



FCX is committed to communicating on our ESG performance regularly and transparently and has been reporting on our sustainability performance since 2001. The data provided in this section and throughout the report reflects Freeport-McMoRan's historical performance for the past five years on key ESG topics.

Unless noted otherwise, the data covers sustainability matters related to all of our significant operating sites including the following locations: Atlantic Copper, Bagdad, Bayway, Cerro Verde, Chino, Cobre, Climax Mine, El Abra, El Paso, Ft. Madison, Henderson, Kokkola, Miami, Morenci, Norwich, PT Freeport Indonesia, Rotterdam, Safford, Sierrita, Stowmarket and Tyrone.

In general, and unless otherwise noted, this data does not include assets divested or acquired during the year, non-managed joint ventures, exploration activities, projects, and non-operating and discontinued sites. All data presented excludes Tenke Fungurume which was sold in November 2016.

As a result of methodology changes, corrections or ongoing improvements to our data collection processes and quality, prior year data may be restated in future years. Historical results are not necessarily indicative of future performance.

All financial figures are quoted in U.S. dollars, unless otherwise noted. Some figures and percentages may not add up to the total figure or 100% due to rounding. Data presented covers our performance for years ending December 31, which corresponds to our fiscal year.



Our ESG performance data presented here is also available for download in excel format on our website. For additional details about FCX, our financial performance and governance practices, please refer to our website, 2019 Annual Report and 2020 Proxy Statement.

TREND DATA

	2015	2016	2017	2018	2019
GOVERNANCE					
BUSINESS ETHICS					
PBC Training Completion Rate ¹	N/A	97%	100%	100%	100%
Anti-corruption Training	N/A	97%	98%	100%	100%
FCX Compliance Line Reports	265	218	235	257	285
ECONOMIC VALUE CONTRIBUTION (\$ MILLIONS)					
Direct Economic Contributions ²	\$13,458	\$12,688	\$12,158	\$14,663	\$13,556
Cash Payments to Governments ²	\$1,613	\$1,224	\$1,346	\$2,409	\$1,412
Community Investments	\$138	\$129	\$153	\$155	\$100

	2015	2016	2017	2018	2019
SOCIAL	2013	2010	2017	2010	2019
HEALTH & SAFETY					
Total Recordable Events	535	474	445	466	526
% High Risk ³	9.7%	17.1%	22.7%	10.9%	11.0%
Total Recordable Incident Rate (TRIR) ⁴	0.61	0.72	0.76	0.71	0.74
Number of Fatalities	3	6	5	1	3
HUMAN RIGHTS					
Gross Human Rights Violations⁵	_	_	_	_	_
WORKFORCE					
Employees	31,100	30,000	25,200	26,800	27,500
Contractors	31,400	29,100	28,000	38,800	40,600
% Employees Under CLA ⁶	43%	47%	39%	37%	37%
WOMEN IN LEADERSHIP POSITIONS					
Board of Directors	13%	25%	25%	40%	33%
Executive Management	12%	11%	8%	10%	11%
Management	11%	11%	11%	12%	12%
Non-Management	11%	10%	12%	13%	13%
Total Workforce	11%	10%	12%	13%	13%
Attrition Rate – Women	11%	17%	19%	9%	12%
% of New Hires - Women	15%	15%	22%	21%	21%
EMPLOYEE TURNOVER BY REGION & GENDER					
North America	12%	18%	16%	10%	11%
South America	20%	5%	3%	5%	6%
Indonesia	3%	3%	55%	3%	4%
Europe/Other	4%	11%	6%	5%	25%
Total Workforce	9%	10%	28%	7%	9%
% Male	9%	9%	29%	6%	8%
% Female	11%	17%	19%	9%	12%
EMPLOYEE TURNOVER BY AGE GROUP					
<30 Years	11%	13%	23%	13%	16%
30-50 Years	7%	6%	28%	5%	6%
>50 Years	17%	19%	31%	8%	11%

