.
Brazilian Association of Mineral Feed Industries (ASBRAM)	Member	Mosaic engages in regulatory discussions that affect the animal feed industry.
Brazilian Mining Institute (IBRAM)	Board Level	Through IBRAM, Mosaic contributes directly to regulatory discussions that affect the mining sector and provides support of sustainability initiatives.
Business Council for International Understanding (BCIU)	Member	Mosaic is a member of BCIU, which promotes cooperation between U.S. companies with the diplomatic community around the world.
Conservation Technology Information Center (CTIC)	Board Level	Mosaic continues to partner with CTIC on several initiatives that champion, promote, and provide information on technologies and sustainable agricultural systems.
Fertiliser Association of India (FAI)	Member	Mosaic supports and partners with FAI in its objective to ensure food security through balanced and efficient use of plant nutrients.
Fertilizer Canada (formerly Canadian Fertilizer Institute)	Committee and Board Level	Mosaic supports Fertilizer Canada's efforts to promote the responsible, sustainable and safe production distribution and use of fertilizers.
Field to Market	Member	Mosaic contributes to solutions for sustainability and continuous improvement in U.S. commodity agriculture.
Saskatchewan Industrial Energy Consumers Association	Member	Mosaic is a participant in SIECA, the leading energy advocacy group in the province of Saskatchewan

General Standard Disclosures

102-13 Membership of associations (continued)

ORGANIZATION	WAYS WE ENGAGE	INVOLVEMENT
INDUSTRY ORGANIZATIONS (CONTINUED)		
Associated Industries of Florida	Member	Mosaic is engaged with AIF's policy development process and their advocacy on behalf of industry.
Florida Chamber of Commerce	Member	Mosaic is engaged with the Chamber's policy development process and their advocacy for business and participates in the Chamber's legislative candidate interview evaluation process.
Industrial Energy Consumers of America (IECA)	Board and Committee	Mosaic participates in IECA's engagement on federal energy-related issues in the United States and contributes to discussions with Federal Energy Regulatory Commission and Department of Energy about fair energy.
International Fertilizer Industry Association (IFA)	Board and Member	Mosaic supports IFA's efforts to represent, promote and protect the fertilizer industry among policymakers, regulators, farmers and society at large.
Manufacturers Association of Florida (MAF)	Member	Mosaic participates the development of MAF's advocacy positions on issues of importance to Florida manufacturing, including workforce education and regulatory issues, and assists with advocacy efforts.
Manufacturers Alliance for Productivity and Innovation (MAPI)	Member and Council Participant	MAPI's mission is to build strong leadership within manufacturing, and to drive the growth, profitability, and stature of global manufacturers. As a member of MAPI, Mosaic has representatives on several councils, and uses and provides input to the non-profit's research and benchmarking efforts.
Mining Industry Union of the State of Goiás (SIEEG)	Member	Mosaic engages SIEEG as part of the Mining Chamber of the State of Goiás, a network of companies that promotes a better business environment for the mining industry.
Mining Industry Union of the State of Minas Gerais	Member	Mosaic engages Sindixtra to promote a better business environment for the mining industry in the State of Minas Gerais.
National Association of Manufacturers (NAM)	Member and Board Level	Through membership and committee participation, Mosaic contributes to NAM's work to create a favorable policy climate for manufacturing in the United States.
National Union for the Animal Feed Industry (Sindirações)	Member	Through Sindirações, Mosaic contributes to the discussions at the technical chambers of the Ministry of Agriculture of Brazil.
National Union for the Fertilizer's Raw Materials Industry (Sinprifert)	Board Level	At the board level of Sinprifert Mosaic leads initiatives to improve the competitiveness of the national producers of fertilizers.
Saskatchewan Chamber of Commerce	Committee and Board Level	Mosaic contributes to the Chamber's role as the voice of Saskatchewan business, promoting Saskatchewan as the best place to live, work and invest.
Saskatchewan Mining Association (SMA)	Committee and Board Level	Mosaic supports the SMA's aims to enhance the general welfare of the mining industry through technical innovations in the fields of health and safety standards, waste disposal, environmental protection, and extractive metallurgy research and development.
The Fertilizer Institute (TFI)	Committee and Board Level	Mosaic partners with TFI in its mission to represent and promote the fertilizer industry.
New Mexico Mining Association (NMMA)	Board Level	As a member of the Board, Mosaic supports the NMMA's goal of advancing the mineral resources and mining industries in New Mexico.
Canadian Chamber of Commerce	Member and Committee	Mosaic leaders participate on two committees: Ottawa Liaison Committee & Natural Resources & Environment Committee.
Tampa Bay Partnership	Member and Board Level	The CEO-driven regional advocacy organization is committed to creating a unified, competitive and prosperous Tampa Bay.
Tampa Bay Economic Development Council	Member	Tampa Bay Economic Development Council is the lead designated economic development agency for Hillsborough County and the cities of Tampa, Plant City, and Temple Terrace, and an official partner of Enterprise Florida, Inc.
Women in Mining Brazil	Member	Mosaic participates in this organization's aims to expand and strengthen the participation of women in the Brazilian mining industry.
American Chamber of Commerce – Brazil (AMCHAM)	Member	As a member of AMCHAM, Mosaic supports Brazil – U.S. trade and investment relations and participates in strategic bilateral discussions to improve the business environments for both countries.

General Standard Disclosures

Ethics and Integrity

102-16 Values, principles, standards and norms of behavior

102-17 Mechanisms for advice and concerns about ethics

In a rapidly changing business environment, it is important for us to remain grounded and focused on what we determine is most important. No matter where Mosaic operates in the world, we ask that our employees adhere to the same companywide principles.

MISSION: We help the world grow the food it needs

PRINCIPLES: We are responsible, innovative, collaborative and driven

STRATEGIC PRIORITIES:

- **North America Transformation**
Uncover and pursue new opportunities to improve the profitability and competitiveness of our Potash and Phosphates businesses
- **South America Growth Engine**
Leverage Mosaic's in-country capabilities to drive additional growth and profitability
- **Grow and Strengthen Our Product Portfolio**
Pursue diverse opportunities that make us stronger and that yield mutual benefits for Mosaic and our customers
- **Drive Functional Collaboration and Efficiency**
Rethink and re-engineer outdated and inefficient processes, and continue to look for new ways to improve
- **Optimize Operating Assets and Capital Management**
Continually assess, prioritize and allocate capital across the business and make decisions that strengthen our balance sheet
- **Act Responsibly**
Be a good corporate citizen and contribute to the vitality of the people and the communities around us, which address profitability, competitiveness and our ability to deliver value to our diverse constituents.

Our **Code of Business Conduct and Ethics** aligns with these principles and provides information about how we make sure we always do the right thing. Mosaic also maintains a 24-hour independently administered confidential and anonymous incident reporting hotline called EthicsPoint for all Mosaic employees, contractors, vendors, and the public to report perceived ethical issues. In 2020 we received 267 EthicsPoint reports. Most of the reported allegations related to employee relations; discrimination, harassment or retaliation; and contractor, supplier and third-party relations.

General Standard Disclosures

Governance

102-20 Executive-level of responsibility for economic, environmental and social topics

Mosaic's approach to sustainability reflects our commitments to global food security, the environment, our people, the communities where we operate, and our company. We encourage each person at Mosaic to act responsibly and contribute to our company's success. It's our collective decisions and actions that must be ethical, strategic and sustainable.

Sustainability leadership begins with our Board of Directors (BoD). The Environmental Health, Safety and Sustainable Development (EHSS) Committee of Mosaic's BoD provides oversight of our environmental, health, safety, and sustainable development strategic vision and performance.

View our [2020 Proxy Statement](#) and the [EHSS Committee Charter](#) for more information. The Board and the Company's Senior Leadership Team review the EHSS Committee's recommendations in order to develop new companywide policies, initiatives, targets and goals. A team of employees, overseen by a Senior Vice President of Regulatory and Public Affairs, manages sustainability initiatives on a day-to-day basis.

The Mosaic Company [Senior Leadership Team \(SLT\)](#), led by our President and Chief Executive Officer, is primarily responsible for managing profit and loss and delivering growth. Implementation and delivery of Mosaic's business strategy and plan are monitored by SLT members. The SLT is supported in matters of sustainability by leading vice president- and director-level employees who are accountable for ensuring the goals are achieved through site-specific, business segment and companywide implementation.

General Standard Disclosures

Stakeholder Engagement

102-40 List of stakeholder groups

102-42 Basis for identification and selection of stakeholders with whom to engage

102-43 Organization's approach to stakeholder engagement

102-44 Key topics and concerns that have been raised through stakeholder engagement

Mosaic's stakeholders include our employees, investors, local communities, customers, government and regulatory officials, civil society organizations, environmental organizations, suppliers, media, academia and others. We identify our stakeholders as those who are affected by our activities and whose actions have the potential to affect the outcome of our business activities. Our stakeholders help shape our strategic priorities and give meaning to our mission to help the world grow the food it needs.

STAKEHOLDER ENGAGEMENT			
MOSAIC'S STAKEHOLDERS	WAYS WE ENGAGE	HOW OFTEN	TOPICS OF IMPORTANCE
Academia	Fund or sponsor research, technical and industry meetings, research site visits, in-person visits during growing season, remote meetings	Monthly to Quarterly	Product and process innovations, agronomic research and development, nutrient stewardship, product trials, regulations, and impacts of our business and the industry
Civil Society Organizations	Internet site, meetings with organizations, local community and business leaders, corporate communications	Weekly to Biannually	Nutrient stewardship, habitat conservation, watershed protection and restoration, sustainable agriculture, food security, local community investment and partnerships
Customers	Sales relationships, regular visits, customer service surveys, special events, memberships in industry organizations, AgCollege	Weekly to Biannually	Product innovations, agronomic research and development, nutrient stewardship, certifications, impacts of our business and the industry
Employees, Senior Leadership Team and Board of Directors	Intranet sites, e-screens at plants and mines, town hall meetings, engagement surveys and activities, Annual Meeting, committee meetings	Daily to Quarterly	Environment, health and safety; company, business segment and facility performance; our business and our industry; business conduct and ethics; professional development and training; Mosaic's strategic community
Government and Regulatory Officials	Federal, provincial/state, and local executive and legislative branch advocacy, permitting applications, tours of plants and mines, engagement in state, national and trade association activities	Biweekly to Quarterly	Compliance, environmental investment and footprint, industry leadership, voluntary programs
Growers	Direct media, commodity organizations, industry partnerships, surveys	Monthly to Quarterly	Agricultural best practices, our business and our industry, agronomic research and development, product innovation, nutrient stewardship
Investors and Financial Markets	Internet site, webcasts and presentations, Securities and Exchange Commission (SEC) reports, analyst meetings, annual shareholder's meeting, press releases	Daily to Quarterly	Investments, financial results, market data, operational excellence, risks and opportunities, company and shareholder priorities
Joint Ventures and Business Partners	Board meetings, technical and planning sessions, site visits	Daily to Biannually	Project details, environment, health and safety, investments, technologies, product and process knowledge
Labor Unions	Employee and labor relations meetings, contract negotiations	Daily to Annually	Safety, contract interpretation, employee relations issues, engagement, productivity, work environment
Local Communities	Internet site and community microsites, tours of plants and mines, community advisory panels, town halls and/or open houses, media, community organization memberships, economic and charitable partnerships	Daily to Quarterly	Partnerships and community relations, corporate and charitable support, environmental investment, environmental footprint, education, local jobs, economic impact
Media	Press releases, interviews and briefings, internet site and community microsites, SEC reports, tours of plants and mines, town halls and/or open houses	Daily to Quarterly	Company priorities, performance and products, food security, nutrient stewardship, watershed restoration, local economic impact, partnerships and community relations, corporate and charitable support
Retirees	Mailings, HR Connect	As needed to Annually	Plan benefit summaries and changes, investment updates and disclosures
Suppliers	Internet site, supplier survey, site visits, meetings	Daily to Biannually	Cost reduction, productivity, quality and innovation opportunities; new technologies; contract preparation; environment, health and safety evaluation; products and services provided; certifications; impacts of products and services
Trade and Industry Associations	Organizational membership, committee participation, meetings	Monthly to Quarterly	Productivity and innovation, best practices, industry priorities, risk management

General Standard Disclosures

102-41 Employees covered by collective bargaining agreements

EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS			
COUNTRY	UNION EMPLOYEES	NON-UNION EMPLOYEES	% COVERED BY COLLECTIVE BARGAINING AGREEMENTS
Brazil	5,915	1	>99%
Canada	1,071	812	57%
China*	155	0	100%
India	0	66	0%
Paraguay	0	54	0%
United States of America	1,859	1,950	49%
Total	9,000	2,884	76%

NOTE: We work closely with unions and our unionized employees at both a national and international level. All China employees, except those still on a probation period, are represented by collective bargaining agreements. No employees were on probation at the end of 2020. The total reported above represents the percentage of our total workforce covered by collective work agreements. Figures differ from what is reported in the 2020 10-K in that it represents percent of all employees, whereas the 10-K cites union involvement as a percent of the hourly workforce.

Reporting Practice

102-46 Defining report content and topic boundaries

102-47 List of material topic

103-1 Topics and topic boundaries

As a global, publicly traded company, we are continually exploring what it means to be responsible and accountable to Mosaic's diverse stakeholders. From employees, customers, shareholders and industry partners to trade unions, community organizations, government officials and academics, we seek ongoing dialogue with individuals or representatives of stakeholder organizations that impact — or are impacted by — Mosaic's business activities.

Topics and indicators that reflect Mosaic's significant economic, environmental and social impacts or that would substantively influence the assessments and decisions of stakeholders are deemed by us to be "significant" for sustainability reporting purposes.

AccountAbility's AA1000 Stakeholder Engagement Standard guided the review process that reflects our company's commitment to more fully inform all stakeholders on matters that influence our business and society.

General Standard Disclosures

In addition to analyzing peer sustainability reports, Global Reporting Initiative (GRI) Standards and the GRI Mining and Metals sector supplement; Sustainability Accounting Standards Board Standards for Chemicals and Metals & Mining; as well as other reports and frameworks, our ongoing significance analysis includes:

- Reviewing Mosaic's public financial reports, sustainability reports, GRI tables, policies and commitments as well as an internally conducted survey of senior management, customers and employees
- Scanning media reports, social media and blogs for issues raised for public concern
- Engaging leaders of local, regional, national and global community organizations
- Comparing sustainability materiality determination practices to peer companies
- Cataloging issues identified by stakeholder surveys, sustainability indexes, United Nations Sustainability Development Goals, principles of the United Nations Global Compact, regulatory and policy trends, industry associations and cross-sector partnerships
- Reviewing marketing research and customer satisfaction survey results
- Analyzing investor insights, hosting analyst day events with Q&A sessions, and participating in meetings
- Compiling community perceptions through social media activity and brand awareness surveys

Significant issues are structured around and summarized in four areas of our sustainability focus: People, Environment, Society and Company. Please see our [website](#) for relevant updates in each of these areas.

Mosaic team members originally evaluated the significance of more than 50 issues based on their relevancy and importance to stakeholders, the likelihood of impact and the connection to Mosaic's business strategies and values. We monitor these issues as part of the process described above. In 2018 we began a materiality refresh exercise to incorporate insights from the newly acquired Mosaic Fertilizantes business. As part of the refresh process we analyzed reporting disclosures by Mosaic and Brazil peer companies and suppliers to identify gaps in stakeholder groups and engagement methods, material issues and reporting best practices; and to evaluate opportunities for improvement in areas related to targets-setting, prioritization of material issues, external assurance of materiality and sustainability governance. Our goals and reporting continue to evolve as we refine our understanding and identify further significant issues.

General Standard Disclosures

Full disclosures of Mosaic’s management approach precede the disclosure of the respective topic. We list boundaries for each topic below.

MATERIAL TOPICS			
GRI	TOPIC	TOPIC BOUNDARY WITHIN THE ORGANIZATION	TOPIC BOUNDARY OUTSIDE THE ORGANIZATION
GRI 201	Economic Performance	Within Mosaic	Investors; Suppliers and Joint Ventures; Competitors; Government and Regulatory Officials; Civil Society Organizations; Media
GRI 202	Market Presence		Local Communities; Civil Society Organizations
GRI 203	Indirect Economic Impacts		
GRI 204	Procurement Practices		
GRI 205	Anti-corruption		Investors; Suppliers and Joint Ventures; Competitors; Government and Regulatory Officials; Civil Society Organizations; Media
GRI 206	Anti-competitive Behavior		
GRI 301	Materials		Local Communities; Suppliers; Customers; Government and Regulatory Officials; Investors, Media
GRI 303	Water		
GRI 304	Biodiversity		
GRI 305	Emissions		
GRI 306	Effluents and Waste		
GRI 307	Environmental Compliance		
GRI 308	Supplier Environmental Compliance		
GRI 401	Employment		Suppliers, Local Communities, Government and Regulatory Officials; Labor Unions; Investors, Media
GRI 402	Labor/Management Relations		
GRI 403	Occupational Health and Safety		
GRI 404	Training and Education		
GRI 405	Diversity and Equal Opportunity		
GRI 406	Non-discrimination		
GRI 407	Freedom of Association and Collective Bargaining		
GRI 408	Child Labor		
GRI 409	Forced or Compulsory Labor		
GRI 411	Rights of Indigenous Peoples		
GRI 412	Human Rights Assessment		
GRI 413	Local Communities		Suppliers, Local Communities, Government and Regulatory Officials; Labor Unions; Media
GRI 415	Public Policy		
GRI 416	Customer Health and Safety		
GRI 417	Marketing and Labeling		

General Standard Disclosures

102-45 Entities included in the consolidated financial statements

102-48 Restatements of information

102-49 Changes in reporting

102-54 Claims of reporting in accordance with the GRI Standards

102-56 External assurance

Our 2020 sustainability disclosure details The Mosaic Company's 2020 performance across broad sustainability focus areas of People, Environment, Society and Company. Our report has been prepared in accordance with the GRI Standards: Core option. The content of this report has been shaped by the issues identified through a significance study, the results of which we analyze on an ongoing basis. This report primarily summarizes the activities occurring in the period of calendar year 2020 and, unless otherwise noted, all data is presented on a calendar year (CY) basis.

We encourage readers to refer to our [2020 10-K](#), our [2020 Performance Summary](#), [Environment Metrics Supplement](#) and [mosaicco.com](#) for additional information about Mosaic's performance.

This report covers our global operations, including entities over which Mosaic exercises majority operational control, including all its operations and departments that have the potential to generate significant impacts. Except for financial and select environmental data, this report does not specifically reflect equity-method investments, including joint ventures in which we have a minority interest. Please see our [2020 10-K](#) (page F-55) for more information about those investments.

This disclosure includes data from facilities we acquired as part of the 2018 acquisition of Vale Fertilizantes S.A. in Brazil. We are also including data from the Miski Mayo mine as part of our Phosphates business since we became the majority owner of the joint venture that operates it following the Vale Fertilizantes acquisition. Emissions impacts associated with a joint venture in the Kingdom of Saudi Arabia in which we have a 25% interest are reported as part of our [scope 3 emissions in 305-3](#).

Due to an interpretation error, we are restating 2019 total effluent discharges and phosphorous and nitrogen loadings for our Mosaic Fertilizantes business.

ERM CVS performed limited assurance of 2020 total energy (direct and indirect), total GHG emissions (Scope 1 & Scope 2 location-based), Scope 1 GHG emissions, Scope 2 location-based GHG emissions, total water withdrawals, and total water withdrawals by source. We also earned assurance on select Scope 3 categories. To understand the scope, activities and conclusions of the assurance process, please view the [ERM CVS Assurance Statement](#).

Throughout the report, "tonnes" refers to metric ton unit of measurement equaling approximately 2,205 pounds, whereas the occasional reference to "tons" refers to the unit of measurement equaling 2,000 pounds. References to sulfur are in "long tons," which is equal to 2,240 pounds.

Category: Economic

Management Approach: Economic Performance

Mosaic's business is cyclical and subject to impacts from economic and market trends and geopolitical change. We have built our company to thrive across cycles and to take advantage of opportunities by reducing costs across the business; improving productivity; and leveraging innovation in new ways.

Mosaic is developing highly focused plans across our businesses and functions that keep us aligned and working together toward a common outcome.

Motivated by a "value first" mindset, we are focused on executing against **six strategic priorities**:

North America Transformation - Uncover and pursue new opportunities to improve the profitability and competitiveness of our Potash and Phosphates businesses

South America Growth Engine - Leverage Mosaic's in-country capabilities to drive additional growth and profitability

Grow and Strengthen Our Product Portfolio - Pursue diverse opportunities that make us stronger and that yield mutual benefits for Mosaic and our customers

Drive Functional Collaboration and Efficiency - Rethink and re-engineer outdated and inefficient processes, and continue to look for new ways to improve

Optimize Operating Assets and Capital Management - Continually assess, prioritize and allocate capital across the business and make decisions that strengthen our balance sheet

Act Responsibly - Be a good corporate citizen and contribute to the vitality of the people and the communities around us, which address profitability, competitiveness and our ability to deliver value to our diverse constituents.

Mosaic's sustainability efforts and performance are closely aligned with our operational and financial goals. We respond annually to CDP and use the Global Reporting Initiative (GRI) Standards with the Mining and Metals Sector Supplement to report on our environmental and sustainability performance. Our reporting index is aligned to many of the Sustainability Accounting Standards Board (SASB) metrics for the Metals & Mining and Chemicals industries.

As it relates to maximizing our impact in communities, we believe it is our responsibility to use our financial resources, technical expertise and innovative spirit to help the world sustainably grow the food it needs through strategic partnerships with leading organizations.

Our community investments are focused in the areas of food, water and local initiatives.

FOOD: Mosaic is committed to supporting organizations that advance global agricultural development, agricultural research and education, and hunger relief for community members in need. These programs, respectively, include: The Mosaic Villages Project in India; micronutrient deficiency research and mobile soil testing labs; and local community food drives, food distribution trucks and school backpack programs.

WATER: Mosaic supports organizations that work in watershed restoration, habitat conservation and nutrient stewardship. These programs, respectively, include shoreline restoration and oyster reef installations; improved land management practices and wildlife protection; and 4R nutrient stewardship, which is best management practices for fertilizer application, minimizing field runoff and improving farmer yields.

LOCAL: Mosaic supports philanthropic or civic partnerships that enrich the long-term strength of communities in which Mosaic has offices and operations. These programs include local schools, health care institutions, museums; special projects and sponsorship of events; and housing and disaster relief.

For more information on our management approach and financial progress, please see our [2020 10-K](#) and [company website](#).

We support a variety of formal and informal Mosaic channels through which stakeholders can submit concerns, including [communicating with the Board of Directors](#).

Category: Economic

201-1 Direct economic value generated and distributed

ECONOMIC PERFORMANCE (IN MILLIONS)

	2016	2017	2018	2019	2020
Revenue	\$7,162.8	\$7,409.4	\$9,587.3	\$8,906.3	\$8,681.7

OPERATING COSTS (IN MILLIONS)

	2016	2017	2018	2019	2020
Cost of Goods Sold	\$6,352.8	\$6,566.6	\$8,088.9	\$8,009.0	\$7,616.8
Selling, General and Administrative Expenses	\$304.2	\$301.3	\$341.1	\$354.1	\$371.5
Impairment and Restructuring	\$0.0	\$0.0	\$0.0	\$1,462.1	\$0.00
Less: Unrealized Gain/Loss on Derivatives	(\$70.0)	\$12.4	(\$32.6)	\$39.8	\$22.2
Less: Depreciation, Depletion and Amortization	\$711.2	\$665.5	\$883.9	\$882.7	\$847.6
*Less: Wages and Benefits	\$1,358.1	\$1,435.2	\$1,657.5	\$1,539.2	\$1,477.4
Total Operating Costs	\$4,657.7	\$4,754.8	\$5,921.2	\$7,363.5	\$5,641.2
Wages and Benefits	\$1,358.1	\$1,435.2	\$1,657.5	\$1,539.2	\$1,477.4

* As reported in the Mosaic 2020 Form 10-K, Cost of Goods Sold include wages and benefits. For the purpose of the sustainability disclosure, wages and benefits are requested separately, so they are excluded here and added back in as a separate line item directly below.

PAYMENTS TO PROVIDERS OF FUNDS (IN MILLIONS)

	2016	2017	2018	2019	2020
Dividends Paid	\$385.1	\$210.60	\$38.5	\$67.2	\$75.8
Payments for Share Repurchases	\$75.0	\$0.0	\$0.0	\$149.9	\$0.0
Interest Paid (Net of Amount Capitalized)	\$124.5	\$155.0	\$173.9	202.8	\$199.5
Total Payments to Providers of Funds	\$584.6	\$365.6	\$212.4	419.9	\$275.3
Retained Earnings	\$10,863.4	\$10,631.1	\$ 11,064.7	\$9,921.5	\$ 10,511.0

TAX - PAYMENT TO GOVERNMENT (IN MILLIONS)

	2016	2017	2018	2019	2020
United States	(\$45.0)	(\$57.6)	(\$42.4)	(\$93.4)	(\$94.8)
Canada	(\$25.3)	(\$8.7)	\$12.2	\$120.0	\$48.1
Brazil	(\$1.7)	\$3.4	(\$15.1)	\$8.3	\$41.2
Other	\$6.6	(\$7.2)	\$11.1	\$11.6	\$11.7
Total Income Taxes Paid	(\$65.4)	(\$70.1)	(\$34.2)	\$46.5	\$6.2

* 2016 United States tax refunds relate to 2003 and FY2012 overpayments, while 2016 Canada tax refunds relate to 2015 overpayments. 2017 United States tax refunds relate primarily to 2013, 2015, and 2016 overpayments, while 2017 Canada tax refunds relate to 2016 overpayments. 2018–2020 United States tax refunds relate primarily to AMT tax credit refunds because of the Tax Cuts and Jobs Act. The 2018 Brazil tax refunds relate to refunds of tax credits.

Category: Economic

201-1 Direct economic value generated and distributed (continued)

CANADIAN RESOURCE TAXES AND ROYALTIES EXPENSE (IN MILLIONS)

	2016	2017	2018	2019	2020
Canadian Resource Taxes and Royalties Expense**	\$121.6	\$142.0	\$198.8	\$211.9	\$176.1

** Represents tax expense during the period, not cash payments.

OTHER NON-INCOME TAXES AND ROYALTIES*** (IN MILLIONS)

	2016	2017	2018	2019	2020
Other Non-income Taxes	\$82.0	\$84.3	\$89.1	\$89.2	\$86.1
Other Royalties	\$7.9	\$7.0	\$22.7	\$29.6	\$31.4

*** Other non-income taxes include property taxes and a Florida mining tax. Other royalties are for payments to governments associated with relevant mining activities in Brazil and the United States.

The combined 2020 contributions by The Mosaic Company, The Mosaic Company Foundation and The Mosaic Institute in Brazil provided more than \$14 million of support through companywide philanthropic grant making, in-kind products and services contributions, and paid employee volunteerism, including pro bono, skills-based technical assistance and functional-specific services. Our engagement with local and global organizations promotes shared value. In addition to helping achieve positive community and societal outcomes, our investments contribute to Mosaic's ability to execute our strategy by helping us build a talent pipeline; maintain a positive reputation; protect our license to operate; differentiate our company as a good neighbor; and meet specific stakeholder expectations.

Please see [203-1](#) and [203-2](#) for more information about our contributions. 2020 community investments by geography are as follows:

2020 COMMUNITY INVESTMENTS BY GEOGRAPHY (U.S. DOLLARS)

GEOGRAPHY	INVESTMENT
Brazil	\$2,315,974
Canada	\$4,542,231
Florida	\$4,193,454
Global Partnerships	\$656,550
Louisiana	\$231,182
Minnesota	\$215,900
New Mexico	\$154,000
United States — National	\$1,233,275
Villages — Brazil	\$371,503
Villages — India	\$349,183
Administrative/Program	\$43,559
Total	\$14,101,812

Mosaic uses an online grant application system to receive and evaluate proposals for funding. By accessing the online grant application system, potential grantees have access to Mosaic's focus areas, grant making guidelines, application deadlines and our non-discrimination policy. Establishing a standardized grant making system with stated guidelines and policies online has provided greater transparency to our partners, shareholders, employees and communities. Through this system, grantees provide reports on their outcomes, enabling Mosaic to evaluate the effectiveness of each grant.

Category: Economic

201-2 Financial implications and other risks and opportunities for the organization's activities due to climate change

Mosaic's "[Commitment on Climate Change](#)" acknowledges that global climate change creates uncertainty for our business and poses challenges for the health and well-being of the world's populations-ecologically, socially and economically.

The potential financial implications regarding the physical, transition and regulatory changes associated with climate change, as well as potential regulatory response changes, are discussed in Mosaic's [2020 CDP Climate Change Response](#) and in Mosaic's [2020 10-K](#). As of the date of this report, we have work underway with a third party to assess climate risks and opportunities and their potential repercussions on our business.

201-3 Defined benefit plan obligations and other retirement plans

BENEFIT PLAN OBLIGATION (IN MILLIONS)

	2016	2017	2018	2019	2020
Pension Plan Obligation	\$713.5	\$766.1	\$673.6	\$755.5	\$796.6
Fair Value of Plan Assets	\$715.6	\$793.2	\$701.2	\$790.6	\$845.2

NOTE: Please refer to the discussion of our defined benefit pension plans in our [2020 10-K](#).

PENSION PLAN ASSET ALLOCATION

UNITED STATES PENSION PLANS

	ASSETS AS OF 12/31/2016	ASSETS AS OF 12/31/2017	ASSETS AS OF 12/31/2018	ASSETS AS OF 12/31/2019	ASSETS AS OF 12/31/2020
Fixed Income	85%	75%	75%	80%	83%
United States Equity Securities	80%	15%	15%	9%	8%
Non-United States Equity Securities	60%	1%	1%	11%	9%
Real Estate	0	0	0	0	0
Private Equity	1%	0	0	0	0
Other	0	0	0	0	0
Total	100%	100%	100%	100%	100%

CANADIAN PENSION PLANS

	ASSETS AS OF 12/31/2016	ASSETS AS OF 12/31/2017	ASSETS AS OF 12/31/2018	ASSETS AS OF 12/31/2019	ASSETS AS OF 12/31/2020
Fixed Income	37%	38%	66%	65%	71%
United States Equity Securities	23%	22%	9%	10%	12%
Canadian Equity Securities	23%	2%	8%	10%	0%
Non-United States Equity Securities	14%	15%	13%	14%	7%
Private Equity	1%	1%	0	0	0
Other	2%	4%	4%	1%	10%
Total	100%	100%	100%	100%	100%

INVESTMENT PLAN AND SAVINGS PLAN (IN MILLIONS)

	2016	2017	2018	2019	2020
Attributable Expense	\$51.1	\$54.3	\$51.2	\$56.4	\$48.0

Category: Economic

Participation and funding target percentages for our United States and Canadian pension plans as of December 31, 2020, are as follows:

BENEFIT PLAN PARTICIPATION AND TARGET ATTAINMENT (as of December 31, 2020)

LOCATION	PARTICIPANTS	FUNDING ATTAINMENT
United States (Union)	2,970	105.8%
United States (Salaried)	2,630	103.4%
Colonsay (Hourly)	543	101.4%
Colonsay (Salaried)	67	103.6%
Esterhazy (Hourly)	1,359	104.76%
Esterhazy (Salaried)	197	107.34%
Brazil (Hourly)*	4,240	
Brazil (Salaried)*	1,432	

* We have four plans in Brazil of which only one is a pension plan subject to funding requirements. This plan has 227 active participants and was funded at 101.61 percent at the time of this report. The remainder of the plans are like defined contribution plans and therefore, not subject to funding requirements.

201-4 Financial assistance received from government

TAX CREDITS AND SUBSIDIES

COUNTRY	TYPE	AMOUNT
Brazil	Employee Meal and Leave Subsidies	\$306,876
Brazil	Research and Development Incentive	\$323,000
Canada	Research and Development Credit	\$2,769,150
United States	Mine Rescue Team Training Credit	\$20,329
United States	Research and Development Credit	\$1,689,222
United States	FMLA Credit	\$106,038

NOTE: All figures are reported in United States dollars. As actual 2020 figures were not available at the time of reporting, these figures represent actual 2019 amounts. The Brazil and Canada figures were calculated using an average income statement exchange rate used for financial reporting purposes.

Category: Economic

Management Approach: Market Presence, Indirect Economic Impacts and Procurement Practices

At Mosaic, we understand that our business and our communities are indelibly linked. Our operating communities are also our homes — where we live, work and raise children. We strive to be a thoughtful and engaged neighbor, investing carefully and generously as we seek long-term partnerships with organizations that are making a difference.

Mosaic is dedicated to advancing the many ways that our business contributes to the sustainable development of the communities where we operate: investing in communities; hiring employees and contracting vendors from local communities; offering competitive wages and benefits to our workforce; and developing our future workforce.

Investing in Communities

The Mosaic Company, The Mosaic Company Foundation and The Mosaic Institute in Brazil partner with industry associations, nonprofit groups and stakeholders focused on food, water and local initiatives. We are especially committed to the strength and prosperity of the communities where we have offices and operations, including North America, South America and Asia. Our financial support is magnified by employee volunteerism and community involvement.

Hiring Employees and Contracting Vendors From Local Communities

As a matter of practice, and in accordance with Mosaic's global job posting policies, we will "hire from within wherever possible." In addition, Mosaic initiates and conducts its search for qualified candidates locally, before the search is broadened.

Mosaic's mining and production operations take place in communities of varying size throughout North America. Mosaic does not have a written policy for giving preference to locally-based suppliers, but we do encourage and support local suppliers of all sizes. As a global company, the vendor screening process we have in place ensures that we maintain strict ethics, quality and safety standards. In an effort to support more local suppliers, we engage them, build partnerships, and explore opportunities to build capacity.

Our [Supplier Code of Conduct](#) outlines the standards of business integrity to which we hold ourselves and our suppliers accountable. We are committed to engaging our suppliers through a survey, launched in 2020 as part of Mosaic's [2025 ESG Performance Targets](#), to collect insights related to their performance in key ESG areas.

Offering Competitive Wages and Benefits to Our Workforce

Our global talent investment philosophy is to provide competitive compensation and benefits, with flexibility to choose programs that best meet our employees' needs.

Developing Our Future Workforce

Skilled labor is a key priority in the geographies where we operate. We work with governments and institutions to help train skilled labor to develop the knowledge required to support Mosaic's future workforce.

Category: Economic

202-1 Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation

Mosaic offers competitive compensation and benefits in each of the company's significant locations of operation. As shown below in local currency, the standard entry-level wage range is higher than the prevailing local minimum wage for each location presented. For Mosaic, minimum wages are generally not relevant since most entry-level Mosaic positions require a higher level of skills or knowledge than jobs to which the minimum wage rate would apply.

2020 MOSAIC LOCAL MINIMUM WAGE COMPARED TO LOCAL MINIMUM WAGE

SIGNIFICANT OPERATIONS	LOCAL MINIMUM WAGE	MOSAIC ENTRY-LEVEL WAGES	MOSAIC ENTRY-LEVEL WAGE RELATIVE TO LOCAL MINIMUM WAGE
U.S. Range/hr (USD)	\$7.25–\$10.50	\$16.95–\$25.65 (hourly) \$11.68–\$18.60 (salaried)	161%
Canada Range/hr (CAD)	\$11.45	\$27.37–\$35.83 (hourly) \$16.92–\$25.52 (salaried)	147%
Brazil Range/hr (BRL)	\$5.03–\$8.53	\$5.86–\$12.38	120%
China Range/hr (CNY)	\$10.92–\$12.64	\$25.59–\$33.19	234%
India Range/hr (INR)	\$65.03–\$96.46	\$145.75–\$301.50	308%
Paraguay Range/hr (PGY)	\$9,967.45	\$10,454.55–\$14,090.91	123%

NOTE: Mosaic's compensation practices adhere to the respective regulations in the geographies where we have operations.

202-2 Proportion of senior management hired from the local community at significant locations of operation

As a matter of practice, we will hire from within wherever possible. For senior leader roles, if no internal candidates are identified, a search will be conducted externally to find the best candidate for the leader role. The hire may or may not come from one of the communities where we have a local presence. These candidates are also supported with relocation assistance.

In 2020, 100 percent of newly hired senior leaders — all 12 of whom were external hires — came from local communities.

For the purpose of this indicator, "significant locations of operation" refers to United States, Canada and Brazil. "Senior leader" is defined as those individuals who are responsible for a business unit, corporate function, business unit function, country or operations site; "local community" is defined as the country where our operations are located. "Senior leaders" represent less than 3 percent of our total workforce.

Category: Economic

203-1 Development and impact of infrastructure investments and services supported

Livable communities require stable infrastructure and connectivity. As part of our community investment focus on local communities, Mosaic responds to community needs for welcoming public spaces, hospitals and emergency services, and entertainment and sports facilities that bring additional revenue to local economies. Our investments in this category in 2020 totaled approximately \$4.1 million. Here are examples of some of our recent community investments in infrastructure.

Global

- Throughout 2020, Mosaic provided approximately \$2 million to local organizations in Brazil, Canada, China, India, Peru and the United States to support Covid-19 pandemic relief efforts. Examples of the relief efforts included: distribution of food, sanitation kits, and personal protective equipment (PPE).

Florida

- Mosaic made two grants, totaling \$375,000, to two local Boys & Girls Clubs. A \$100,000 grant was provided to the Boys & Girls Club in Arcadia to support the expansion and renovation of the Club which, includes the new Mosaic Technology Lab. The expansion adds 7,000+ sq. ft. in teaching space to increase the Club's capacity from 75 to 200+ children. A \$275,000 grant was provided to the Boys & Girls Club of Polk County to support the building of a new Club in Mulberry, including the Mosaic Gym. The grant also supported the expansion of a new club in Bartow, including development of the Club's Mosaic Kitchen, which provided 133,500 meals to children throughout Polk County in 2020.
- In 2020, The Mosaic Company made a five-year, \$1.5 million commitment to support Tampa Bay Innovation Hub's capital campaign. Mosaic's annual \$300,000 grant supports the organization's Embarc Collective, a state-of-the-art 32,000 square foot facility located in downtown Tampa which opened in January 2020. The innovation hub helps recruit, retain and develop new tech startups in an effort to build bold, scalable and thriving companies in Tampa Bay.

Louisiana

- Mosaic made a \$40,000 grant to the Greater Baton Rouge Food Bank for the purchase of a new temperature-rated forklift. This forklift helps the Food Bank address their increased need to serve 13.6 million meals annually to 41 parishes throughout Louisiana.

Canada

- In 2020, half of Mosaic's dedicated Indigenous Community Investment budget was spent on infrastructure needs, totaling \$309,000. With Mosaic's support, Kakhewistahaw and Ochapowace First Nations partnered to address housing insecurity and build homes in their communities, starting with the first build on Ochapowace First Nation. Once complete, the home will be awarded to a deserving member of the community. This initiative also provides home building training to students to earn 300 trade-time hours toward Level 1 of the apprenticeship program through Saskatchewan Youth Apprenticeship.
- As part of their long-term Food Sovereignty program, Zagime Anishinabek First Nation have introduced bison to their land and required a sustainable water source to ensure water supply in times of drought. Mosaic invested \$25,000 toward pasture infrastructure to support bison herd expansion, ensuring the herd will grow to 80 animals over the next two years.
- 2020 was our final year of a 5-year commitment of \$500,000, in support of the Trail of Discovery at Wanuskewin in Saskatchewan, a National Historical Site. The funding supported the return of Plains bison to the prairies, archaeological recoveries from over 6000 years ago, restoration of the native prairie land and creation of a world-class facility to foster education based on expressions of Indigenous culture.
- Mosaic provided financial support for healthcare infrastructure throughout the province of Saskatchewan. This included investing more than \$1.2 million with health foundations across the province in support of capital campaigns raising funds for equipment and upgrades for the Jim Pattison Children's Hospital Foundation, Cancer Foundation of Saskatchewan and others, contributing funding toward automation of laboratory results in Esterhazy, SK, and partnering with the Hospitals of Regina Foundation to fund the purchase and upgrade of life-saving cardiac equipment.

Category: Economic

203-1 Development and impact of infrastructure investments and services supported (continued)

India

- Mosaic's Krishi Jyoti project aims to improve livelihoods in villages in rural India by enhancing farm productivity. In partnership with the project's implementing partner, The Sehgal Foundation, 13 check dams have been constructed since 2008, increasing water storage capacity to 104.94 million gallons. The project also promotes education among children in these remote villages by providing them a healthy and safe school environment. Krishi Jyoti has supported the renovation of 31 government schools in the project villages, benefiting nearly 7,500 children. 2020 marked Mosaic's twelfth year participating in the Krishi Jyoti project.

Brazil

- The Mosaic Institute recognizes the important contributions of public spaces and social centers to a community's wellbeing and invests in them locally. In 2020, The Mosaic Institute Brazil invested more than \$1,700,000 in the areas of food, water, education and social development.
- In 2020, The Mosaic Institute in Brazil contributed philanthropic funding and emergency support to help prevent transmission of Covid-19.
- Building off the success of the Mosaic Villages Project success in India, The Mosaic Foundation launched Villages Brazil in 2019, which will support 17 small farmers in Barreiras in the state of Bahia.

In 2020, combined contributions by The Mosaic Company, The Mosaic Company Foundation and The Mosaic Institute in Brazil through philanthropic funding, employee engagement and in-kind donations totaled more than \$14 million.

View our global and local community investments on [Mosaic's Giving Page](#).