	2015	2016	2017	2018	2019
SOCIAL				2010	20.0
COMMUNITIES					
COMMUNITY INVESTMENTS (\$ MILLIONS)	\$138	\$129	\$153	\$155	\$100
Community Trust Funds	23%	26%	30%	40%	29%
Safety, Health & Environment	15%	12%	19%	15%	21%
Education & Training	16%	16%	14%	12%	18%
Economic Development & Infrastructure	16%	19%	19%	15%	17%
Other ⁷	14%	13%	15%	15%	14%
Administration	16%	14%	3%	3%	1%
NO. GRIEVANCES BY GEOGRAPHY					
Chile	6	8	33	37	29
Europe ⁸	_	-	_	5	5
Indonesia	90	64	64	76	60
Peru ⁹		8	17	15	9
United States ¹⁰	49	25	38	93	67
Total	145	105	152	226	170
GRIEVANCES BY TYPE (%)					
Community Benefits	32%	46%	36%	27%	32%
Employment	_	1%	3%	3%	2%
Environment	10%	10%	28%	24%	16%
Health & Safety	4%	9%	10%	11%	16%
Indigenous Peoples	1%	-	1%	5%	1%
Land Rights	21%	14%	7%	9%	12%
Physical Damage	2%	6%	4%	9%	5%
Other ¹¹	30%	14%	13%	11%	16%
PROCUREMENT SPEND DISTRIBUTION (\$ MILLIONS)					
Local	\$3,014	\$2,451	\$2,549	\$3,201	\$ 3,552
National	\$4,991	\$3,857	\$4,150	\$5,115	\$5,437
Outside Home Country	\$1,057	\$751	\$7,158	\$1,288	\$1,566
Total	\$9,062	\$7,059	\$13,857	\$9,604	\$10,555
% Local	33%	35%	34%	33%	34%
% National	55%	55%	56%	53%	51%
% Outside Home Country	12%	10%	10%	14%	15%
Number of Local Suppliers	4,375	3,845	3,794	3,727	3,649

	2015	2016	2017	2018	2019				
ENVIRONMENT									
CLIMATE									
FMC MINING ^{12, 13} (CO ₂ E METRIC TONS)									
Scope 1	2,040,012	1,772,308	1,763,407	2,049,720	2,241,039				
Scope 2	4,007,548	3,834,801	3,349,819	2,774,994	2,705,132				
PURCHASED POWER BY SOURCE									
Natural Gas	37%	36%	36%	39%	36%				
Hydro	14%	20%	21%	33%	35%				
Coal, Other Fossil	25%	25%	25%	18%	17%				
Nuclear	16%	14%	13%	7%	7%				
Solar, Wind, Geothermal	7%	4%	5%	3%	4%				
Other	1%	2%	_	_	-				
FMC DOWNSTREAM PROCESSING ^{13, 14} (CO ₂ E METRIC TONS)	FMC DOWNSTREAM PROCESSING ^{13, 14} (CO ₂ E METRIC TONS)								
Scope 1	275,451	240,647	239,102	254,961	264,083				
Scope 2	428,875	366,260	341,298	389,827	337,937				
PURCHASED POWER BY SOURCE									
Natural Gas	29%	27%	27%	31%	28%				
Hydro	8%	8%	8%	14%	9%				
Coal, Other Fossil	25%	27%	27%	23%	24%				
Nuclear	20%	22%	22%	17%	23%				
Solar, Wind, Geothermal	13%	12%	12%	10%	15%				
Other	4%	4%	4%	6%	2%				
PT-FI (CO ₂ e metric tons)									
Scope 1	3,384,208	3,082,180	2,528,388	2,935,480	2,464,261				
Scope 2	_	_	_	_	_				
FCX GLOBAL (CO ₂ E METRIC TONS)									
Scope 1	5,699,671	5,095,135	4,530,897	5,240,161	4,969,382				
Scope 2	4,436,423	4,201,061	3,691,117	3,164,821	3,043,069				
Scope 1 + 2 Total	10,136,094	9,296,196	8,222,014	8,404,983	8,012,451				
Scope 3	561,821	618,819	706,214	750,332	692,336				
AIR EMISSIONS (THOUSAND METRIC TONS)									
NOx	40.7	41.2	38.4	37.6	42.9				
SOx	10.1	11.6	10.6	6.6	3.5				
PM10	24.1	24.8	15.3	16.9	18.2				
VOC	10.4	10.1	8.8	9.4	10.0				
ODS	0.8	0.8	2.0	1.0	0.7				