Category: Economic

203-2 Significant indirect economic impacts, including the extent of impacts

Mosaic has diverse and varied indirect economic effects on communities across the world as an employer, community partner, taxpayer, and consumer of goods and services. Due to the complex nature of the business and philanthropic activities in which Mosaic engages, we do not attempt to estimate our full indirect economic impact by using a measurement of currency. Here are some of the ways Mosaic contributes indirectly to economies around the globe:

- Our customers, dealers, and vendors are all meaningful contributors to the economic vitality of the rural and regional communities where they operate. They provide employment, purchase goods and services, and pay taxes in their own communities. An [economic study](#) by The Fertilizer Institute estimates that the United States fertilizer industry contributes nearly \$131 billion to the United States economy. The study goes on to estimate that fertilizer producers, wholesalers and retailers, and the businesses that serve them, support nearly 500,000 United States jobs.
- Located in Tampa, Florida, The Florida Aquarium receives more than 800,000 visitors each year. Approximately six to eight times a year, Mosaic barges returning from Louisiana collect sea water from the Gulf of Mexico and deliver this vital resource to the aquarium, which helps support over 9,000 aquatic and terrestrial animals. In 2020, Mosaic delivered a total of 1.8 million gallons of sea water saving the aquarium over \$550,000 in costs related to the manufacturing of salt water. The water delivery also resulted in waste reduction for the aquarium, avoiding the following: 224 wooden pallets, 9,000 cardboard boxes, 36,000 plastic bags and 9,900 linear feet of plastic wrap.
- The Mosaic Company supported a City of Tampa study by Resilient Cities Catalyst. Utilizing the City Resiliency Framework (CRF), the study provides insight to help understand the complexity of cities, and it identifies a series of drivers necessary for a city's resiliency. The study seeks to understand four dimensions: Health and Wellbeing, Economy and Society, Infrastructure and Environment; and Leadership and Strategy.
- Museums allow children to explore their interests through authentic objects, hands-on exhibits and activities. They also help create a sense of community by celebrating local history. Mosaic made a \$50,000 grant to Explorations V Children's Museum in Lakeland, FL. This community investment provides support for the building of a 47,800 sq. ft. children's museum, including a 2,000 sq. ft. branded exhibit called The Mosaic Dig Pit. The new museum will increase Explorations V's capacity to serve more than 100,000 visitors annually.
- The Mosaic Villages Project works with smallholder farmers in India to help break the cycle of poverty, moving farmers from survival to surplus. Agronomic training is essential for these farmers, as they suffer from depleted soils and lack the land-management knowledge necessary to farm productively and sustainably. Mosaic's agronomists provide expertise to teach these farmers modern methods that increase yields and protect the local ecosystem. Additionally, participants in The Mosaic Villages Project in India receive no-interest loans to buy fertilizer at time of planting and repay the loans through the sale of surplus yield at harvest. Fertilizer acts as an injection of capital to the region, helping farmers break the cycle of poverty that has gripped developing regions of the world. This project has benefited 105 villages and almost 129,000 farmers with average 18-35% crop yield increases in wheat, mustard, pearl millet and cotton.
- Building off the success of the Mosaic Villages Project success in India, The Mosaic Foundation launched Villages Brazil in 2019, which will support 17 small farmers in Barreiras, state of Bahia.
- The Mosaic Institute in Brazil also implemented programs to improve basic education, including promoting literacy and independent reading and refurbishing or supporting construction of public schools. In 2020 we initiated construction of a school for children's education that will open May 2021. We also trained 1,243 teachers in 84 schools in a program that benefitted over 12,000 students.

Category: Economic

- The Mosaic Institute in Brazil also promoted programs for local development. For example, we funded a Social Entrepreneurship program, developed in Cajati, state of São Paulo, that supports efforts to build entrepreneurial capacity for local businesses. In 2020 we supported two social organizations: a recyclers' cooperative and a seamstress association. The program offered more than 400 hours of training, assistance and the purchase of materials and equipment to help these organizations thrive.
- In Brazil, we continued supporting a social bidding initiative that provides funding for projects that promote water stewardship. In 2020, 12 projects were selected to receive funding. Mosaic's investment of more than \$90,000 helped improve the management of local water resources.
- In 2018, Mosaic committed \$375,000 over 3 years to Regina Education and Action on Child Hunger (REACH). 2020 marked the final year of this partnership, where funds were used to support initiatives including: community kitchens, nutrition and cooking classes, the Mosaic-branded van for delivery of the Mobile Markets. All of this allows families to be self-sufficient by meeting both dietary and financial needs through non-emergency sources. This impacts over 12,000 individuals per year, over half of which are children.

Additionally, many of Mosaic's partnerships with community organizations continue to support positive healthcare, education, housing and recreational opportunities for our neighbors. Please see [203-1](#) and [Mosaic's Community Giving page](#) for more information.

204-1 Proportion of spending on local suppliers at significant locations of information

We report on purchases from local suppliers in the United States, Canada and Brazil. For the purposes of this indicator, operations in these areas are considered "significant" since they are in key geographies where our mining and chemical manufacturing, and as a result, most of our supply chain activities, take place.

LOCAL SUPPLY CHAIN (PERCENT)

OPERATIONAL LOCATIONS	2020
Phosphate (United States)	86
Phosphate (Peru)	98
Potash (Canada and United States)	61
Mosaic Fertilizantes	98

NOTE: Excludes governmental, raw materials, clubs and organizations, employee-related and freight and warehouse expenditures. Includes as locals in the Phosphates segment all vendors with addresses in Louisiana and Florida, and in the Potash segment all vendors with addresses in New Mexico, Saskatchewan and Manitoba. Phosphate Peru spend categories exclude raw materials, diesel, potable water and power and defines local as all vendors in Peru. Mosaic Fertilizantes spend categories include indirect expenditures and logistics. Figures include all vendors with addresses within the country of operations.

Category: Economic

Management Approach: Anti-corruption and Anti-competitive Behavior

Mosaic operates in a regulated industry and in areas throughout the world with varying degrees of perceived corruption. Mosaic also has routine interactions with foreign government officials and agencies related to obtaining licenses and approvals, customs, land use and other matters. The risk of corrupt practices exists in the countries where we operate as government officials and agencies are inherently involved in the production, sale, and distribution of our fertilizer products through the related laws and regulations governing these activities.

Mosaic must comply with all applicable laws of the United States, and all other countries in which we do business, that are designed to prevent bribery and corruption. Our [Code of Business Conduct and Ethics](#) demands compliance from our employees and requires any employees who have been assigned a company computer user ID to complete online code of conduct training and certify compliance with the code annually. In 2020, 7,360 employees completed the Code of Conduct Certification. The completion rate by salaried employees (over 5,400 employees) was 100 percent.

Mosaic also maintains a 24-hour independently administered confidential and anonymous incident reporting hotline for all Mosaic employees. In addition, our company conducts a robust risk assessment to identify risks related to the U.S. Foreign Corrupt Practices Act (FCPA). A robust fraud risk assessment is also completed in the Sarbanes-Oxley compliance efforts.

We recognize the significance of the FCPA and have established a [Worldwide Anti-Bribery, Anti-Corruption Policy](#). In addition to providing training on anti-bribery and anti-corruption for employees (approximately 2,000 employees trained in 2020), we conduct periodic FCPA audits of selected various geographic locations and respective individuals — including but not limited to: country managers, sales representatives, accounting/finance personnel and supply chain — whose job responsibilities require a keen awareness of and compliance with the FCPA.

205-1 Total number and percentage of operations assessed for risks related to corruption and the significant risks identified

During 2019, Mosaic reviewed the following foundational elements of our anticorruption program: Tone at the Top, Policies and Procedures, and Training, to provide assurance that Mosaic is taking the appropriate measures to mitigate the risk of an employee or representative (third parties) engaging in activities that may violate FCPA or other anticorruption laws or regulations. These reviews were repeated in 2020 for all our operating segments (Potash, Phosphates and Mosaic Fertilizantes). In addition, in 2020, Mosaic performed audit procedures at the Company's operations in Brazil, Peru and Saudi Arabia.

Transparency International's Corruption Perception Index ranks 180 countries and territories by their perceived levels of public sector corruption. We do not have production facilities in any of the 20 lowest-ranked countries.

Category: Economic

205-2 Communication and training on anti-corruption policies and procedures

Mosaic requires all salaried employees (which includes all management employees) to complete the online Foreign Corrupt Practices Act (FCPA) training. In addition to the online training, instructor-led training is also provided to certain employees based on their location and job responsibilities. In 2020, we administered approximately 10,000 hours of anti-corruption, business conduct and ethics and other legal compliance trainings. As part of our Code of Business Conduct and Ethics (the “Code of Conduct”) certification process, which is required annually of all salaried employees, employees are specifically asked to certify as to their compliance with the FCPA in the past year. Most recently, the 2019 Code of Conduct certification, completed in early 2020, had a 100 percent completion rate. View [404-1](#) for more information.

Board members are recertified on Mosaic’s Code of Conduct annually, most recently with a 100 percent completion rate in 2020.

Regarding business partners, Mosaic’s service agreements generally require suppliers to agree to follow the Mosaic Code of Conduct, a section of which addresses preventing bribery and corruption. The [Supplier Code of Conduct](#) states that suppliers adhere to the same level as required by Mosaic employees.

Mosaic’s purchasing policy requires suppliers to acknowledge Mosaic’s Code of Conduct biannually in writing. Mosaic’s [Worldwide Anti-Bribery, Anti-Corruption Policy](#) and [Code of Business Conduct and Ethics](#) are both publicly available on our [website](#).

205-3 Confirmed incidents of corruption and actions taken

In 2020 there were no confirmed incidents of corruption. There were no public legal cases brought against Mosaic or its employees in 2020, therefore no fines associated with corruption for the calendar year.

206-1 Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes

In 2020, there were no legal actions for anti-competitive behavior, anti-trust or monopoly practices.

Category: Environment

Management Approach: Materials

In line with Mosaic's strategic priority to **Act Responsibly**, we strive to be good stewards of natural resources, using them as efficiently as possible.

We use various mineral resources and materials to make our crop nutrition products. For example, limestone is used to produce our animal feed products and for water treatment. Sulfur, a byproduct of crude oil and natural gas de-sulfurization, is used to produce steam, electricity and sulfuric acid, which is used to produce phosphoric acid. We use byproduct heat from sulfuric acid production to generate steam that we use in our operations and to generate electricity. Sulfur is also used in the production of our MicroEssentials® product line. Various micronutrients, including zinc and sulfur, are key ingredients in our MicroEssentials product line. Ammonia is used in our finished products, diammonium phosphate (DAP), monoammonium phosphate (MAP) and MicroEssentials, and to adjust the pH of the stack gases at our Esterhazy potash mine.

Coproduct and byproduct materials that are generated during the extraction and beneficiation of potash and phosphate are addressed in the waste section of this report. Mosaic strives to improve recovery and reuse of its wastes in Brazil, where the regulatory construct is more supportive of reuse of products such as phosphogypsum, a byproduct of the phosphate manufacturing process. In 2020, the Mosaic Fertilizantes business sold approximately 4.9 million tonnes of phosphogypsum.

Mosaic products, predominantly fertilizer and animal feed ingredients, are used in agricultural operations. To the extent possible, bulk transport is used to minimize the need for extensive packaging — and therefore packaging waste — throughout the supply chain. Mosaic supports and helps promote The Fertilizer Institute's (TFI) Bulk Blend Workshops and Manual, which eliminates the need for packaging of major raw materials or the final product.

301-1 Materials used by weight or volume

MATERIALS MINED OR CONSUMED (MILLION TONNES)

MATERIALS	2020
Ammonia	1.37
Limestone	0.49
Phosphate Rock	20.4
Potash Ore	30.9
Sulfur (Long Ton)	4.60

NOTE: Ammonia consumed depicted in the table above are for production of phosphate crop nutrients. Sulfur value represents long tons used for our own production in 2020.

301-2 Percentage of materials used that are recycled input materials

Sulfur is the most significant recycled raw material in our manufacturing processes. The sulfur used is recovered from crude oil and natural gas processing and then recycled in our plant operations to produce sulfuric acid, which we use to make phosphoric acid, steam and electricity. Our use of this product prevents an excess of sulfur that otherwise could be disposed of in landfills. In 2020, sulfur made up approximately 2% by weight of our total raw materials.

301-3 Percentage of products sold and their packaging materials that are reclaimed by category

Mosaic products, predominantly fertilizer and animal feed ingredients, are used in agricultural operations. To the extent possible, bulk transport is used to minimize the need for extensive packaging throughout the supply chain. Mosaic supports and helps promote The Fertilizer Institute's (TFI) Bulk Blend Workshops and Manual, which eliminates the need for packaging of major raw materials or the final product. In any given year, more than 60% of the sales volumes (tonnes) from our businesses are sold in bulk.

Category: Environment

Management Approach: Water, Energy, Emissions, Biodiversity, Effluents and Waste and Environmental Compliance

Respect for the natural environment is essential to the sustainability of our business. From our potash mines in Saskatchewan to our Florida phosphate operations and mining, manufacturing and distribution facilities in Brazil, we strive to optimize our production processes and reduce our environmental impact.

Our management of water, energy and greenhouse gas emissions and waste is guided by our **Environmental, Health and Safety Policy** and commitment to the United Nations Global Compact. Our ESG Performance Targets, progress toward which we report annually, help focus our efforts and track our progress on these key issues.

We support a variety of formal and informal Mosaic channels through which stakeholders can submit concerns. Beyond outreach directly to Mosaic, the public has an opportunity to comment on local, state and federal rules and permits through Public Hearings, Public Notice and formal comment periods. Please see **413-1** for more information.

Water

We recognize that water is a critical natural resource that is essential to the sustainability of our operations, as well as the communities and ecosystems in which we operate. In our direct operations, we consume significant volumes of water in the mining and production of our phosphate and potash crop nutrient products. The primary sources of water for our operations are surface water; rainwater captured within the footprint of our facilities; and groundwater.

Our facilities monitor and evaluate water use to confirm it is minimized, and water recycling and reuse are being maximized. Secondary sources of water include water supplied by local authorities and partially treated industrial and domestic reclaimed water, also supplied by local authorities. Surface water withdrawals include once-through cooling water used by our Louisiana operations and sea water used at our Miski Mayo phosphate joint venture in Peru.

Discharges from Mosaic's Florida and Louisiana phosphate operations to downstream water bodies are highly regulated through federal National Pollutant Discharge Elimination System (permits that are administered by the Florida Department of Environmental Protection (FDEP) and Louisiana Department of Environmental Quality (LDEQ). Discharges are monitored, sampled and analyzed regularly by Mosaic, with reports provided to regulatory agencies to demonstrate compliance with permit limitations. The limitations are based on the water quality standards that protect the designated uses of the receiving water body. Mosaic's Saskatchewan facilities maintain a "zero-discharge" approach. When the discharge of freshwater is warranted following a high precipitation event, it is approved in advance by multiple regulatory agencies.

As it relates to the use of our products, crop nutrient products like those Mosaic manufactures have the potential to run off farmland and into waterways, which can contribute to impaired water quality.

By preserving the quality of water resources, addressing our water risks at a site-level, minimizing our own water use, and promoting agricultural practices that preserve and protect water resources, we reduce the environmental impact of fertilizers on the global food supply. See our Commitment to Water Stewardship for more information.

Mosaic's water stewardship efforts are focused on:

- Preserving and maintaining the quality of the water resources we use in the communities where we operate
- Integrating an environment, health and safety management system that is focused on identifying, evaluating and controlling risks
- Maximizing water recycling and reuse
- Supporting and participating in partnerships that advance nutrient stewardship, habitat conservation and watershed restoration
- Investing in water-efficient technologies and automation to drive improved water performance
- Partnering with industry and government to use alternative water sources
- Reporting our water performance and engaging with stakeholders

Category: Environment

Energy and Emissions

Fertilizer production is an energy-intensive activity. We use energy and generate direct and indirect greenhouse gas emissions in the mining, production, distribution and use of our phosphate and potash crop nutrient products. Since our company's formation in 2004, we have invested in initiatives aimed at reducing energy use and emissions — efforts that have resulted in improvements in environmental performance and operating cost savings. By improving the efficiency of our operations and promoting sustainable agricultural practices, we are adapting to the potential threats of climate change and reducing the environmental impact of fertilizers on the global food supply.

See [Our Leadership on Climate Change](#) for more information.

Our approach to managing energy and greenhouse gas emissions includes:

- Emphasizing operating efficiency
- Maximizing generation of electricity produced from waste heat at our phosphate manufacturing facilities
- Investing in energy-efficient technologies and evaluating alternative energy sources
- Leveraging our agronomic expertise to promote efficiencies in agricultural systems, which have the potential to enhance customers' productivity
- Advocating for balanced clean energy policy that encourages the generation and consumption of existing, low-cost resources, such as waste heat recovery
- Reporting our energy and GHG performance and communicating with stakeholders

Biodiversity

Protection of biodiversity is critical to global sustainable development and a significant component of Mosaic's sustainability efforts. In both our phosphate and potash operations in the United States, Canada and Brazil, prior to the start of mining — or when extending or expanding a mine — permits are secured from local, regional, state and federal government agencies. This exhaustive planning and approval process protects water, air, ecology, wildlife, transportation, safety and other environmental, health, and public welfare considerations.

We work with multiple parties to evaluate ecological resource preservation opportunities and to avoid and minimize any harm to state and federally protected wildlife species found on mine properties.

Phosphate mining represents a temporary disturbance of ecological resources. Once mining is complete, we conduct acre-for-acre **reclamation** and return mined lands to productive uses for wildlife and people. To promote biodiversity, Mosaic may introduce certain species into reclaimed lands, such as the gopher tortoise, that may have previously resided on the parcel but were moved prior to mining. All introductions and relocations of protected species are conducted in accordance with federal and state requirements and guidelines. Phosphates and potash operations' interaction with wildlife in the United States is regulated by state and federal agencies such as the Florida Fish and Wildlife Conservation Commission and the United States Fish and Wildlife Service (USFWS). These agencies maintain lists of protected species for which Mosaic develops species-specific habitat management plans for the proper protection measures are in place. Protection of these species is also reviewed and approved through the Federal, State and local permitting processes for our Florida phosphate mines.

In our potash facilities located in Saskatchewan, Canada, our approach to evaluating potential impacts to wildlife includes biological assessments for projects located in new or expanded footprint areas. Since potash mining is underground, such impacts are rare once a facility is in operation. Assessments include field surveys to identify rare species of plants, birds, mammals, reptiles and amphibians of special concern that may be impacted. Survey methods follow the recommendations of the provincial and federal agencies. Biological assessments for all expansion areas at the potash facilities followed this approach.

We work closely with regulators as to comply with all applicable regulations and agency-approved management plans and to fund and/or conduct research that promotes the goal of wildlife and habitat conservation.

Category: Environment

Waste

Large quantities of byproduct materials generated as a result of mining and processing of potash and phosphate — referred to for ease in this report as “mining wastes” are managed during the operation of a facility, and upon its closure. We apply industry best practices to manage and reuse overburden, tailings and byproducts associated with our mining and production practices. Potash tailings, consisting primarily of salt and clay, are stored in tailings management areas. A portion of the excess salt generated from potash mining is processed and then used for commercial purposes, including road salt, water softener salt, and use in food grade products and industrial uses. Phosphate clay residuals from mining are deposited in clay settling areas (CSAs) located within the approved mine boundaries. These CSAs are eventually dewatered and reclaimed. Overburden and sand tailings produced at our phosphate mines are used in reclamation and mitigation conducted at the mines.

Phosphogypsum, a byproduct of our phosphate manufacturing process, is managed in permitted phosphogypsum management systems (“gypstacks”) in the United States. In 2020, the U.S. Environmental Protection Agency (EPA) approved The Fertilizer Institute’s petition to allow phosphogypsum to be used for road construction projects. Though several other agency approvals are necessary before any road construction can occur, we believe this action by the federal government aligns the United States with long-standing international standards, as phosphogypsum beneficial use is common in many other parts of the world. This change would allow for a reduced footprint of areas currently used for stacking and potentially reduce the future need for Mosaic’s gypstack expansions in the United States. EPA’s approval has been met with some controversy and has been challenged by several nongovernmental organizations.

In Brazil some phosphogypsum is stacked, whereas the remainder is sold to third parties for use in agricultural and industrial applications. We sell most of the total volume of phosphogypsum generated at the Cajati and Uberaba facilities. We store the process water that separates from phosphogypsum during the dewatering process in gypstacks. We are subject to federal, state and local regulations related to these materials.

Certain solid wastes generated by our phosphates operations in the United States are subject to regulation under the Resource Conservation and Recovery Act (RCRA) and related state laws. The EPA rules exempt “extraction” and “beneficiation” wastes, as well as 20 specified “mineral processing” wastes, from the hazardous waste management requirements of the RCRA. Accordingly, certain residual materials like phosphogypsum, as well as process wastewater from phosphoric acid production, are exempt from RCRA’s hazardous waste regulations. Phosphogypsum and process wastewater nonetheless still are subject to extensive regulation.

Mosaic’s operations generate a variety of nonhazardous solid wastes, including domestic refuse, construction and demolition debris, and waste lubricants. Our waste management program provides assurance that all of our locations have a process in place to minimize waste generation, maximize recycling, and to ensure that waste management practices do not adversely affect the environment or health and safety of employees and the public.

We endeavor to choose on-site process chemicals that are the least hazardous, thereby seeking to lower risk to occupational health and safety and minimizing waste management implications. Mosaic facilities generate hazardous waste during production and maintenance operations. The types of hazardous solid waste generated at Mosaic’s United States facilities typically include spent cleaning solvents, paint-related wastes and some spent laboratory chemicals. At concentrate facilities, wastes generated during production and maintenance operations include waste that is characteristically hazardous for corrosivity and/or toxicity (e.g., low pH and/or metals content). Each location has an appropriate hazardous waste management system to ensure that the waste is properly and safely disposed.

No hazardous wastes are shipped internationally for disposal.

We continue to improve our comprehensive waste management strategy, accounting for federal, state and local requirements and to align it to the Mosaic environmental health and safety management system.

Environmental Compliance

We support a variety of formal and informal Mosaic channels through which stakeholders can submit concerns. Please see [413-1](#) for more information.

Category: Environment

303-1 Total water withdrawal by source

GLOBAL WATER WITHDRAWALS (,000m ³)					
	2016	2017	2018*	2019	2020
Groundwater	65,085	78,846	72,847	70,843	77,104
Municipal	914	7,050	1,296	1,003	1,048
Reclaimed (third party) Water	9,247	9,249	9,888	8,642	8,436
Surface Water	233,512	232,393	301,441	218,550	258,652
Total	308,758	327,538	385,471	299,038	345,240

Note: Reclaimed (third party) water includes waste water sources from industry or municipalities. We use reclaimed water as alternative source water to offset reliance on freshwater sources. Surface water includes once-through cooling used at our Uncle Sam, Louisiana facility, and seawater used at our Miski Mayo joint venture in Peru. Please see our discussion of freshwater intensity for our year-over-year performance toward our freshwater reduction target.

One Mosaic facility — our Miski Mayo joint venture in Peru — is located in a basin considered to be in high or extremely high water stress according to the World Resources Institute Aqueduct Water Risk Atlas tool. However, this facility operates almost exclusively on seawater, which undergoes a process of desalination before it is used. Actual groundwater withdrawals from this facility represent less than 1% of Mosaic's total groundwater withdrawals.

In 2020 we announced a target to reduce our freshwater withdrawals by 20% per tonne of product by 2025. As of the end of 2020, we have achieved an 18% reduction since our 2015 baseline and a 5% reduction since 2019. The significant reduction in freshwater use is thanks to efforts across our business to minimize our impact — and, in part, due to the nonlinear and cyclical nature of water use. We expect our performance to rebound somewhat next year. We are on track to meet our 2025 targets.

The values reported below reflect a freshwater intensity measurement, in line with our targets. Our intent with this metric is to drive water efficiency improvements across our business and to increase the use of alternative sources.

FRESHWATER INTENSITY (m ³ /TONNE)					
	2016	2017	2018*	2019	2020
Mosaic legacy ¹	4.76	4.85	4.52	4.85	4.69
Mosaic companywide ²			6.69	6.66	6.53

NOTE: ¹Mosaic Legacy figures do not include recently acquired Mosaic Fertilizantes facilities in Brazil since they were not part of the original target setting process. ²Companywide freshwater intensity includes acquired facilities. For withdrawals and total intensity broken down by business segment, please see our [2020 Environment Metrics Supplement](#).

Category: Environment

303-2 Water sources significantly affected by withdrawal of water

All of Mosaic's operations operate using recycled or reused water when possible to minimize reliance on freshwater resources.

North America

Our Central Florida operations use captured rainfall as an "alternative water supply." Groundwater use is heavily regulated and is used by Mosaic to supplement captured rainfall. Local regulations promote the use of available alternative water supplies, such as reclaimed water from municipalities, before groundwater use. Mosaic Florida sites received reclaimed water from six municipal waste water treatment plants in 2020 at an average rate of 5.90 million gallons per day (MGD). Mosaic Florida Phosphates operations do not withdraw water from nationally or internationally protected surface water sources. However, Mosaic has two withdrawal points from springs: Lithia Springs and Buckhorn Springs. This water is used at Mosaic's Riverview facility. In 2020, an average of 2.1 million gallons per day (MGD) was pumped from Lithia Springs and less than 0.2 MGD from Buckhorn Springs, representing less than 10 percent of the annual average spring flow for these springs. Although the state of Florida has over 700 springs, 30 of which have been designated as Outstanding Florida springs and are afforded extra protection, neither Lithia nor Buckhorn Springs are on the Outstanding Florida spring list. Nonetheless, Lithia Springs is a valuable recreational and cultural asset to the local community. Mosaic and its predecessors have leased Lithia Springs as a 160-acre recreational park to Hillsborough County since 1957.

In the Potash business, water use, including source and allocated volumes, are subject to site-specific regulations and permits. Water used in the operations process is recycled or reused, when possible. Our Saskatchewan potash operations withdraw from provincially regulated surface water and groundwater sources. Many of these sources also provide drinking water for nearby communities, and the surface water sources, including Cutarm Creek, Buffalo Pound Lake and Zelma Reservoir, are also used for recreational purposes. None of these sources are designated as national or international conservation areas.

Brazil

The Mosaic Fertilizantes business does not withdraw from nationally or internationally protected water sources, though some facilities are located near water bodies or regions that have significant biodiversity value. For example, our Cajati mine is located approximately 15–20 km from a Ramsar-listed protected area in the states of São Paulo and Paraná that contains diverse landscape and animal and aquatic environments. No withdrawals are made from water bodies within this protected area, but we do withdraw water from the Jacupiranguinha River, an important natural resource for the region and local community since it is home to endemic species and serves as a source of public water supply for the community. In 2020, withdrawals from this water body amounted to approximately 50% of the site's permitted volumes. Some of our facilities withdraw from sources in or near communities that are also used for drinking water or recreational purposes. All our facilities are heavily regulated and subject to facility-specific regulations, monitoring requirements and permits relating to water source and allocations.

Please see [303-1](#) and [303-3](#) for additional context.

303-3 Total volume of water recycled and reused

Figures are based on total water used by facility, less freshwater withdrawals.

RECYCLE AND REUSE VOLUME (,000m³)

BUSINESS SEGMENT	RECYCLE AND REUSE VOLUME
Phosphates	867,758
Potash	185,580
Mosaic Fertilizantes	581,086

NOTE: Carlsbad, N.M., South Pierce, Fla., and Faustina and Uncle Sam, La., are not included in respective business calculations. Belle Plaine is a solution mine and therefore, water use and methodology for recycle/reuse rate differs from shaft mining operations. However, recycled volumes from that facility are included in the totals for Potash. Legacy Brazil facilities historically reported under International Distribution segment are now reported under Mosaic Fertilizantes segment. Expressed as a percent of total water used, recycle figures by business are approximately 95%, 95%, 91% respectively.

Category: Environment

302-1 Energy consumption within the organization

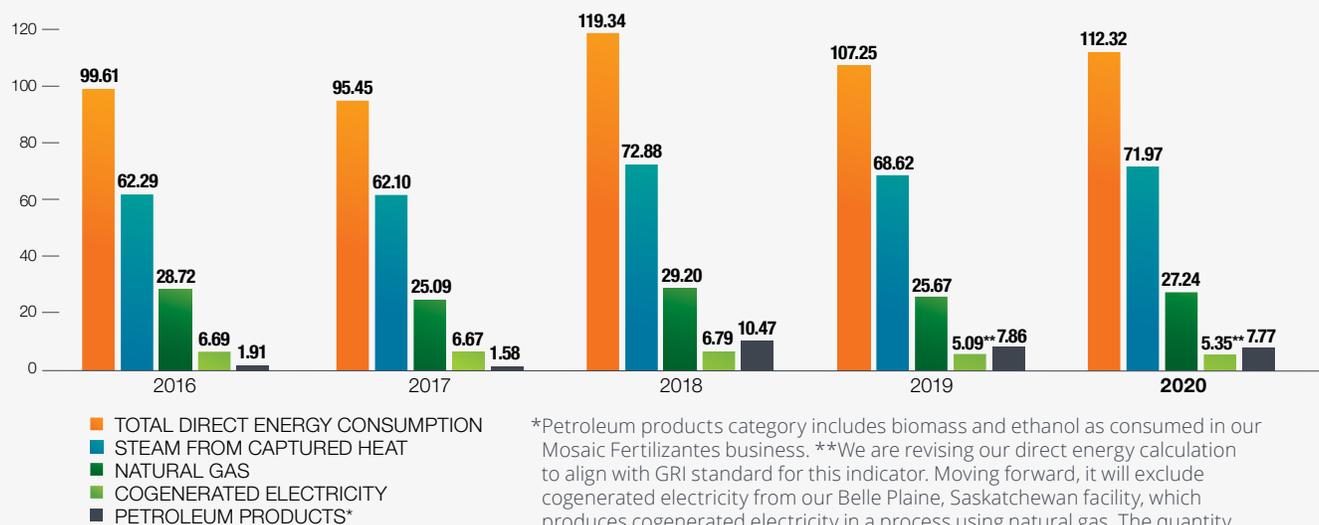
Companywide, our direct and indirect energy use totaled 125.92 million gigajoules (GJ) in 2020.

Our total direct energy consumption in 2020 was 112.32 million GJ.

Direct Energy Consumption by Source

Approximately 88% of Mosaic's worldwide total direct energy consumption in 2020 was from two sources: waste heat from sulfuric acid production and natural gas. The remaining portion was made up of petroleum products and propane.

TOTAL DIRECT ENERGY CONSUMPTION BY SOURCE (MILLION GJ)



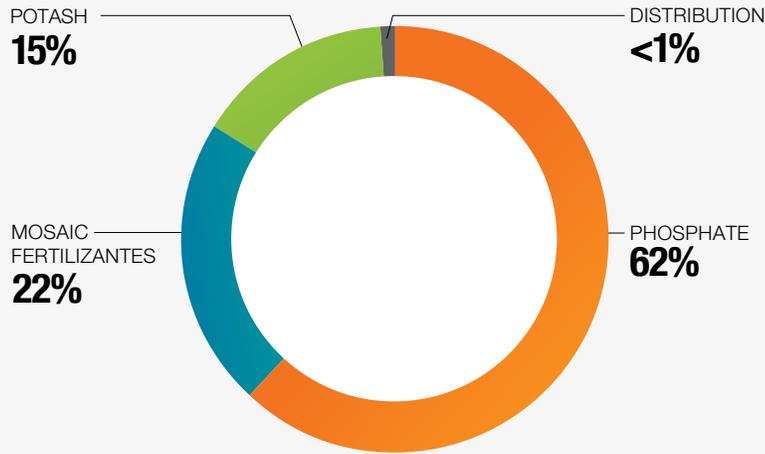
*Petroleum products category includes biomass and ethanol as consumed in our Mosaic Fertilizantes business. **We are revising our direct energy calculation to align with GRI standard for this indicator. Moving forward, it will exclude cogenerated electricity from our Belle Plaine, Saskatchewan facility, which produces cogenerated electricity in a process using natural gas. The quantity of natural gas used to create 1.17 million GJ of power at Belle Plaine in 2020 is included in companywide natural gas totals. The remaining cogenerated electricity includes power generated from waste heat from the sulfuric acid manufacturing process in our Florida, Louisiana and Brazil phosphate operations.

In 2020, our North America phosphates operations used a portion of steam energy from the sulfuric acid manufacturing process to produce 4.9 million GJ of electricity through a process called cogeneration, approximately 90% of which, or 4.4 million GJ, was used internally at our plants and mines. We consider the waste heat from sulfuric acid production to be a direct primary energy source for our North America phosphate operations. We exported approximately 480,000 GJ of power to the local utility grid in North America in 2020. Three of our Brazil facilities used a similar process to harness waste heat from the sulfuric acid manufacturing process, resulting in generation of approximately 890,000 GJ of energy for use at their operations. In 2020 our Brazil operations sent approximately 120 GJ of electricity to the utility grid.

Mosaic looks for opportunities to improve the efficiency and expand the electricity output of our cogeneration assets. Mosaic could have additional opportunities for harnessing emissions-free power under a more supportive regulatory construct. We advocate for a balanced renewable energy policy that recognizes cogenerated power from waste heat as emissions-free power; incentivizes and expands the generation and consumption of existing, low-cost clean energy, such as waste heat recovery; and promotes a universal clean energy credit assigned to all zero-emissions electricity.

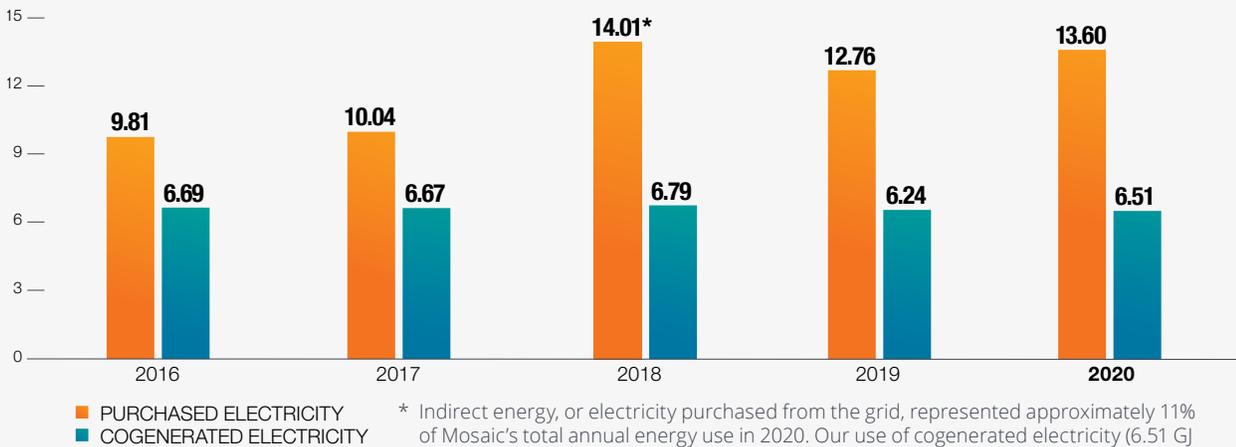
Category: Environment

DIRECT ENERGY CONSUMPTION BY BUSINESS SEGMENT 2020 (%)



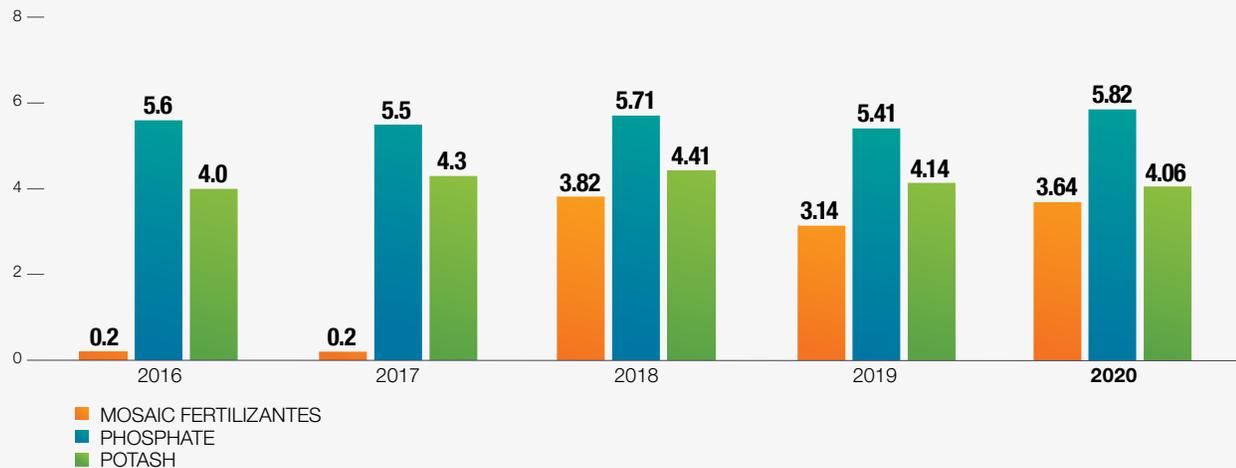
NOTE: The Phosphates and Mosaic Fertilizantes businesses use a significant amount of waste heat energy from the sulfuric acid manufacturing process, which is accounted for here. Distribution facilities accounted for less than 1% of companywide direct energy use.

INDIRECT ENERGY CONSUMPTION BY PRIMARY ENERGY SOURCE (MILLION GJ)



* Indirect energy, or electricity purchased from the grid, represented approximately 11% of Mosaic's total annual energy use in 2020. Our use of cogenerated electricity (6.51 GJ companywide in 2020) offsets what we would otherwise have to purchase from the grid.

INDIRECT ENERGY CONSUMPTION BY BUSINESS SEGMENT (MILLION GJ)

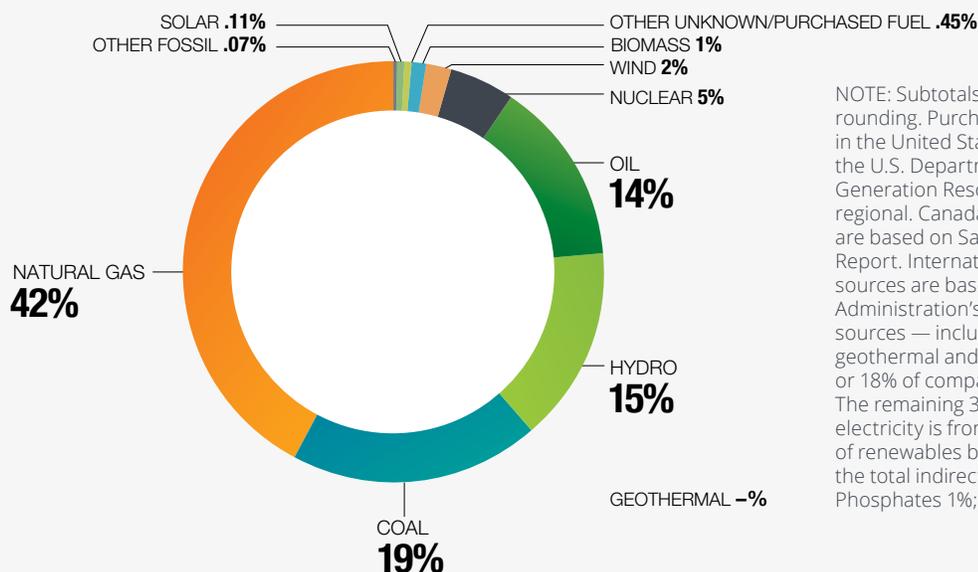


Category: Environment

Indirect Energy Consumption by Fuel Source

Approximately 18% of Mosaic's worldwide indirect energy consumption from purchased electricity is from renewable sources, including hydroelectric, biomass sources and wind power.

INDIRECT ENERGY CONSUMPTION BY GENERATION SOURCE (PERCENT)



NOTE: Subtotals do not add up exactly to 100 due to rounding. Purchased electricity sources for facilities in the United States are categorized consistent with the U.S. Department of Energy 2016 Emissions & Generation Resource Integrated Database (eGrid) regional. Canada-purchased electricity sources are based on Saskpower 2016–2017 Annual Report. International facilities power generation sources are based on the U.S. Energy Information Administration's national energy profiles. Renewable sources — including hydroelectric, wind, biomass, geothermal and solar — total approximately 8,976 GJ or 18% of companywide indirect energy consumption. The remaining 39,985 GJ (82%) of purchased electricity is from nonrenewable sources. Breakdown of renewables by business segment as a percent of the total indirect energy consumption are as follows: Phosphates 1%; Potash 7%; Mosaic Fertilizantes 10%.

302-3 Energy intensity

DIRECT AND INDIRECT ENERGY INTENSITY (GJ/TONNE)

	2016	2017	2018	2019	2020
Mosaic legacy ¹	2.68	2.31	2.47	2.39	2.44
Mosaic companywide ²			2.83	2.60	2.57

NOTE: ¹Mosaic Legacy figures do not include recently acquired Mosaic Fertilizantes facilities in Brazil since they were not part of the original energy target setting process. ²Companywide energy intensity includes acquired facilities. For intensity broken down by business, please see our [2020 Environment Metrics Supplement](#).

302-4 Reduction in energy consumption

Our energy improvement and sustainability process is part of a broader strategic business plan designed to help Mosaic reduce greenhouse gas emissions and meet or exceed efficiency, production and profitability requirements. This plan includes strategies for lowering purchased energy consumption through more efficient processes and maximizing use of cogenerated energy.

We also emphasize energy efficiency in our office facilities. Mosaic's Florida headquarters in FishHawk was designed and constructed to Leadership in Energy & Environmental Design (LEED) standards and maintains its ENERGY STAR certification. Mosaic's leased Regina, Canada, offices were built to LEED standards and included the purchase of interior design elements, furniture and products, as well as other energy efficiencies associated with LEED. The Regina office was LEED certified in 2017.

In 2020 we completed behavioral change, energy efficiency, fuel switch and process optimization projects that resulted in energy savings of approximately 75,000 GJ.

Category: Environment

305-1 Direct GHG emissions (Scope 1)

305-2 Indirect GHG emissions (Scope 2)

WORLDWIDE GHG EMISSIONS (MILLION TONNES CO ₂ e)					
BUSINESS SEGMENT/EMISSION TYPE	2016	2017	2018	2019	2020
Phosphates	2.69	2.3	2.56	2.29	2.56
Direct Emissions	1.92	1.5	1.87	1.67	1.88
Indirect Emissions	0.76	0.81	0.69	0.62	0.67
Potash	1.80	1.81	1.83	1.66	1.60
Direct Emissions	0.97	0.90	0.93	0.91	0.88
Indirect Emissions	0.83	0.91	0.90	0.74	0.73
Mosaic Fertilizantes	0.07	0.05	0.88	0.63	0.75
Direct Emissions	0.04	0.03	0.78	0.56	0.67
Indirect Emissions	0.01	0.01	0.10	0.08	0.07
Emissions from Biofuels (CO ₂)			0.18	0.16	0.14
Distribution	0.03	0.02	0.01	0.01	0.01
Direct Emissions	0.02	0.00*	0.00*	0.00*	0.00*
Indirect Emissions	0.01	0.01	0.01	0.01	0.01
Total Direct Emissions			3.58	3.13	3.44
Total Indirect Emissions			1.69	1.45	1.48
Total Emissions	4.56	4.17	5.28	4.58	4.92

Approximately 25% of Mosaic's Scope 1 emissions (those generated in Canada) are covered under emissions-limiting regulations. Figures higher starting in 2018 due to inclusion of recently acquired Mosaic Fertilizantes facilities in Brazil. Legacy Brazil facilities previously reported under International Distribution segment are now reported under Mosaic Fertilizantes segment. Distribution, as reported here, represents Streamsong Resort and Mosaic-owned facilities involved in warehousing, blending and/or shipping Mosaic's products. Totals marked with an asterisk are less than 0.01 million tonnes. Direct emissions include Mosaic's consumption of natural gas, diesel, other fuels, process related activities, water treatment and refrigerants. Indirect emissions are location-based only and include electricity purchased from third-party utilities. The Mosaic Fertilizantes business consumes biomass and ethanol as fuel alternatives. Per the GHG Protocol, we have added a line item to account for CO₂ emissions from biomass. N₂O and CH₄ are represented within the direct emissions totals. 2020 emissions from biomass are higher due to an error in our 2019 figure, which we have elected not restate because it does not have a significant impact on our total emissions. Mosaic uses guidance from the CDP for calculating and reporting carbon dioxide equivalence (CO₂e). Subtotals may not always add up to totals due to rounding. Please see Mosaic's [CDP Climate Change response](#) for more information on our GHG emissions performance.