				2010	2010
	2015	2016	2017	2018	2019
ENVIRONMENT					
WATER UTILIZATION (MILLION CUBIC METERS)					
New - Groundwater	103	101	94	112	99
New - Surface Water	120	122	110	68	61
New - Sea Water	-	_	_	47	49
New - Stormwater	44	49	44	53	57
New - 3rd Party Sources	4	31	27	31	37
Total New Water Withdrawn	271	303	275	311	303
Total Water Recycled	1,164	1,399	1,285	1,378	1,409
Total Utilized Water (Withdrawn + Recycled)	1,435	1,702	1,560	1,689	1,711
% Reused/Recycled of Total Water Utilized	81%	82%	82%	82%	82%
Total Water Discharge ¹⁵	-	-	-	106	96
Water Use Efficiency (%) ¹⁵	-	-	_	87%	87%
NUMBER OF TAILINGS IMPOUNDMENTS ¹⁶					
Active	18	18	19	18	18
Closed/Inactive	52	52	56	59	58
Total	70	70	75	77	76
MINING & MINERAL PROCESSING WASTE					
Tailings (million metric tons)	211	304	298	324	309
Waste Rock (million metric tons)	311	191	154	371	445
Slags, Sludges and Residues (thousand metric tons)	272	706	626	692	655
NON-MINING WASTE & RECYCLABLE MATERIAL (THOUSAND METRI	C TONS)				
Non-Hazardous Waste Generated	156.9	126.7	123.2	137.5	193.5
Hazardous Waste Generated	123.7	69.3	52.9	53.3	57.1
Total Non-Mining Waste Generated	280.6	196.0	176.1	190.8	250.6
% Recycled	25%	30%	36%	37%	38%
NON-HAZARDOUS (THOUSAND METRIC TONS)					
Recycled	65.1	53.7	59.0	68.1	90.0
Disposed - Landfill	62.7	58.7	55.8	58.9	77.5
Disposed - Other	3.3	4.3	2.8	4.3	4.0
Stored On-Site	25.8	10.0	5.6	6.2	22.0
Total	156.9	126.7	123.2	137.5	193.5

	2015	2016	2017	2018	2019
ENVIRONMENT					
HAZARDOUS (THOUSAND METRIC TONS)					
Recycled	5.1	6.0	3.6	3.4	4.9
Disposed - Landfill	92.2	35.4	28.9	27.3	26.5
Stored On-Site	0.2	0.4	0.2	_	_
Treated	26.2	27.5	20.2	22.6	25.7
Total	123.7	69.3	52.9	53.3	57.1
USED OIL (THOUSAND CUBIC METERS)					
Onsite	0.1	-	0.1	0.1	0.1
Offsite	9.8	7.6	9.7	12.2	11.2
Total	9.9	7.6	9.8	12.3	11.3
% Recycled	100%	100%	100%	100%	100%
LAND (IN HECTARES)					
New land disturbed during the year	521	540	761	971	1,721
Land rehabilitated during the year	175	101	65	84	80
Total land disturbed to be rehabilitated	57,847	58,286	58,982	59,870	61,512
ENVIRONMENTAL EVENTS					
Reportable spills or releases of hazardous or toxic chemicals ^{17, 18}	15	33	25	17	33
NOVs - permit exceedances, spills, releases or other compliance matters ¹⁹	2	5	5	13	6
Significant environmental events (as defined in the Risk Register)	_	_	_	1	_
Environmental Penalties (\$ thousands) ^{20, 21}	\$43	_	\$317	_	\$125