305-3 Other indirect GHG emissions (Scope 3)

OTHER INDIRECT GHG EMISSIONS (MILLION TONNES CO₂e, EXCEPT CATEGORIES 5 AND 6¹)

SCOPE 3 CATEGORY	2020
Category 1²: Purchased Goods and Services	2.42
Category 3: Fuel-and-Energy-Related Activities	0.50
Category 4³: Upstream Transportation and Distribution	
Florida Trucking	0.04
Global Rail Shipments	0.25
Category 5⁴: Waste Generated in Operations	2,787
Category 6: Business Travel	619
Category 11⁵: Use of Sold Products	4.80

NOTE: ¹Business travel and waste disposal represented in MTN CO₂e, resulting in companywide total Scope 3 emissions of 3.8 million MTN CO₂e. ²Category 1 emissions are associated with the purchase of ammonia for production of phosphate crop nutrients and use in smaller applications at our Esterhazy complex. ³Trucking represents upstream transportation of raw materials, in-process and finished goods related to our Florida Phosphate operations. Apart from emissions associated with one vendor, representing less than 5% of emissions associated with upstream rail movements, the rail line item excludes unladen backhaul trips ⁴Waste disposal category does not include mining wastes. This category was not third-party assured. ⁵The emissions associated with use of sold products is from 2019 IPCC N₂O emissions from managed soils. We applied a Tier 1 methodology, which does not take into account different land cover, soil types, climatic conditions or management practices. ⁶Investment category includes emissions associated with our 25 percent interest in a joint venture investment in MWSPC, which operates a mine and chemical complex that produces phosphates fertilizers and other downstream products in the Kingdom of Saudi Arabia. Please see our [2020 CDP Climate Change response](#) for more information about our Scope 3 emissions.

Category: Environment

305-4 GHG emissions intensity

DIRECT AND INDIRECT GHG EMISSIONS INTENSITY (METRIC TONNE CO₂e/PER TONNE OF FINISHED PRODUCT)

	2016	2017	2018	2019	2020
Mosaic legacy ¹	0.26	0.22	0.24	0.23	0.24
Mosaic companywide ²			0.25	0.23	0.23

NOTE: ¹These figures do not include Mosaic Fertilizantes facilities in Brazil that were acquired in 2018. For total GHG intensity broken down by business, please see our [2020 Environment Metrics Supplement](#). Gases included in our calculation are CO₂, CH₄ and N₂O.

In 2020 we announced a target to reduce our Scope 1 and 2 greenhouse gas emissions by 20% per tonne of product by 2025. As of the end of 2020, we have achieved a 10% reduction since our 2015 baseline and a 1% reduction since 2019.

305-5 Reduction of Greenhouse Gas (GHG) emissions

Mosaic is taking a proactive approach to reductions in GHG emissions, with an emphasis on technology and improving energy efficiency with behavioral changes, process improvements, equipment upgrades and bold solutions. GHG emissions reductions resulting from the energy saving initiatives reported in [302-4](#) equal approximately 20,000 tonnes of CO₂e, the equivalent of taking more than 4,000 average United States cars off the road for a year. For more information on Mosaic's efforts to reduce GHG emissions and address climate change, please see our [2020 CDP Climate Change response](#).

Reducing Impacts Associated with Product Use

The results of a value chain exercise we completed in 2016 confirmed that the GHG impacts associated with the downstream application of our products — primarily potash and phosphate crop nutrient products — are minimal compared to nitrogen-based fertilizer products. We report those emissions in [305-3](#). Nevertheless, we understand the role we play in reducing the environmental impact of fertilizers on the global food supply and we are engaged with agricultural stakeholders on multiple fronts.

- Mosaic promotes the use of best agricultural practices, including research and practices to minimize GHG emissions and other environmental impacts associated with the use of crop nutrient products. Further, Mosaic supports the minimization of GHG emissions and other environmental impacts from the global food supply by encouraging stakeholders to enhance their understanding, adoption and promotion of [4R Nutrient Stewardship](#).
- Mosaic maintains active partnerships with industry-leading research centers, targeting agriculture efficiency and productivity improvements that may facilitate GHG reductions associated with use of Mosaic's products. In 2020 we conducted 400 small plot trials in Argentina, Brazil, Chile, China, Canada, India, Latin America (Mexico to Peru) and the United States.
- We have also recently announced agreements with two companies to develop and launch agricultural solutions, including a nutrient efficiency product and a nitrogen-fixing microbial product, that contribute to soil health and have positive environmental benefits.
- In 2020, Mosaic partnered with Anuvia to launch Sus-Terra™ by the Mosaic Company, a bio-based phosphate fertilizer that contributes to long-term soil health and fertility. Importantly, Sus-Terra™ fertilizer and MicroEssentials® were defined by the Association of American Plant Food Control Officials (AAPFCO) as Enhanced Efficiency Fertilizers (EEF) in 2021. EEF products reduce nutrient losses to the environment through the slow release of nutrients or by disrupting the conversion of nutrient forms in the soil that are susceptible to loss all while increasing nutrient availability for the crop. Innovative fertilizers, like EEFs, are an important component of 4R Nutrient Stewardship. Combined with 4R practices, the use of EEFs and other emerging technologies will help to promote more sustainable farming practices while also solving for the world's increasing demand in food supply.

Category: Environment

305-7 NO_x, SO₂ and other significant air emissions

CRITERIA AIR AND OTHER POLLUTANTS (,000 TONNES)					
EMISSION TYPE	2016	2017	2018	2019	NORMALIZED 2019
NO _x	3.27	2.85	3.25	2.84	0.15
CO	1.43	0.9	1.06	0.84	0.04
PM	6.05	6.09	6.24	4.70	0.25
SO ₂	16.55	15.77	19.31	16.47	0.88
VOC	0.24	0.2	0.28	0.20	0.01
NH ₃	1.84	1.61	1.01	0.30	0.02
F	0.11	0.14	0.28	0.21	0.01
H ₂ S	0.01	0.01	0.01	0.01	0.00*
SAM	0.16	0.3	0.34	0.27	0.01
HF	0.13	0.13	0.14	0.42	0.02

NOTE: 2020 air emissions were not available at time of publication. We will update the report when values are available. We attribute lower 2019 emissions to a variety of factors, including management efforts at our manufacturing plants and temporary idling of Louisiana facilities. Figures higher in 2018 due to inclusion of recently acquired Mosaic Fertilizantes facilities in Brazil. Emissions based on stack test results and emission factors. "Normalized" refers to the emissions value per 1,000 tonnes of finished product. Values marked with an asterisk are less than 0.01 per 1,000 tonnes.

Category: Environment

304-1 Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas

North America

In Florida, although there are no International Union for Conservation of Nature (IUCN) protected management areas near our operations, Mosaic has placed approximately 22,000 acres in conservation easements along wildlife corridors and other ecologically significant habitats. As of December 31, 2020, Mosaic owned or maintained mineral interests in about 365,400 acres of land in Florida related to our phosphate surface mining operations. These mine areas may abut or contain habitat and wildlife corridors, many of which are recognized on official state maps as being high in biodiversity. While Mosaic lands are not adjacent to, nor do they contain land registered as IUCN protected areas, many of these lands are permanently protected through conservation easements. As of 2020, Mosaic owns or controls more than 33,000 acres in Florida that are designated as preservation for conservation easements, non-impacted floodplain, and high-quality wetlands.

As of 2020, Mosaic operates two Canadian potash facilities, all located in the southern half of the province of Saskatchewan, including our solution mine at Belle Plaine and two interconnected mine shafts at our Esterhazy shaft mine. We continue the expansion of capacity in our Potash segment with the K3 shafts at our Esterhazy mine. Following ramp-up, these shafts are expected to add an estimated 0.9 million tonnes to our annual potash operational capacity and provide an infrastructure to move ore from K3 to the K1 and K2 mills.

Mosaic has mineral rights to approximately 617,000 acres in Saskatchewan for potash mining and surface rights to approximately 35,000 acres. Mosaic's United States potash operations include a shaft mine in Carlsbad, New Mexico, with mineral rights to approximately 77,000 acres for potash mining and approximately 7,200 acres of surface rights. Fewer than 10% of our reserves are within 5 kilometers of lands that have been categorized as protected through mechanisms such as Crown Conservation Easements, IUCN or the Wildlife Habitat Protection Act. It is important to note that unlike in a traditional metals mining setting, potash shaft mining in Saskatchewan occurs at more than 3,000 feet below surface, and potash solution mining requires limited acreage for surface infrastructure. Therefore, the only surface areas that are disturbed are the actual footprint of the mine shaft and the adjacent above-ground processing facilities and tailings management areas.

Brazil

Mosaic operates five phosphates mines and one potash mine, and four crop nutrient production facilities in Brazil, totaling approximately 310,000 acres. Some Mosaic facilities in Brazil, such as the Cajati mine, are located in regions with high biodiversity value. The Cajati mining operations occupy approximately 4,699 acres near the Ribeira Valley region in the state of São Paulo. Though not within a protected area, this facility is near a region that is considered to have high cultural and biodiversity value due to the existence of prominent archaeological sites, diversity of flora and fauna and threatened species as defined by IUCN. Similarly, there are approximately 700 acres of protected area near our Uberaba production facility, which occupies approximately 1,438 acres in the state of Minas Gerais. Though not registered as IUCN protected areas, this land and others adjacent to many of our mining or production facilities are protected by stringent site-specific permit requirements and government regulations.

Category: Environment

304-2 Descriptions of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas

Phosphate Mining and Production in the United States and Brazil

Mosaic's Florida phosphate surface mine operations involve land clearing and dewatering. As part of the permitting process for our phosphate mines, regulatory agencies review comprehensive site survey data and assessment reports to determine and approve temporary impacts to species and habitat. Site specific Wildlife and Habitat Management Plans are developed for each mine, which outline measures to be implemented to protect and manage wildlife, listed species and their habitats, including provisions for pre-clearing surveys and species relocation for less mobile species, such as the gopher tortoise.

We generate direct and indirect greenhouse gas (GHG) emissions in the mining and production of Mosaic's phosphate crop nutrient products. We report those impacts in [305-1](#) and [305-2](#).

In addition, in preparation for mining the surficial groundwater table is drawn down for safety of personnel and equipment and to allow more efficient recovery of the phosphate ore. The groundwater level, however, is restored once mining is complete and the area is backfilled. Perimeter recharge systems are used to maintain any ephemeral adverse impact from groundwater drawdown occurs on Mosaic's property boundary. The typical duration between land clearing and restoration of habitat is about 10 years. Wildlife re-population of constructed habitat areas—mainly due to their connection to other habitats and foraging areas, demonstrate the reversibility of the impacts. Because mining occurs in a sequential pattern, while new areas are being cleared for mining, additional preservation areas are being set aside and habitat restoration in other areas of the mine site is being completed such that habitat areas remain available for the affected species.

As with any land disturbance activity, affected land lends itself to nuisance plant species proliferation. Mosaic, however, uses aggressive approaches to establish biodiversity and minimize the proliferation of invasive species. In fact, post reclamation wildlife surveys indicate that even though the ground surface may be affected for a number of years as a result of the mine process, revegetation and repopulation of these sites with wildlife species is successfully achieved. Many bird species are attracted to the water features contained within the active mine operation and remain onsite throughout the process. These are in part, why the state of Florida deems phosphate mining to be a temporary land use. Please see our [website](#) for more information.

Phosphate mining operations in Brazil use an open pit process to extract phosphate reserves. The process is heavily regulated and there are procedures in place to minimize impacts to wildlife and habitats. Each of our mining operations in Brazil has a management plan and environmental compensation strategies that address the locations' unique biodiversity needs. As an example of our environmental compensation strategies, we set aside a portion of the mining site—approximately 20 percent of the project footprint—as part of our efforts to preserve and protect unmined land. Please see [303-2](#), [304-1](#) and [MM2](#) for more information.

Potash Mining and Production in the United States and Canada

Potash mining operations in Canada and the United States use shaft and solution mining techniques. Because of the limited footprint on surface features, such as surface infrastructure and tailings management areas, impacts to wildlife and habitats are also highly localized and relatively small in scale. Prior to surface development, Mosaic's Saskatchewan facilities consult multiple stakeholders as part of best management practices and procedures that minimize risk to wildlife and habitats in our operating areas. In Carlsbad, open bodies of surface saline waters attract migratory birds. We have robust efforts in place to reduce impacts to avian populations, working in collaboration with local regulators and stakeholders.

Our potash operations also generate direct and indirect greenhouse gas emissions associated with mining and crop nutrient production. We report those impacts in [305-1](#) and [305-2](#).

Category: Environment

MM1 Land disturbed or rehabilitated

In our Florida phosphate operations, Mosaic reports our Florida mining and reclamation activities to the Florida Department of Environmental Protection (FDEP) Mining and Mitigation Program. Once we have satisfied all reclamation requirements with respect to mined and disturbed lands, the FDEP “releases” those acres from further reclamation obligation and those reclaimed lands, are then considered “released acres” by FDEP. Accordingly, an increase in the annual released acreage is the result of our satisfaction of those reclamation requirements.

Our Brazil phosphate operations use an open pit process to extract phosphate reserves. Once mining is complete, land recovery efforts include resloping and revegetating the mined area.

LAND MINED AND RECLAIMED (ACRES)

FLORIDA PHOSPHATE OPERATIONS¹

YEARS	MINED AND DISTURBED		MINED AND DISTURBED RECLAIMED (INITIAL REVEGETATION COMPLETE)		RELEASED MINED & DISTURBED
	MINED	DISTURBED ONLY	MINED	DISTURBED	
All Previous	153,077	41,802	118,013	35,511	90,305
2016	2,035	691	2,161	1,184	9,362
2017	2,964	1,437	2,449	134	2,089
2018	2,331	-1,174	719	405	3,660
2019 ²	1,843	1,533	1,281	-141	3,806
2020 ²	1,740	463	1,000	190	855
Total	163,990	44,751	125,622	37,284	110,078

BRAZIL PHOSPHATE OPERATIONS³

YEARS	MINED		MINED AND DISTURBED RECOVERED		PENDING RECOVERY MINED & DISTURBED AREAS
	MINED	DISTURBED	MINED	DISTURBED	
2018	4,060	16,457	0	3,099	17,418
2019	3,919	12,778	64	2,296	14,340
2020	3,024	11,634	27	1,609	13,025
Total	11,003	40,869	91	7,004	44,783

NOTE: ¹Estimated acreages based on Annual Mine and Reclamation Reports submitted to the Florida Department of Environmental Protection (FDEP) pursuant to Chapter 62C-16.0091 F.A.C. and FDEP approved Conceptual Reclamation Plans. "Released" acres are those acres with no further reclamation obligations pursuant to Chapter 62C-16 F.A.C. Additional mitigation releases required pursuant to WRP, ERP, County and USACE Section 404 Permits are not accounted for in this table. ²As of the date of this publication's release, 2019-2020 reports have not been validated by FDEP. Accordingly, these figures are estimates only and may be revised in future reports. ³We are reporting mined and recovered area for Mosaic Fertilizantes back to 2018, the year we acquired this business in Brazil.

MM2 Number and percentage of sites identified as requiring biodiversity management plans

All active mine sites within the United States, Canada and Brazil are required to operate pursuant to federal, state/provincial and local regulations related to management of habitat and wildlife. Mosaic has three operating mines in Florida; all (100%) have both Wildlife and Habitat Management Plans and Wetland Mitigation plans to promote and maintain biodiversity. While Mosaic's Carlsbad, NM potash mine is an underground mine, it maintains an active migratory bird program. In Saskatchewan wildlife management plans and procedures are used to ensure compliance with applicable legislation, project approvals and commitments. In Brazil, each of our five active mine sites has a biodiversity management plan in place. Environmental Stewardship, including biodiversity and preservation of important ecological sites, is a critical part of Mosaic's sustainability efforts.

Category: Environment

304-3 Habitats protected or restored

In our Florida phosphate mining operations, we restore or reclaim every acre of land we mine or disturb, with an emphasis on habitat. We report those activities in **MM1**. Consequently, there are at least as many acres in habitat after mining as before. In addition, environmentally sensitive lands — typically about 15% of a project site — are set aside for preservation, with additional reclaimed wetlands and some uplands (such as gopher tortoise recipient sites) protected in perpetuity through conservation easements. For example, a typical 10,000 acres mine site may be composed of about 25% wetland and 30% upland habitat, with the balance in other uses such as agriculture. Frequently — prior to mining — much of this habitat is fragmented or unconnected due to historic agricultural practices. Thus, holistic mitigation plans allow restoration to be consolidated and intertwined — as well as interconnected to the high-quality preserved land — to promote wildlife re-establishment and migration as well as in providing buffers for streams and flowways. Success of these restoration efforts is determined by standards imposed by regulatory agencies, and independent assessments by third party ecological professionals. Mosaic's Florida business planted approximately 490,000 trees in 2020, reclaiming uplands, significant upland habitats and wetlands. Please see **MM1** for information on our reclamation activities in 2020.

Mosaic has fostered partnerships with, and funding for, a variety of non-governmental organizations (NGOs) and academic institutions to advance our understanding of the habitats we manage through reclamation. Examples of these groups include Tampa Bay Watch, The Nature Conservancy, Archbold Biologic Station and Audubon, Florida.

Mosaic's Potash business segment is similarly committed to habitat restoration. For example, in 2012, Mosaic made a grant to Ducks Unlimited for \$2 million that will restore at least 500 acres of wetlands over a 10-year period in Saskatchewan. 2020 marked the ninth year of this agreement and we are on track to meet the 500 acres goal by the end of 2021.

As part of our environmental compensation efforts in the Mosaic Fertilizantes segment, we set aside a portion of a mining site — approximately 20 percent of the project footprint (but in certain cases as much as 80 percent) — to preserve and protect unmined land in its natural state. Additionally, as part of other mining requirements, we complete other environmental compensation actions such as planting trees. As of 2020 more than 17,000 acres were classified as protected, preserved or restored. As another example of the Mosaic Fertilizantes business's efforts, in 2020 we invested in wildlife and forest preservation programs in the southwest region of the state of Minas Gerais. We also contributed to efforts to preserve and monitor at-risk avian species including the Brazilian merganser. Mosaic has invested in a mangrove monitoring and waste removal program, which has observed recovery of the mangrove area adjacent to the Fospar facility. Mangroves are an important resource for protection of coastal wetlands and habitat for valuable species of fish, crustaceans, mammals, birds and insects.

Category: Environment

304-4 Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

Mosaic does not specifically manage wildlife species per the International Union for Conservation of Nature (IUCN) List designations, but rather in accordance with rules established for threatened or endangered species by regulatory agencies with authority in the regions in which we operate. Some of the species listed below are present on lists that are applicable to the region in which the facility is located.

IUCN RED LIST OF SPECIES POSSIBLY IN THE VICINITY OF OPERATIONS

FLORIDA PHOSPHATE OPERATIONS

IUCN RED LIST DESIGNATION	NUMBER OF SPECIES	TYPE OF SPECIES
Endangered	—	—
Vulnerable	5	Florida bonneted bat, Florida mouse, gopher tortoise, Florida scrub jay, West Indian manatee
Near Threatened	5	Gopher frog, short-tailed snake, common bobwhite, loggerhead shrike, wood thrush, common grackle

Florida state or federally-listed threatened species considered IUCN Least Concern include the burrowing owl, Florida pine snake, least tern, little blue heron, Southeast American kestrel, tricolored heron, wood stork, Eastern indigo snake, crested caracara, American alligator, Eastern diamondback rattlesnake. We manage these species in accordance with rules established by applicable regulatory agencies.

IUCN RED LIST OF SPECIES POSSIBLY IN THE VICINITY OF OPERATIONS

U.S. POTASH OPERATIONS (NEW MEXICO)

IUCN RED LIST DESIGNATION	NUMBER OF SPECIES	TYPE OF SPECIES
Endangered	—	—
Vulnerable	—	—
Near Threatened	1	Snowy plover

IUCN RED LIST OF SPECIES POSSIBLY IN THE VICINITY OF OPERATIONS

CANADA POTASH OPERATIONS

IUCN RED LIST DESIGNATION	NUMBER OF SPECIES	TYPE OF SPECIES
Endangered	—	—
Vulnerable	3	Horned grebe, Snowy owl, Sprague's pipit
Near Threatened	3	Olive-sided flycatcher, loggerhead shrike, common grackle

IUCN RED LIST OF SPECIES POSSIBLY IN THE VICINITY OF OPERATIONS

LOUISIANA PHOSPHATE OPERATIONS

IUCN RED LIST DESIGNATION	NUMBER OF SPECIES	TYPE OF SPECIES
Endangered	1	Pallid sturgeon
Vulnerable	1	West Indian manatee
Near Threatened	—	—

NOTE: Species listed as possibly affected by Louisiana operations are from Louisiana Department of Wildlife and Fisheries database and may not have been actually observed on or near Mosaic property. Avian species listed as affected or possibly affected by New Mexico and Saskatchewan operations are migratory species with potential migration patterns proximal to our operations in those geographies.

Category: Environment

IUCN RED LIST OF SPECIES POSSIBLY IN THE VICINITY OF OPERATIONS

BRAZIL PHOSPHATE AND POTASH OPERATIONS

ICUN RED LIST DESIGNATION	NUMBER OF SPECIES	TYPE OF SPECIES
Critically Endangered	1	Brazilian merganser
Endangered	5	Vinaceous-breasted Amazon, Chaco Eagle, Crowned solitary eagle, Brasilia Tapaculo, Tapeti
Vulnerable	12	Red-tailed amazon, White-bearded antshrike, Bare-faced Curassow, sharp-tailed tyrant, azure jay, ultramarine grosbeak, cycloramphus acangatan, Southern tiger cat, Giant anteater, lesser nothura, bare-throated bellbird, channel-billed toucan
Near Threatened	21	Marbled tropical bullfrog, yellow-faced amazon, turquoise-fronted Amazon, Aplastodiscus perviridis, golden-capped parakeet, white-edged tree frog, Black-fronted Titi Monkey, Maned wolf, Yellow-legged Tinamou, spot-breasted antvireo, white-breasted tapaculo, black-fronted titi, festive coquette, greater crescent-chested puffbird, white-banded tanager, Bearded Tachuri, blue finch, blue-winged macaw, saw-billed hermit, Greater Rhea, azure-shouldered tanager

306-1 Total water discharge by quality and destination

306-5 Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water or runoff

TOTAL WATER DISCHARGE 2020 (TONNES UNLESS OTHERWISE NOTED)

		2016	2017	2018	2019	2020
Phosphate Segment Discharges	Annual Outfall Discharges (,000 m ³)	456,861	383,218	454,995	388,980	342,251
	Phosphorous Loadings	1,826	1,732	1,505	976	1,289
	Nitrogen Loadings	490	409	466	462	385
Mosaic Fertilizantes Segment Discharges	Annual Outfall Discharges (,000 m ³)	—	—	164,803	140,337	169,824
	Phosphorous Loadings	—	—	681	2,049	2,265
	Nitrogen Loadings	—	—	82	53	22

NOTE: Per location-specific permit conditions, our Brazil operations monitor water discharges for various other parameters not reported here. Please view our [2020 Environment Metrics Supplement](#) for more information.

Category: Environment

RIVERINE BASINS WHERE MOSAIC OPERATES

WATER BODY/BASIN	BASIN SIZE (HECTARES)	RIVER LENGTH (KM)
NORTH AMERICA		
Hillsborough River	175,000	95
Peace River	608,000	169
Alafia River	109,000	38
Little Manatee River	58,000	58
Myakka River	155,000	106
Mississippi River	322,500,000	3,370
Pecos River	11,500,000	1,490
Qu'Appelle	1,780,000	430
BRAZIL		
Jacupiranguinha River	2,568,100	60
Jacupiranga River	2,568,100	no data
Capivara River	2,209	93
Sal Stream	2,209	21
Fundo Stream	22,260	16
Mandaguari Stream	22,260	9
Salitre Stream	2,209	622
Bebedouro Stream	2,209	8
Bonito Stream	2,209,100	11
Limeira Stream	3,440,000	7
Imbé Stream	3,440,000	3
Inferno Stream	2,208,600	78
Grande River	258,300,000	1,360
Gameleira Stream	14,300,000	8
Seco Creek	14,300,000	6
Paranaguá Bay	1	n/a

NOTE: The size of the basin for Brazil facilities is associated with the river basin that the water body is part of.

In the Phosphates business, no outfalls discharge directly into a designated protected area, although discharges occur in three riverine basins upstream of Outstanding Florida Waters (i.e. segments of Little Manatee River, Hillsborough River and Myakka River) and Florida Wild and Scenic Rivers (segment of Myakka River). As an overarching principle, water that falls within the active, operational footprint of Mosaic's phosphate mining and fertilizer production facilities is actively managed, used in our operations, treated if necessary and discharged through NPDES outfalls pursuant to water quality standards stipulated by permits. Discharges are monitored, sampled and analyzed regularly by Mosaic, with reports provided to regulatory agencies to demonstrate ongoing compliance with permit limitations.

For our Canadian Potash business, in certain high precipitation events, off-site discharges of freshwater surface runoff are warranted and are approved in advance by the Saskatchewan Ministry of Environment and the Saskatchewan Water Security Agency. There were no such instances in 2020. Please see **MM3** for a discussion of our Potash segment's brine disposal methods.

None of our Brazil facilities discharge directly into designated protected areas. Effluents are regularly monitored, sampled, and analyzed by Mosaic, and reports are regularly provided to governmental environmental agencies in accordance with applicable requirements.

Category: Environment

306-2 Total weight of waste by type and disposal method

306-4 Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention, and percentage of transported wastes shipped internationally

2020 WASTE GENERATED BY DISPOSAL METHOD (TONNES)

	INCINERATION	LANDFILL	RECYCLE	TREATMENT	OTHER	TOTAL
Potash	39	1,925	5,619	884	25	8,491
Hazardous	39	185	224	884	25	1,356
Non-hazardous	-	1,740	5,395	-	-	7,135
Phosphates	333	12,080	4,090	1,248	-	17,750
Hazardous	171	955	-	912	-	2,037
Non-hazardous	162	11,125	4,090	336	-	15,713
Mosaic Fertilizantes	27	7,602	7,535	-	1,203	16,367
Hazardous	20	966	638	-	831	2,455
Non-hazardous	7	6,636	6,897	-	373	13,912
Total Hazardous	230	2,106	862	1,795	856	5,848
Total Non-hazardous	169	19,500	16,382	336	373	36,760
Total	399	21,607	17,244	2,131	1,228	42,608

NOTE: "Other" disposal method includes combinations of co-processing, retort, treatment, incineration and/or deep well injection. Subtotals may not always add up to totals due to rounding. Our tracking of wastes across our business continues to improve. Legacy Brazil facilities previously reported under International Distribution segment are now reported under Mosaic Fertilizantes segment.

No hazardous wastes were shipped internationally.

Category: Environment

MM3 Overburden, rock, tailings and sludge

MINING AND MINERAL PROCESSING SOLID WASTE GENERATED AND DISPOSAL METHOD (TONNES)

PHOSPHATES

MATERIAL	2016	2017	2018	2019	2020	DISPOSAL METHOD
Overburden	142,792,323	126,608,107	120,461,664	113,826,257	85,369,264	Used for reclamation
Sand Tailings	41,395,971	39,221,004	37,790,316	36,994,175	33,368,070	Used for reclamation
Clay	19,289,693	18,416,751	15,573,299	14,628,902	15,493,615	Stored in surface impoundments and used for reclamation
Phosphogypsum	22,864,328	23,181,038	21,150,286	20,273,770	20,600,284	Managed in permitted phosphogypsum stack systems

POTASH

MATERIAL	2016	2017	2018	2019	2020	DISPOSAL METHOD
Tailings (Salt)	9,987,260	12,961,397	13,522,972	12,734,513	10,557,129	Stored or recycled for commercial use
Brine	4,992,673	13,858,720	13,547,629	12,176,515	13,977,675	Deep well injection or evaporation

MOSAIC FERTILIZANTES

MATERIAL	2016	2017	2018	2019	2020	DISPOSAL METHOD
Waste rock (sterile)	—	—	63,768,400	53,039,223	57,377,108	Stored and used for reclamation
Sand Tailings	—	—	19,169,629	13,012,380	15,414,844	Stored in tailings dams
Phosphogypsum	—	—	5,372,140	4,630,659	4,450,823	Managed in permitted phosphogypsum stack systems or used in coproduct applications
Brine	—	—	4,172,975	5,529,700	6,438,067	Evaporated or discharged

NOTES: Due to the composition of mineral deposits in Brazil, our Mosaic Fertilizantes operations handle various mining and production wastes we have not historically reported here. Please review our [2020 Environment Metrics Supplement](#) for more information.

In 2018, our Potash segment standardized the calculation methodology for brine, which explains the variance between the 2016 and 2017 reported brine values. There was no change to the operations process and the brine volumes were accurately reported.

Category: Environment

306-3 Number and volume of significant spills

In 2020 we had a total of six releases equal to or greater than 2,000 gallons.

ENVIRONMENTAL RELEASES > 2,000 GALLONS

BUSINESS SEGMENT	2016	2017	2018	2019	2020
Phosphates	8	5	1	3	3
Potash	8	2	0	0	0
Mosaic Fertilizantes	-	-	-	3	3

Note: Table includes environmental releases equal to or greater than 2,000 gallons equivalent. Environmental releases meeting these criteria in 2020 included: Phosphates — three (one release of process water to soil; one release of gypsum slurry to soil; and one release of sulfuric acid cleaning solution to soil); and Mosaic Fertilizantes — three (one release of gypsum slurry to water; one release of limestone treatment water to water; and one release of stormwater to water.)

307-1 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations

Companywide, we had 15 events of alleged non-compliance with environmental permits or regulations that resulted in enforcement actions in 2020, representing fines in the amount of approximately \$600,000. Of those, two were events related to water quality permits.

In 2020 10-K and 10-Qs, Mosaic reports any environmental enforcement action that it has identified as potentially material to investors, or if not potentially material, as potentially meeting or exceeding a significance threshold of \$100,000. In 2020, there were two such enforcement actions, both in Brazil, involving fines for delayed reporting to a regulatory agency.

Management Approach: Supplier Environmental Assessment

308-2 Significant actual and potential environmental impacts in the supply chain and action taken

Through a collaboration with a third party, we determined that the environmental impacts associated with our supply chain are primarily associated with the purchase of manufactured ammonia — specifically, the greenhouse gas emissions associated with producing this material. We report those emissions in **305-3**. In 2020 we issued a target to engage suppliers and service providers, representing 80% of Mosaic's total North American procurement and supply chain expenditures, to assess their commitment to and performance in key ESG areas such as environment, diversity and human rights. We will continue to engage with suppliers to evaluate and report their performance, while identifying opportunities to mitigate and reduce their individual company and broader industry's environmental impacts.

Another potential impact relates to downstream use of crop nutrient products which, if used improperly, can run into waterways and contribute to impaired water quality and can also nourish algal blooms. Mosaic supports and promotes the 4R Nutrient Stewardship framework to achieve the agricultural benefits of fertilizer and reduce nutrient loss to the environment. Since 2004, Mosaic has invested over \$25 million with more than 150 organizations on water-related initiatives, including nutrient stewardship. In 2020, we issued a target to empower farmers in key growing areas in North America to reduce the impact of crop nutrient products on the environment by facilitating the implementation of 4R Nutrient Stewardship on 25 million acres by 2025.

Category: Social

Management Approach: Employment, Labor/Management Relations, Diversity and Equal Opportunity

At Mosaic, the strength of our business relies on the commitment of an exceptional global team of employees. Whether working in our mines, distribution facilities or offices, our more than 12,200 employees are part of a global Mosaic team that is richly diverse in skills, experiences and backgrounds. Together, we are responsible, innovative, collaborative and driven.

Mosaic aims to be the employer of choice for a diverse and inclusive workforce. Our global talent investment philosophy is to provide competitive compensation and benefits, with flexibility to choose programs that best meet our employees' needs. Mosaic offers health, welfare and retirement benefits to all full-time employees and eligible dependents.

Mosaic offers competitive compensation and benefits in each of the company's significant locations of operation. Within each of the countries in which Mosaic operates, benefits provided or offered to our full-time employees may differ for various reasons, including:

- State or country mandated benefit laws that apply to Mosaic employees in a specific geography
- Labor agreements between Mosaic and labor organizations acting on behalf of represented employees
- Market-specific benefit programs or practices that exist within an area that Mosaic competes for labor
- The impact to employees of local or national tax laws regarding the treatment of company-sponsored benefits

Mosaic values collective bargaining as an important form of collaborative employee engagement. In addition, Mosaic is sensitive to the needs of its employees, and much consideration is placed on applicable notice periods for any such changes that may impact employees.

Mosaic's **Equal Employment Opportunity and Nondiscrimination Policy** provides equal employment opportunities to all Mosaic applicants and employees and other qualified persons without regard to race, religion, color, gender, national origin, age, disability, marital status, citizenship status, military or veteran status, sexual orientation, gender identity, genetic information, or any other legally protected status under applicable laws in countries where Mosaic employees work. The policy also provides that Mosaic is committed to maintaining a work environment free of discrimination. Mosaic's commitment applies to all terms and conditions of employment, including: recruiting and hiring, training and promotion, compensation and benefits, performance assessments, transfers, terminations, layoffs or recall from layoff, leaves of absence, and company-sponsored training and education.

Retaliation or reprisal toward an employee who has exercised their rights under this policy is strictly prohibited. Mosaic's **Code of Business Conduct and Ethics** reinforces this policy.

Our **Commitment to Inclusion** reinforces that Mosaic is focused on building a representative workforce that embraces the opportunities that diversity brings to the workplace.

Mosaic supports and participates in a variety of formal and informal channels through which employees can submit concerns or grievances, including an EthicsPoint hotline, engagement surveys, mediation, arbitration, and/ or through other formal administrative tribunals such as the National Labor Relations Board and Equal Employment Opportunity Commission. Our collective bargaining agreements contain procedures for resolving grievances over the application or interpretation of such agreements, and Mosaic resolves labor grievances in accordance with the procedures outlined in those respective agreements. Please see our Human Capital disclosures in our **2020 10-K** (pg. 26) for more information.

Category: Social

401-1 Total number and rates of new employee hires and employee turnover by age group, gender and region

EMPLOYEES BY AGE GROUP, GENDER AND REGION

COUNTRY	<30		30-50		>50		TOTAL	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Australia	0	0	0	0	0	1	0	1
Brazil	215	761	570	3,741	24	605	809	5,107
Canada	46	139	176	1,052	51	419	273	1,610
China	5	4	42	93	2	9	49	106
India	0	5	8	51	0	2	8	58
Paraguay	4	13	8	27	0	2	12	42
USA	54	314	328	1,506	209	1,398	591	3,218
Subtotal	324	1,236	1,132	6,470	286	2,436	1,742	10,142
Total	1,560		7,602		2,722		11,884	

NOTE: Excludes long-term leaves, co-ops, seasonal and temporary employees.
Employees considered to be on long-term leave are those away from work for more than 180 days.

NEW HIRES BY AGE GROUP, GENDER AND REGION

COUNTRY	<30		30-50		>50		TOTAL	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Australia	0	0	0	0	0	0	0	0
Brazil	83	170	78	258	1	8	162	436
Canada	9	13	3	19	0	4	12	36
China	0	0	1	1	0	0	1	1
India	0	2	0	5	0	0	0	7
Paraguay	1	4	2	7	0	0	3	11
USA	16	69	33	104	5	23	54	196
Subtotal	109	258	117	394	6	35	232	687
Total	367		511		41		919	

NOTE: Excludes long-term leaves, co-ops, seasonal and temporary employees.
Employees considered to be on long-term leave are those away from work for more than 180 days.

EMPLOYEE TURNOVER BY AGE GROUP, GENDER AND REGION

COUNTRY	<30		30-50		>50		TOTAL	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
Australia	0	0	0	0	0	0	0	0
Brazil	20	142	60	324	8	75	88	541
Canada	6	19	25	148	9	106	40	273
China	0	0	2	2	0	0	2	2
India	0	0	0	4	0	0	0	4
Paraguay	1	5	0	11	0	2	1	18
USA	7	32	30	130	36	132	73	294
Subtotal	34	198	117	619	53	315	204	1,132
Total	232		736		368		1,336	

NOTE: Excludes long-term leaves, co-ops, seasonal and temporary employees. Turnover totaled 11% in 2020.

Category: Social

401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation

Mosaic provides competitive compensation and bonus opportunities for jobs in all disciplines and geographic markets based on company and individual performance. Additionally, Mosaic contributes toward retirement income benefits, which may include defined-benefit pension plans, defined-contribution plans or other supplemental retirement plans across our locations and countries. The majority of administrative, insurance and other costs associated with Mosaic-sponsored health and welfare plans is borne by us. Participation in the retirement plans is automatic in the United States and Canada. The defined-contribution plan is open to all, but it is not mandatory to participate.

EMPLOYEE BENEFITS (● = YES)						
TYPE OF BENEFIT	UNITED STATES	CANADA	BRAZIL	PARAGUAY	INDIA	CHINA
Health Care	●	●	●	●	●	●
Life Insurance	●	●	●	●	●	●
AD&D Insurance	●	●			●	●
Disability Coverage	●	●	●	●	●	●
Employee Assistance Program	●	●	●	●		●
Defined-benefit Pension Plan	●	●	●		●	
Defined-contribution Savings Plan	●	●	●		●	
Annual Profit Sharing	●	●	●	●	●	●
Maternity Leave	●	●	●	●	●	●
Paternity Leave	●	●	●	●	●	●
Family Leave	●	●				
Sickness Leave	●	●	●	●	●	●
Deferred Bonus and Deferred Pay	●		●			
Long-term Incentives	●	●	●	●	●	●
Stock Ownership	●				●	
Relocation Assistance	●	●	●	●	●	●
Flex Time Program	●	●	●			●
Formal Wellness Programs	●	●	●			●
Tuition Assistance/Education	●	●	●	●	●	●
Telecommute Program					●	●

*In most countries maternity and paternity leave are offered in accordance with applicable law. Mosaic provides additional paternity leave in India; additional maternity leave in Brazil; and additional parental leave (maternity and paternity) in the United States which exceeds compliance benefits.

**Formal Wellness Program includes benefits such as biometric screenings and on-site fitness facilities. Individual wellness benefits vary by country.

Category: Social

401-3 Parental Leave

PARENTAL LEAVE							
		EMPLOYEES ENTITLED TO PARENTAL LEAVE (2020)	EMPLOYEES WHO TOOK PARENTAL LEAVE (2020)	EMPLOYEES WHO RETURNED TO WORK (2020)	EMPLOYEES STILL EMPLOYED 12 MONTHS AFTER RETURN (2019-2020)	RETURN TO WORK RATE	RETENTION RATE
Male		7,363	86	92	64		
	USA	1,461	39	40	40	100%	91%
	Canada	634	34	34	8	95%	100%
	Brazil	5,104	12	12	11	100%	92%
	India	58	4	4	4	100%	100%
	China	106	1	2	1	100%	100%
Female		1,534	68	50	37		
	USA	489	18	17	10	89%	73%
	Canada	178	13	6	9	83%	100%
	Brazil	809	32	26	15	72%	60%
	India	8	2	1	1	100%	100%
	China	50	3	0	2	100%	100%
Total		8,897	154	142	101	100%	100%

NOTE: Per the definitions for this disclosure as laid out in the GRI Employment Standard, return to work rate is calculated as the total number of employees that returned to work after parental leave divided by the number employees due to return to work after taking parental leave. Retention rate is calculated as the number of employees retained 12 months after returning to work following a leave of parental leave divided by the total number of employees returning from parental leave in the prior reporting period(s).

402-1 Minimum notice periods regarding operational changes, including whether these are specified in collective agreements

In the United States, we adhere to or exceed the minimum notice requirements set by federal and state Worker Adjustment and Retraining Notification Act (WARN) laws. Additionally, in the U.S. some of Mosaic's labor agreements contain provisions of advance notice periods with respect to significant operational changes that impact employees. In most locations the exact notice requirement varies depending on circumstances surrounding the changes. In Canada, Mosaic adheres to or exceeds the minimum notice requirements set by provincial employment standards laws. In China, Mosaic adheres to or exceeds the 30-day notice requirements set by Article 41 of the Employment Contract Law (ECL). In Brazil, Mosaic adheres to the minimum 30-day notice requirement for dismissals without cause required by Brazilian Labor Law. In the other regions where we operate, Mosaic meets and usually exceeds the minimum notice required, which varies by local legislation and collective bargaining agreements.

Category: Social

MM4 Number of strikes and lock-outs exceeding one week's duration, by country

There were no strikes or lock-outs at Mosaic facilities in 2020.

405-1 Diversity of governance bodies and employees

WORKFORCE BY AGE AND GENDER

AGE GROUP	FEMALE		MALE		TOTAL	
	COUNT	PERCENTAGE	COUNT	PERCENTAGE	SUBTOTAL	PERCENTAGE
<30	324	2.7%	1,236	10.4%	1,560	13.1%
30-50	1,132	9.5%	6,470	54.4%	7,602	64.0%
>50	286	2.4%	2,436	20.5%	2,722	22.9%
Total	1,742	14.7%	10,142	85.3%	11,844	100%

NOTE: Excludes long-term leaves, coops, seasonal and temporary workers. 15% of Mosaic's total workforce is female and 17% of the management workforce is female. Approximately 25% of the United States management workforce is considered a member of a minority group; 28% of the total U.S. workforce is considered a member of a minority group. "Minority group" in the United States is defined as non-white ethnicity of any gender.

BOARD OF DIRECTORS BY AGE AND GENDER

AGE GROUP	FEMALE		MALE		TOTAL	
	COUNT	PERCENTAGE	COUNT	PERCENTAGE	SUBTOTAL	PERCENTAGE
30-50	0	0%	1	8%	1	8%
>50	3	25%	8	67%	11	92%
Total	3	25%	9	0.75%	12	100%

NOTE: Table represents age and gender information for Mosaic's 2020 Board of Directors. For more information please review our [2020 Proxy Statement](#).