- 1 Our online training was placed on hold in 2015 as a result of transitioning to a new training module provider.
- 2 Please see more detailed information on pages 14 and 37-40 of this report.
- $3 \quad \text{Our sustainable development Risk Register defines high risk events as incidents that have the potential to result in permanent disabilities or a fatality.} \\$
- 4 TRIR = [(Fatalities + Lost-time Incidents + Restricted-duty Incidents + Medical Treatment) x 200,000] / Total Hours Worked.
- 5 There is no uniform definition of gross human rights violations under international law; however, the United Nations Office of the High Commissioner report: The Corporate Responsibility to Respect Human Rights An Interpretive Guide, provides guidance on identifying such types of violations.
- 6 CLA is Collective Labor Agreement; in North America, our hourly employees continue to elect to work directly with company management rather than through union representation utilizing our Guiding Principles contract which adds value to the workforce and the company.
- 7 Includes arts, culture, mitigation, stakeholder engagement and employee programs such as Matching Gifts and United Way.
- 8 Introduced Europe in 2018.
- 9 2016: Community 146 grievances received in Peru related to a waste water treatment facility at our Cerro Verde operation excluded.
- 10 Community 2018: Approx 630 grievances related to dust incidents at our Sierrita operation excluded.
- 11 Other includes security, town site/housing and other community grievances not listed in the table.
- 12 FMC Mining includes Bagdad, Cerro Verde, Chino/Cobre, Climax, El Abra, Henderson, Morenci, Safford, Sierrita & Tyrone.
- $13\ \ 2015-2017\ Scope\ 2\ emissions\ were\ calculated\ using\ a\ location-based\ method;\ 2018-2019\ Scope\ 2\ emissions\ were\ calculated\ using\ a\ market-based\ method.$
- 14 FMC Downstream Processing includes Atlantic Copper Smelter & Refinery, Bayway Rod & Wire, Ft. Madison Moly Special Products, Kokkola Cobalt Refinery, Miami Smelter & Rod, Norwich Rod, Rotterdam, Stowmarket & El Paso Refinery & Rod.
- 15 In 2018, we started reporting discharge quantities and water use efficiency.
- 16 Tailings impoundment counts are reviewed at least annually and updated according to construction of new facilities, changes in operating conditions, closure, business transactions, and legal reviews. For example, in 2017, Mt Emmons Mining Company agreed to take over the long-term liabilities for the historic Keystone Mine in Colorado, adding 4 inactive tailings facilities to our portfolio.
- 17 Excludes spills at PT-FI associated with pipeline sabotage; due to increased security efforts, the number of sabotage-related spills reported at PT-FI decreased from 68 in 2018 to 16 in 2019.
- 18 In 2019, there were 14 releases of 75 kg (or less) of NH₃ or SO₃ at our Rotterdam molybdenum plant associated with malfunctions of the catalytic oxidizer.
- 19 NOV is Notice of Violation.
- 20 2017 penalties paid were from NOVs at Cerro Verde in 2006 and 2008.
- 21 2019 penalties paid were from NOVs at Sierrita for dust events in 2018 (\$30,000) and a NOV at Cerro Verde in 2007 (\$94,682). In addition, we agreed to fund a \$200,000 Supplemental Environmental Project associated with the Sierrita dust events. The Cerro Verde fine was paid in 2019 from a regulatory inspection conducted in 2007 due to an extended legal appeal process.

Note: Following sale of TFM in November 2016, all data now excludes TFM in 2015/2016. As a result of methodology changes or corrections, prior year data may be updated.