In 2020 we established a companywide diversity and inclusion task force, which is addressing the company's objectives across three pillars: Drive Diversity Recruitment and Build Diverse Talent Pipeline; Build and Promote an Inclusive Culture; and Build Mosaic's Brand and Enhance External Partnerships.

405-2 Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation

We are committed to providing the environment, development opportunities and compensation to ensure that Mosaic is a company where employees are proud to work and grow.

We are an equal opportunity employer, and our recruiting practices focus on matching the best possible candidate to the position. Mosaic uses salary ranges that are competitive with market pay ranges for positions of comparable responsibility, functional knowledge, impact and other compensable factors. Gender is not a factor when determining compensation. Each salary range has a minimum or threshold salary for a new hire, although Mosaic typically sets the actual salary above this minimum.

Pay equity is fundamental to our compensation philosophy and our commitment to diversity and inclusion. Mosaic regularly evaluates pay equity and compensation practices to ensure fair and equitable treatment of employees based on our pay-for-performance framework. In 2020, Mosaic retained an independent consultant to assist with our pay equity analysis on the basis of both gender and ethnicity across our global operations. The results revealed fewer than .05% outliers without adequate business justifications. Mosaic addressed each of the instances during our 2021 compensation cycle.

Category: Social

Management Approach: Occupational Health and Safety

We are dedicated to providing a safe, healthy and respectful work environment for an engaged, inclusive workforce. Mosaic's Environmental Health and Safety Management System, aligned to ISO 14001, OHSAS 18001 and ANSI-Z10, integrates internationally regarded best management practices into our operations while affirming our ongoing safe and environmentally responsible performance. We strive to continually improve Mosaic's management system through efforts such as annual self-assessments, which are reviewed by a combined internal and external consultant audit team.

Mosaic's safety management system is designed to identify, evaluate and control risks. This proactive approach allows us to understand the risks, take action and prevent incidents from occurring in the first place. We have targets for risk reduction controls at all facilities which continues the drive toward zero injuries and incidents. Incident management is one of ten elements of the management system and focuses on thorough incident investigation resulting in corrective and preventative actions. Mosaic's best practice is to communicate incident investigation findings to ensure lessons learned are shared throughout the company.

Though rare, emergencies can occur in our business, and the ability to respond promptly and effectively is critical. Mosaic's overarching approach to crisis management includes risk anticipation and mitigation, site-specific emergency response plans, and routine crisis simulation drills involving Mosaic employees from various functions and emergency response professionals from the communities where we operate. Our internal crisis management intranet site outlines response plan specifics, including roles, procedures, guidelines and protocols for handling crises and communicating with stakeholders.

Ultimately, our goal is zero harm to people and the environment. Globally, all Mosaic employees, service providers and contractors are held to the same high standards outlined in our [Code of Business Conduct and Ethics](#).

403-1 Occupational health and safety management system

403-8 Workers covered by an occupational health and safety system

Mosaic's management system, aligned to ISO 14001, OHSAS 18001 and ANSI-Z10, applies to all workers in North and South America. Exceptions include our joint venture in Peru (2,063 workers), and employees in China (224 workers) and India (84 workers).

Our concentrates and ammonia distribution sites implemented the process safety management (PSM) and risk management program standard for identified processes to address compliance with OSHA 29 CFR 1910.119 and EPA 0 CFR 68 as part of our management system. The purpose of this standard is to have uniform, compliant and sustainable process safety and risk management plans and processes integrated into plant operations. This will help prevent accidental releases of substances that can result in harm to employees, the public or the environment and to mitigate the severity of releases that do occur. While not a regulatory requirement, some of our Mosaic Fertilizantes sites in Brazil are also implementing these standards. Audits and assessments are key components of a successful management system and regulatory compliance within Mosaic. Audits are regulatory- and risk-driven and are a combination of voluntary internal audits (completed by Mosaic and a third party) and required regulatory audits (completed by third-party auditors and Mosaic). Assessments check the health of Mosaic's management system and are completed at each facility by both Mosaic employees and third-party assessors.

Compliance audits are completed annually at our North and South American facilities by teams of Mosaic and third-party auditors to ensure that we are adhering to all internal standards and external regulatory requirements. Topics reviewed are determined through a risk-based approach and management review process. Corrective actions are tracked based on findings and reviewed by management and senior leadership.

Category: Social

403-2 Hazard identification, risk assessment and incident investigation

Mosaic uses an integrated information management system to track EHS incidents, associated corrective actions and risk management claims. To help with data quality and adherence to Mosaic standards and best practices, we have automated reporting that provides our sites with a consolidated view of incidents and corrective action compliance.

Incidents are entered primarily by supervisors and area managers rather than frontline workers to validate data quality and to promote ownership of incidents that occur within respective areas of responsibility. Many types of EHS incidents are managed within this approach: employee injury, near misses, property damage, environmental releases, government inspections, and permit exceptions or exceedances. Contractor incidents that occur on Mosaic property are tracked in the same manner as internal Mosaic incidents. A corporate EHS team manages the flow of information about key incidents by compiling and distributing a weekly EHS report to the site's operations management team, EHS management team and senior leadership team.

Further, Mosaic uses a Risk Register tool to identify and score various EHS risks, as well as document existing operational controls. Each facility has a Risk Register, whose purpose is to identify environmental and safety hazards, quantify baseline, inherent and residual risk scores, and collaborate with the workforce to implement operational controls to reduce or eliminate these hazards. Risk scores are calculated for each identified risk and take into consideration the severity of consequences expected, and the likelihood of exposure and any controls that have been implemented to reduce or eliminate the risk. This is a dynamic process where risks are reviewed whenever new controls are implemented or found to be not effective or new risks are identified.

Over two-thirds of our employees are on the front lines—making crop nutrient products, completing high-risk work and monitoring production processes. Beyond honing a culture that is relentlessly focused on safety, we have formal mechanisms in place that empower employees to stop a job to discuss and evaluate safety and environmental risks and assess and implement mitigations. Mosaic's **Code of Business Conduct and Ethics** encourages employees to speak up if they have a concern about workplace health or safety, and a Non-Retaliation policy prohibits retaliation against an employee for raising a concern.

403-3 Occupational health services

403-4 Worker participation, consultation and communication on occupational health and safety

From front-line workers to leaders, Mosaic employees at all levels contribute to the development, implementation and evaluation of our companywide management system. For each of the ten elements of Mosaic's management systems, we regularly engage employees on the identification, prevention, communication and control of risks. Relevant communication about safety is conveyed to workers through many methods, such as daily shift-start and safety committee meetings, videos, messages from leadership, required training, pre-job risk assessments, newsletters and engagement surveys. An "open door" policy fosters a pervasive safety culture where daily communication about safety happens up and down the organizational structure.

Mosaic has safety committees at most of our global operations, representing more than 95% of employees. All Mosaic facilities located in Brazil, the United States and Canada have formal joint safety committees that meet on defined intervals, either monthly or quarterly. These committees maintain a registry of findings, actions and resolutions to provide routine updates to site teams detailing their progress. The role of these committees, which are composed of employees from all levels, is to promote safety awareness and reinforce a working environment that promotes connectivity, teamwork and productivity among employees while supporting Mosaic's pursuit of an incident- and injury-free workplace.

One hundred percent of our union contracts in the United States, Canada and Brazil cover health and safety topics. Please see **102-41** for more information on the number of employees covered by collective bargaining agreements. Topics covered include supply of personal safety equipment, medical examinations, incident reporting and investigation, rights to refuse unsafe work and health and safety committees.

Category: Social

403-5 Worker training on occupational health and safety

“Training and competency” is one of the ten elements of Mosaic’s EHS management system. Beyond training workers to do their work effectively, employees and contractors are also trained to minimize safety issues and to be vocal about hazards.

Training needs are assessed on many factors, including local regulatory requirements; job-specific needs; employee category; and region of work. Training is designed utilizing established instructional design principles for adult learning including Bloom’s Taxonomy and Gardner’s Theory of Multiple Intelligences. The competency of Mosaic’s trainers is supported through focused training, ongoing paid professional development, and participation of our trainers in relevant professional organizations. Effectiveness of Mosaic’s training programs is regularly evaluated alongside the other elements of Mosaic’s management system through program level and focused audits and self-assessments.

Employees are required to participate in annual training across a range of EHS topics. Training is paid and typically hosted during working hours. In 2020, employees participated in approximately 270,000 hours of EHS training enterprise-wide on topics such as emergency action; environmental compliance; first aid and CPR; general safety; incident reporting and auditing; industrial hygiene; occupational health and safety (OSHA) requirements; and security and transportation/safety handling. Please see [404-1](#) for more information.

403-6 Promotion of worker health

We have observed through incident investigations that psychological and physical health can contribute to incidents at work. Accordingly, worker wellness is a component of Mosaic’s management system, and we have programs that address three elements of wellness for our nearly 12,000 employees: physical, psychological and financial. Mosaic’s Worker Wellness program is based off Total Worker Health® (TWH), championed by the Centers for Disease Control and Prevention (CDC) and the National Institute for Occupational Safety and Health (NIOSH).

Mosaic provides health benefits that include insurance plans, retirement savings plans, tobacco cessation programs, wellness incentive programs and flexible work schedules; leave benefits; and site-specific wellness programs, such as on-site gyms, fitness memberships and walking paths. We also offer a companywide Employee Assistance Program (EAP) that is confidential and addresses a variety of concerns, both personal and work-related. Discussion may occur by speaking with an EAP counselor over the phone, having a face-to-face meeting with an EAP counselor or through a referral to a mental health professional in the employee’s local area. This benefit is offered as an additional resource for wellness. See [401-2](#) for more information.

Further, we are building on our psychological wellness efforts by expanding training and awareness-building among the North America and Brazil workforces. The training builds awareness about the existence of psychological health conditions like depression and anxiety and what it may look or feel like to be unwell. Moving forward, the program will address other wellness elements that contribute to overall health such as nutrition, sleep and self-care.

403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

The safety of contractors and service providers is a priority. We select, screen and audit contractors using the ISNetwork Rating — a global system in which contractors and suppliers report their safety performance and conformance to regulatory and internal health, safety and procurement requirements. We use the ISN Site Tracker Tool to further drive contractor safety improvements, improve accountability and accurately track safety performance.

Category: Social

403-9 Work-related injuries

2020 WORK-RELATED INJURIES

	FATALITIES		HIGH-CONSEQUENCE INJURIES ¹		RECORDABLE INJURIES		TOTAL RECORDABLE INCIDENCE FREQUENCY (TRIF) ²		MAIN TYPES OF INJURIES ³	NUMBER OF HOURS WORKED
	#	RATE	#	RATE	#	RATE	#	RATE		
Employee	0	0	1	0.1	53	0.40	97	0.73	Hand/finger cuts and fractures	26,396,062
Contractor	0	0	0	0	51	0.27	64	0.33	Hand/finger cuts and fractures	38,312,349

Note: Figures have been calculated based on 200,000 hours worked and include all employees and contractors. The numbers do not reflect any worker exclusions. ¹One of these injuries resulted in a permanent disabling injury. ²Though not a global safety metric for Mosaic, we are providing MSHA all-incidence rate to satisfy a request from the SASB Metals & Mining Sustainability Accounting Standard. As reported here, TRIFR differs slightly from MSHA all-incidence rate in that it includes the prescribing of medication for ailments. The MSHA all-incidence rate excludes incidents involving the prescription of medication except when it is related to an eye injury. In 2020, there were two such incidents of prescription of medication, both related to Covid-19, that met the definition to be included in TRIFR but not MSHA all-incidence rate. ³Hand and finger cuts and fractures represented approximately 43 % of total injuries for employees and contractors.

The work-related hazards that pose a risk of high-consequence injury primarily include falling objects (secured and unsecured) and mobile equipment. This conclusion is based on frequency of the occurrence of those events. These risks have been identified on Mosaic's Risk Register, a tool used to identify and score various EHS risks and document existing operational controls. Please see [403-2](#) for more information about the Risk Register.

In 2020, the risks that caused or contributed to high-consequence injuries during the reporting period were incidents involving workers around machinery. As the details around these particular incidents are privileged and confidential, there are no investigation details to share in this report. However, controls deployed to reduce or eliminate such risks include: engineering controls such as equipment and devices, or administrative controls, such as procedures and training.

Category: Social

403-10 Work-related ill health

2020 WORK-RELATED ILL HEALTH

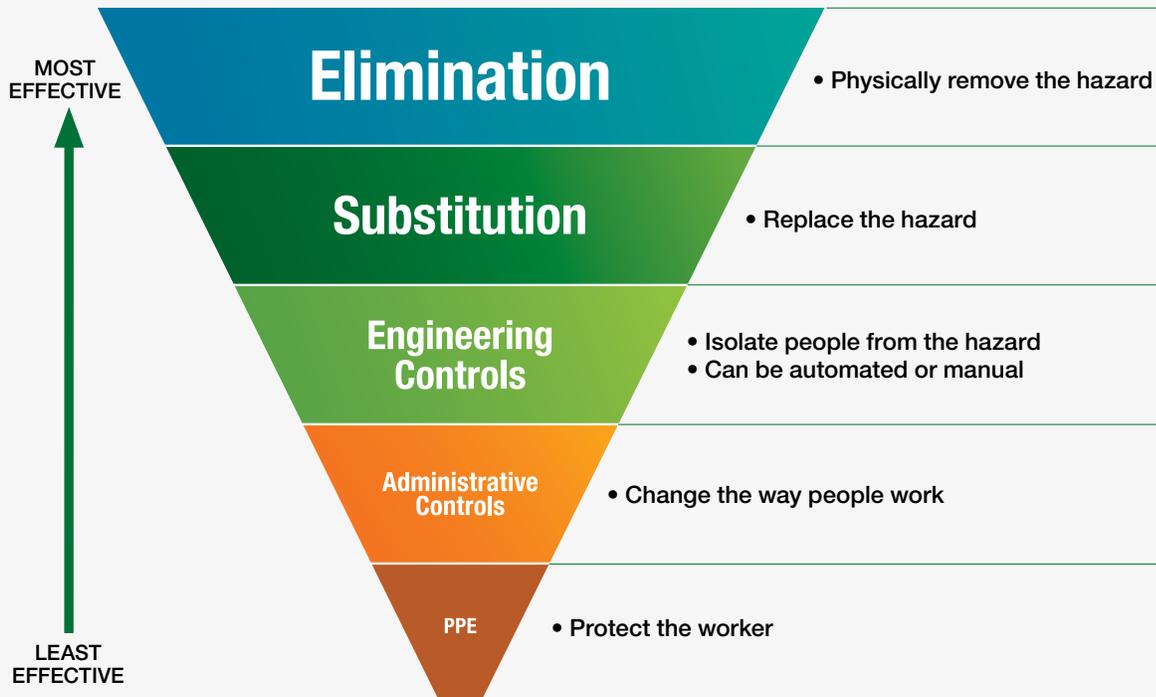
	FATALITIES		RECORDABLE ILL HEALTH CASES ¹		MAIN TYPES OF ILL HEALTH
	#	RATE	#	RATE	
Employee	0	0	44	0.33	Covid-19 Heat Stress Cumulative Injury
Contractor	0	0	13	0.07	Covid-19 Chemical Exposure

Note: Figures have been calculated based on 200,000 hours worked and include all employees and contractors. The numbers do not reflect any worker exclusions.¹For workers and contractors respectively, approximately 70% and 90% of ill-health cases were due to work-related exposure to Covid-19. Some cases of Covid-19 in contractors may not have been captured due to difficulty in making determinations of work-relatedness and variations in individual case reporting and tracking processes.

The work-related hazards that pose a risk of high-consequence ill health primarily include chemical exposure and repetitive stress. Like with the work-related injuries reported above, these risks have been identified on Mosaic's Risk Register. Mosaic's approach to risk mitigation is proactive, thus identifying and controlling risks before an incident or illness occurs. Please see [403-2](#) for more information about the Risk Register.

In 2020, the risks that caused or contributed to cases of ill health during the reporting period were primarily exposure to Covid-19 in the workplace and work in high temperatures.

OSHA recordable illnesses require investigations, but there are some exceptions for certain illnesses. When an investigation is completed, it follows the hierarchy of controls illustrated below. Generally, control methods at the top of the graphic are more effective and protective at managing risk than those at the bottom.



Category: Social

Management Approach: Training and Education

We are committed to providing the environment, development opportunities and compensation to ensure that Mosaic is a company where employees are proud to work and grow.

Mosaic employees are encouraged to continually learn and improve their skills. With management support, we offer a companywide educational reimbursement program to help employees in each of our operating countries better meet their current job responsibilities, as well as prepare for future career opportunities within our company. Our internal training opportunities also support the continuous development of Mosaic employees at all levels:

- Leadership
- Professional and career development
- Environmental, health and safety (EHS) training
- Equipment and maintenance training
- Continuous improvement

404-1 Average hours of training per employee by gender and employee category

TRAINING AND EDUCATION 2020 (TRAINING HOURS BY EMPLOYEE GROUP)

COURSE TITLE	HOURLY	SUPPORT	PROFESSIONAL	LEADERSHIP	STRATEGIC	SENIOR	TOTAL	AVERAGE HOURS FEMALE	AVERAGE HOURS MALE
EHS Training	193,734	11,126	45,175	16,620	866	28	267,548	1.01	1.12
Leadership Professional Development	13,339	7,527	20,168	9,594	788	101	51,517	1.39	0.92
Legal Compliance Training	3,072	755	2,888	1,204	162	3	8,085	0.58	0.48
Operations & Maintenance Training	58,440	1,231	12,779	4,155	89	0	76,694	2.35	2.68
Other Topics	6,176	1,916	7,203	8,854	540	0	18,688	4.23	3.14
Total Growing U	274,760	22,555	88,213	34,427	2,445	132	422,532	1.28	1.23
Total Other							19,598		
Grand Total							442,130		
Hours per Employee							37		

NOTE: "Total other" includes hours associated with training opportunities that are not currently housed in our companywide system. Those hours include: 2,280 hours of apprenticeship training; 1,016 hours of training for India employees across a variety of topics; and 16,302 hours for employees in Brazil. Because of restrictions due to the Covid-19 pandemic, we paused or rescheduled some of our apprenticeship and training programs to focus on the safety and essential work of our employees. Therefore, training hours per employee were lower in 2020 than in 2019.

Category: Social

404-2 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

We offer core leadership programs designed to engage and empower employees; develop leadership skills and assist with managing teams; and drive strong business results. Mosaic offers training courses to developing leaders that are mapped to Mosaic's ten leadership model competencies. In 2020, more than 200 leaders participated in the Mosaic core leadership programs for first-line, mid-level and senior leaders. We also continued the success of our enterprise high potential Accelerated Development Program. As it relates to career transitions, Mosaic provides employees with helpful planning tools, calculators, articles, videos and webcasts, in addition to optional services provided by our third-party vendors to help plan for retirement. When a reduction in our workforce occurs, we provide comprehensive career transition services to employees to help ease the stress that accompanies job loss. In 2020, Mosaic provided employees with over 700 events of third-party coaching, webinars and training to help manage career transitions.

404-3 Percentage of employees receiving regular performance and career development reviews, by gender and employee category

As part of our strategic priority to develop, engage and empower our people, we have a performance management process called EDGE: Evaluating, Developing and Growing Excellence. Our performance management process has evolved to include scaled competencies, goal alignment, and an emphasis on employee and career development. In addition, we offer tuition reimbursement programs to support continued education for Mosaic employees. In 2020, approximately 400 employees received financial assistance to continue their education through Mosaic's tuition reimbursement program.

EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS BY GENDER 2020

	FEMALE	MALE	TOTAL
Performance Reviews Given	1,141	2,619	3,760
Performance Reviews Received	93%	95%	94%

NOTE: Represents percent of reviews conducted for eligible employees.

Category: Social

Management Approach: Non-discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor and Rights of Indigenous Peoples

As a signatory to the United Nations Global Compact, The Mosaic Company is committed to the protection and advancement of human rights. Mosaic's **Code of Business Conduct and Ethics** and **Supplier Code of Conduct** form the basis of our **Commitment to Human Rights**.

406-1 Total number of incidents of discrimination and corrective actions taken

In 2020 there were six incidents involving complaints of discrimination that were filed with external agencies.

- In Brazil and Paraguay, there were five individual labor claims filed in 2020 by employees claiming indemnification or reintegration due to discrimination.
- In Canada, there was one complaint of discrimination filed with the Saskatchewan Human Rights Commission. The complaint was subsequently withdrawn.
- In the United States, there were no charges filed with the United States Equal Opportunity Commission (EEOC).

In 2020 there were 11 internal reports of discrimination.

- In Brazil, there were a total of two internal reports of discrimination/harassment that were substantiated in part. Both cases were determined to involve inappropriate behavior that did not rise to the level of discrimination or harassment and resulted in counseling.
- In Canada, there were four internal reports of discrimination/harassment that were substantiated. In three cases, the allegations, each involving discrimination, retaliation or sexual harassment, were unsubstantiated and we administered training to involved parties. The cases are closed and no longer subject to action. The other case, involving an anonymous note, was found to be substantiated but the harasser was not identified. All site employees were given additional coaching on Mosaic's anti-harassment policy.
- In the United States, there were two internal reports of discrimination/harassment that were substantiated. In both instances, discipline was issued and the cases are closed and no longer subject to action. There were three internal reports of discrimination that were substantiated in part and that were determined to involve inappropriate behavior that did not rise to the level of discrimination or harassment and resulted in counseling and training for the individuals involved. All three incidents are closed and no longer subject to action.

407-1 Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights

Mosaic does not have any operations in which the right to exercise freedom of association and collaborative bargaining are identified as a significant risk. Mosaic does not discriminate based on association, per our Commitment to Human Rights, which is guided by the Universal Declaration of Human Rights (UDHR), the most widely recognized definition of human rights and the responsibilities of national governments; the International Labour Organization (ILO) Declarations on Fundamental Principles and Rights at Work; and the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises. Per our Commitment to Human Rights, Mosaic aims to strengthen and enforce human rights in our policies and operations globally, including in our supply chain.

Category: Social

408-1 Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor

409-1 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor

Mosaic does not have any operations that are identified as a significant risk for child labor or forced or compulsory labor practices. Mosaic abides by all applicable child labor laws, as well as our global hiring and employment policies. In the United States and Canada, we do not employ anyone under the age of 18. In Brazil, we do not hire anyone under the age of 18; however, we participate in an apprenticeship program that is governed by Brazilian law, which occasionally employs apprentices who are under 18. We do not tolerate forced or compulsory labor. Mosaic complies with all statutory requirements in the locations where we operate, as well as our own employment policies, including our Commitment to Human Rights, which is guided by the UDHR, the most widely recognized definition of human rights and the responsibilities of national governments; the ILO Declaration on Fundamental Principles and Rights at Work; and the OECD Guidelines for Multinational Enterprises. Per our Commitment to Human Rights, Mosaic expects all of our business partners to comply with labor and employment laws in the countries where we operate, including laws pertaining to child labor and forced labor.

411-1 Total number of incidents of violations involving rights of Indigenous peoples and actions taken

MM5 Number of operations taking place in or adjacent to Indigenous peoples' territories

Although Mosaic does not conduct any operations on, or immediately adjacent to, any lands of Indigenous Peoples, in Canada there are four First Nations reserves (Cowessess First Nation, Ochapowace First Nation, Kahkewistahaw First Nation, and Sakimay First Nation) that are located within 100 kilometers of our Esterhazy, Saskatchewan potash mining operations. In addition, Cowessess First Nation leases approximately 160 acres of mineral lands to Mosaic for potash mining purposes, and Mosaic may from time to time enter into additional agreements to lease mineral rights owned by other First Nations. Mosaic has had no reported incidents related to violations involving rights of Indigenous Peoples for the period covered in this report.

In Brazil there are three Quilombola communities — made up of approximately 650 people — residing near the company's Potash operations in the state of Sergipe. There were no reported incidents related to violations of the Quilombolas' rights in the period covered by this report. As a legal requirement prior to future Potash project development in Sergipe, Mosaic participated in a process with the Quilombola population to develop the Basic Environmental Plan for Quilombos (PBAQ) of Terra Dura, Patioba and Canta Galo. This collaborative process, as well as the outcome, were overseen and validated by public authorities. An Indigenous community of Mbya Guarani resides near our Fospar facility in Brazil. We continue to engage this group in efforts to help preserve their customs and culture. There were no reported incidents related to violations of their rights in the period covered by this report.

We do not have any reserves in or near areas of conflict.

Category: Social

Management Approach: Local Communities

Our local communities are our homes, and we have a vested interest in their sustainability. We understand that for Mosaic to prosper, so must our communities. We support formal and informal communication channels to connect our employees, communities, partners and customers. Examples include our Community Advisory Panels (CAPs) in Canada and Central Florida, regular meetings with communities in Brazil, as well as regional and international microsites intended as open lines of communication between Mosaic and local communities.

413-1 Percentage of operations with implemented local community engagement, impact assessments, and development programs

In alignment with Mosaic's Environment, Health and Safety policies, we are committed to conducting all business activities in a manner that protects the environment and the health and safety of our employees, our contractors, our customers and the public.

Our guiding principles — which state that we are responsible, innovative, collaborative and driven — define how we conduct business, how we interact with colleagues, and how we treat our communities and planet. Accordingly, 100% of our operations have impact assessment and development programs. We employ a variety of approaches to systematically assess and manage the diverse impacts of industry on the various communities in which we operate.

There were no non-technical delays as a result of political or community relations issues in 2020. In response to Covid-19, some government authorities issued "social distancing or shelter-in-place" orders. As a result, we experienced closures at two of our operating facilities in 2020, including 59 days at our Miski Mayo mine in Peru and ten days at our Patrocinio operations in Brazil.

Sustaining Our Global and Local Operations

Although Mosaic continues to refine and adapt community investment programs throughout South America and Asia, due to the nature of our business and potential impact, this report heavily emphasizes the areas where our operations and employees are centered: Central Florida in the United States; Saskatchewan, Canada; and Brazil. View a list of [our locations](#) (70 as of the date of this report).

Our operations in Saskatchewan, Central Florida and Brazil work diligently to engage local communities as part of a strategy to proactively manage social risk. Mosaic's engagement within local communities includes monthly meetings with a series of CAPs, civic organizations, elected officials, civil servants and other opinion leaders. When the business plans to expand operations, we host community forums and participate in public hearings convened by local and regional governments. In each of our operating geographies, we consult communities and other stakeholders prior to the start of mining or business expansion.

Assessing Our Environmental Impact

Mosaic is committed to conducting and reporting the results of environmental impact assessments. In April 2013, the final Areawide Environmental Impact Statement (AEIS) on Phosphate Mining in the Central Florida District was released by the U.S. Army Corps of Engineers (ACOE) for public review. Administered by the ACOE in compliance with the National Environmental Policy Act, this process analyzed the environmental scope and potential impacts of phosphate mining in Central Florida.

The Mosaic Potash segment conducts regular environmental impact assessments, reporting the results to the Saskatchewan Ministry of Environment. All environmental impact assessments have been submitted and approved to date. Additionally, the Mosaic Potash facilities in Saskatchewan conduct thorough biological assessments of proposed expansion sites, such as the assessments for any new tailings expansions, as well as the K3 site at Esterhazy. Each of these assessments includes field surveys to identify rare species of plants and animals of special concern to identify if mitigation programs are required.

Category: Social

Developing and Consulting In Our Communities

The Mosaic Company, The Mosaic Company Foundation and The Mosaic Institute in Brazil make investments in our global communities through philanthropic grants, employee engagement and in-kind donations. Combined contributions in 2020 were more than \$14 million.

In 2020, Mosaic operations in Florida committed approximately \$4.2 million, and operations in Saskatchewan committed more than \$4.5 million to enrich and improve communities where we have offices and operations. In Brazil we invested more than \$2.3 million in local communities.

Mosaic employs regional, full-time public affairs (PA) staff to support all communities where we have an operating footprint. Mosaic PA staff are committed to maintaining an open dialogue with the people in our communities, assessing local needs and building partnerships designed to improve community vibrancy for local residents. Independent CAPs help facilitate this work. Underwritten by Mosaic, CAPs serve as a forum for open discussion among representatives of the local community and provide a place for companies to discuss community response to industry developments and plans.

In 2019, Mosaic's Brazil operations initiated dam emergency simulations in cooperation with civil defense groups, emergency personnel, municipalities and other stakeholders. We continued the dam management program in 2020 without the simulations due to pandemic conditions, but we anticipate resuming them in 2021. Additionally, we engage communities that are potentially impacted or impacted by our operations through programs that build trust and encourage two-way dialogue aimed at addressing environmental issues.

Recognizing Indigenous Rights

The issue of indigenous engagement is relevant to Mosaic. We recognize the deep connection that indigenous peoples often have to the natural and human resources the mining industry relies on to conduct its work. Given the nature of Mosaic's core business, and our daily interaction with communities and with air, water and land resources across our operations, we prioritize indigenous engagement and understand its implications on the protection of human rights, environmental stewardship and safety.

In some locations, there are cultural implications to our business that Mosaic addresses through community engagement. Mosaic recognizes the significance of building relationships with First Nation and Métis organizations throughout Saskatchewan. For example, Mosaic partners with the Saskatchewan Indian Institute of Technologies' Mining Industry Prep Programs, to prepare Saskatchewan's Indigenous workforce for careers in mining, and also with the Saskatchewan Science Center to provide science-based learning opportunities in Indigenous schools annually. We strive to be a thoughtful and engaged neighbor who invests carefully and generously, and, through working with First Nations and Métis communities, we identify strategic opportunities to target grant funding to initiatives and projects that are important to the growth and sustainability in the areas where we operate.

In Brazil we engage Quilombola communities near our potash operations in Sergipe in cultural and educational initiatives aimed at achieving several outcomes: administrative and management training for community leaders and associations; prevention of sexual exploitation of children and adolescents; reduction and avoidance of alcohol and drug use; and support for traditional African festivals. Please see [411-1](#) and [MM5](#) for more information.

Engaging Our Stakeholders

Mosaic is committed to stakeholder engagement, and public outreach efforts. Through face-to-face meetings, social media, government relations, facility tours and more, Mosaic connects with stakeholders to keep them well informed and engaged with our mission to help the world grow the food it needs.

- Mosaic employees conduct tours of mines and manufacturing facilities for local, state and federal elected officials and staff, customers, investors, students, community leaders, the media, and nonprofit and civic groups throughout the year.
- Mosaic has an engaged social media presence (Twitter, Facebook, YouTube, LinkedIn). These media enable us to share information with the general public and engage in conversations about our business, making thousands of impressions on users and community members.

Category: Social

- Mosaic is an engaged business partner. We regularly collaborate with customers in crop nutrient education and business management principles through various events, such as Mosaic's AgCollege, which hosts approximately 250 of Mosaic's strategic customers from the United States, Canada, Mexico, Argentina, Brazil, Australia, Chile, China and India for the premier education, personal growth and leadership development event for fertilizer retailers.
- As a member of The Fertilizer Institute, Fertilizer Canada, the Saskatchewan Mining Association and Brazilian Mining Institute, Mosaic presents important information to government groups and decision-makers who directly impact operations, our current expansions, and our investments in our communities.
- In all regions where we have operations, Mosaic participates in ongoing consultation with government, covering topics such as operations updates, the need for infrastructure, consistency surrounding tax, partnership opportunities and Mosaic's approach to sustainability.
- Stakeholders may reach Mosaic in several different ways.
 - Send comments or questions regarding this report to: mosaic.sustainability@mosaicco.com
 - Contact our Board of Directors via written communication in care of the General Counsel at the address of the Company's executive offices, or by e-mail: directors@mosaicco.com

413-2 Operations with significant actual and potential negative impacts on local communities

Mosaic provides significant economic and social benefits to the local communities in which it operates. However, as with all mining activities, the extraction and beneficiation of phosphate and potash and subsequent processing to meet the global demand for mineral fertilizer has the potential to cause environmental impacts. One such impact at our mining facilities in Central Florida is the loss of farm output due to farmland being used for mining. The AEIS noted that Mosaic's mining operations, as forecast for 2011 to 2050, will have a net positive economic impact on the local economy. Any economic effects from losses in farm output would be more than made up for by higher paying employment and economic activity resulting from mining. Additionally, land reclaimed from mining is returned to agricultural uses once released from reclamation requirements.

Mosaic operates in a highly regulated and monitored industry. We work closely with state/provincial and federal officials on operations, expansions and sales to ascertain the environmental impact of industry activities on local communities. Through these efforts, Mosaic has identified and implemented mitigation opportunities that safeguard local communities from potential negative impact. For example, in Brazil we work closely with communities and local public authorities to communicate risks and safety precautions related to mining dams. These efforts include the formation of action groups that will be trained to recognize and act in emergency situations. In 2020 we continued dam emergency plan collaboration in cooperation with civil defense groups, emergency personnel, municipalities and other stakeholders. While simulation exercises were put on hold in 2020 due to Covid-19 pandemic, we expect those to resume in 2021. Additionally, we engage communities that are potentially impacted or impacted by our operations through programs that build trust and encourage two-way dialogue aimed at addressing environmental issues.

For more information on actual or potential impacts, please see the discussion of risk factors in our [2020 10-K](#).

Category: Social

MM6 Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples

MM7 The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and outcomes

We did not engage in disputes related to the land use or customary rights of local communities and indigenous people in North America or Brazil in 2020.

Grievance mechanisms vary by geography. In Canada, in line with requirements set forth by the Government of Saskatchewan, when undertaking a new development, Mosaic adheres to provisions of The Heritage Property Act to protect any heritage resources, including Indigenous resources. The heritage screening process within a project area includes partnering with a third-party expert and consulting with the Saskatchewan Heritage Conservation Branch of the Government of Saskatchewan. This information is included in a comprehensive report that is subsequently provided to the Saskatchewan Ministry of the Environment for review and approval prior to development.

In the United States, our activities are subject to rigorous state and federal permitting processes that help protect against the destruction of items of historical or cultural significance. Specifically, before mining in Florida, Mosaic seeks a Statewide Environmental Resource Permit (ERP), which includes a third-party archaeological survey of the property we intend to mine as required by State of Florida's Division of Historical Resources (FDHR). The process entails a land title search, a review of events that have been recorded in master site file and register of historic places, and a grid-style field investigation around the perimeter of the parcel of land to shovel test the area for items of archaeological significance. The U.S. Army Corps of Engineers (Army Corps), a federal agency, reviews the final FDHR report and coordinates review with the Seminole Tribe, a Sovereign Nation, at which time the Seminole Tribe can express any objection to our activities if needed. Noted within the Federal permits that fall under Army Corps jurisdiction is a condition that Mosaic stops work if an artifact or item of cultural significance is observed during the mining process — a measure that serves as further protection of any items of significance. Finally, public notice and comment periods provide communities the opportunity to provide feedback on our mining and business expansion plans.

Mosaic's operations in Brazil are primarily on land which we access through owned mineral rights. Prior to the start of mining in Brazil, and as a condition of the mine permitting process, we must conduct cultural and archaeological studies to identify areas of potential significance. Any such area — referred to as an "occurrence" — is put under local management in accordance with permits. To date, there are known archaeological occurrences identified around Tapira, Patrocínio and Catalão mines. Beyond rescuing and preserving the artifacts or materials discovered during these studies, Mosaic develops a cultural educational program to protect the knowledge of cultural materials and educate and engage surrounding communities in an ongoing discussion about their history and value. These archaeological programs are managed in line with a Brazil law from IPHAN (National Historical and Artistic Heritage Institute), which defines Mosaic's obligation as a mining company to protect cultural heritage.

Management Approach: Public Policy

As one of the world's leading crop nutrient companies, Mosaic has a responsibility to be actively engaged in the promotion of sound and sustainable public policies. We proactively educate all levels of our employees and government officials on the key issues our company and operations face, our value to operating communities, and our vital role in the world's food production. Mosaic supports elected officials, candidates for public office, and political committees that are supportive of Mosaic's mission and share our views on important issues, such as maintaining a strong North American manufacturing and mining base, recognizing the importance of crop nutrients in maintaining domestic and global food security, and supporting reasonable science-based regulation with responsible environmental stewardship.

Please see [102-12](#), [102-13](#) for a list of the industry organizations of which we are members, some of which represent the public policy needs of our industry within our operating communities.

Category: Social

415-1 Total value of political contributions by country and recipient/beneficiary

Amounts of political contributions are reported based on when Mosaic issued the check, which in some cases may be in a different year than when the check was delivered and reported by the receiving candidate or organization. Contribution levels vary in accordance with election cycles in local and regional communities where we operate.

POLITICAL CONTRIBUTIONS (U.S. DOLLARS)					
	2016	2017	2018	2019	2020
United States	230,570	252,050	626,614	244,841	356,598
Canada*	48,630	11,400	10,713	11,916	23,163

NOTE: In line with local regulations, we do not make political contributions in Brazil. United States political contributions include both "hard" and "soft" money donations, with contributions made from the Mosaic Company Political Action Committee (PAC) included in the United States total. The 2018 increase in our United States political contributions reflected an election cycle in which most of Florida's Senate and House offices were up for election, as well as all four Florida statewide elected offices. *The Canada figures were converted to USD using the currency exchange rate on December 31 of the respective calendar year. Since the figures were not converted on the actual date of the contribution, the amount in USD on the date of the contribution may differ slightly from what is reported here.

MM9 Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process

Mosaic's North American operations are well established mining regions with 50-plus years of operations. Mosaic purchased private properties near our operations in Canada and the United States in 2020, but no resettlements of communities took place. In Brazil, we negotiated resettlements with four families near our Catalão facility, resulting in three resettlements. Negotiations related to the resettlement of one family were not successful, and the matter is being resolved through the judicial process.

MM10 Number and percentage of operations with closure plans

Mosaic has plans in place as required by governmental regulations for the closure and post-closure care of our phosphogypsum management systems at eight former and current phosphoric acid manufacturing plants in Florida and Louisiana. Similarly, Mosaic has plans in place as required by governmental regulations for the closure and post-closure care of all its Carlsbad and Saskatchewan mining operations. In Brazil we have closure plans in place as required by governmental regulations for the closure and post-closure care of all production facilities, except for one, which is operating under a lease agreement with the Government that calls for the facility to be maintained and reverted back to the government at the end of the concession period.

For specific details on our estimated asset retirement obligations, refer to our [2020 10-K](#).

Category: Social

Management Approach: Customer Health and Safety and Marketing and Labeling

Mosaic's Belle Plaine facility has earned the Product Stewardship Excellence certification from the International Fertilizer Association's (IFA) Protect & Sustain Product Stewardship initiative. This certification covers the product life cycle including how products are produced; and how they are developed, sourced, stored, transported and used.

Communications related to the health and safety of Mosaic's products are directed up and down the value chain, such as supplier certification requirements as part of sourcing and procurement of inputs, (material) safety data sheets (M/SDS), labels, registrations, quality/traceability information, training and educational materials.

Mosaic's research and development processes include internal and external research and science-based data generation to advance product advocacy and customer results.

Finally, process improvements include an Environmental Health and Safety Management System that is aligned to ISO 14001/OHSAS 18001 and ANSI-10, enterprise mechanical integrity programs and contractor accountability programs.

We believe Mosaic's products are among the most responsibly sourced in the world, and we are committed to the sustainable manufacturing of our products. For example, Mosaic uses improved raw material sourcing guidance for sulfuric acid and zinc to prevent impacts to our products with trace metals.

416-1 Assessment of the health and safety impacts of product and service categories

In 2020, approximately 41% of Mosaic's products, representing approximately \$3.5 billion in revenue, are GHS Category 1 or 2 hazardous substances. This figure includes revenue from the sale of crop nutrient, animal feed and industrial products, as well as coproducts and materials that are sold as part of supply agreements. It excludes blends from the Mosaic Fertilizantes business, some of which might be categorized as GHS Category 1 or 2.

As for hazard assessments, a portion of the Muriate of Potash (MOP) products sold through Canpotex agreements, representing approximately 6% of companywide revenue in 2020, undergo a REACH hazard assessment. The remainder of our products undergo various other health and safety assessments. For example, we conduct pre-job risk assessments (PJRAs) to identify potential hazards associated with manufacturing jobs and to prevent health and safety incidents from occurring. Through facility-level PJRAs and various other hazard assessment techniques — all of which are governed by Mosaic's environment, health and safety management system — we identify, implement mitigation controls for, document and communicate health, safety and environmental measures to manage risks so products can be safely used for their intended purposes.

Category: Social

417-1 Requirements for product and service information and labeling

One hundred percent of Mosaic's products are subject to labeling requirements. We comply with safety, environmental, labeling and registration required by country and local governments where we sell and distribute fertilizer, animal feed and industrial products.

Mosaic provides the required country, state and local product documentation for all shipments. This includes detailed labels, data specification sheets and a safety data sheet (SDS) for all products. These documents provide information about proper product handling, safety precautions and guaranteed analysis. Situations requiring disposal are also addressed in the SDS. For product undergoing vessel transport, the SDS includes certification that the discharge of cargo hold rinsate is not harmful to the marine environment.

Approximately 41% of Mosaic's products are categorized as Globally Harmonized System of Classification and Labeling of Chemicals (GHS) hazard Category 1 or 2. GHS defines and classifies the hazards of chemical products and communicates health and safety information on labels and safety data sheets. See [416-1](#) for more information.

As it relates to safe use of our products, Mosaic promotes customer education following the [4R Nutrient Stewardship](#) framework of the Right nutrient source, applied at the Right rate, at the Right time and at the Right place. Our agronomists share this message worldwide.

More Information: Animal Testing

Some stakeholders have expressed an interest in Mosaic's involvement with animal testing, so we offer important context here. We produce animal feed ingredient (AFI) products (approximately 2% by weight of total products) that contain phosphate and potash. The U.S. Food and Drug Administration (FDA) is the primary Federal regulatory agency responsible for ensuring the safety of AFIs. Both the phosphate and potash components, and the resulting finished animal feed ingredient products they go into, are considered "generally recognized as safe" (GRAS) by the FDA. Therefore, safety testing is typically not needed as it has already occurred. There are respective approval and registration processes in each of the countries where we sell our products, but many of those jurisdictions rely on the FDA's stringent guidelines.

In those limited instances where testing may be needed to evaluate the efficacy of our products, we work with third parties to conduct intermittent bioavailability studies involving animals.

417-2 Incidents of non-compliance concerning product and service information and labeling

Mosaic has systems to manage, track and monitor incidents related to noncompliance with regulations and voluntary codes concerning product and service information and labeling. We are committed to quality and responsible labeling. We investigate all questions or claims about the labeling or guaranteed analysis of our products and work with the customer and/or appropriate agency to resolve any claims that arise. Companywide in 2020, the sum of claims that resulted in penalties totaled less than \$15,000.

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Learn more.
TheMosaicStory.com



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