

# BUILDING 2019 ON STRENGTH

Annual Report  
on Sustainability



Cover Photo: Remote underground equipment operators at the Grasberg Block Cave, Indonesia.

## About Freeport-McMoRan

Freeport-McMoRan Inc. (Freeport-McMoRan, FCX or the company) is a leading international mining company with headquarters in Phoenix, Arizona. FCX operates large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum. FCX is one of the world's largest publicly traded copper producers. Our portfolio of assets includes the Grasberg minerals district in Indonesia (PT Freeport Indonesia or PT-FI), one of the world's largest copper and gold deposits; and significant mining operations in North America and South America (Freeport Minerals Corporation or FMC), including the large-scale Morenci minerals district in Arizona and the Cerro Verde operation in Peru.

### RECENT AWARDS & RECOGNITION



Freeport-McMoRan was named to **Forbes Magazine's JUST 100** as one of America's most JUST Companies for the **4th** consecutive year (ranked **43rd** nationally and **1st** in Basic Resources).



Freeport-McMoRan ranked **6th** among 200 of the largest publicly traded companies in the world assessed by the **Corporate Human Rights Benchmark** (ranked **1st** in North America and **3rd** among 56 global extractive companies evaluated).



**Forbes Magazine** ranked Freeport-McMoRan on its **2019 Best Employers List** (**2nd** best employer in Arizona and **143rd** nationally).



**Newsweek** ranked Freeport-McMoRan as one of **America's 300 Most Responsible Companies** (ranked **138th**).



**Corporate Responsibility Magazine** listed Freeport-McMoRan as one of the **100 Best Corporate Citizens** for the **8th** year for outstanding environmental, social and governance (ESG) transparency and performance.



**Agenda** and **HIP Investor** named Freeport-McMoRan one of the **10 most transparent companies in S&P 500 for ESG reporting**.



June 3, 2020

## Letter to Stakeholders

Dear Stakeholders,

We are proud to share our 2019 *Annual Report on Sustainability*, "Building on Strength." This report details our company's long-standing commitment and progress to responsibly manage our environmental, social and governance (ESG) performance.

As we write this letter, the world is continuing to deal with major challenges associated with the COVID-19 pandemic. Our company's principal focus is the health, safety and well-being of our global workforce, their families, and the communities where we live and operate, including our indigenous and tribal neighbors. Building on years of partnering with our local stakeholders, we are using the strength of our global supply chain to acquire, purchase, donate and deliver much needed medical supplies, food and other items to our community partners in support of COVID-19 relief efforts.

We recognize that by protecting the health and safety of our workforce, we are safeguarding our business. In today's challenging environment, this is more important than ever. At Freeport-McMoRan, "E-S-G" is not a separate area of work we do from time to time – it is integral to all aspects of our business.

At the foundation of our sustainability approach is health and safety. It is with profound sadness that we report three fatalities during 2019, two from a single event at PT-FI in Indonesia and one at Tyrone in New Mexico. While we have a strong culture of safety throughout of our global organization, we must do better. We remain diligent in enhancing the tools and technologies necessary to improve our safety performance with a particular emphasis on fatality prevention.

In addition to the health and safety of our global workforce, the well-being of our communities and the environment is critical to our success. We launched our Tailings Stewardship Program 15 years ago with a foundation in independent third-party reviews. The program has evolved significantly over the years and today we employ substantial engineering expertise, robust monitoring and local and corporate management oversight. In 2019, we provided enhanced public disclosures of our tailings management and stewardship program.

We recognize there are many environmental challenges facing the copper mining industry today, notably climate risk and associated water management. Concurrent with this report, we have published our first climate report which details

our efforts to date and our plans to address climate-related risks and opportunities going forward. Later this year, we also plan to publish our first water report to enhance our transparency and accountability in this critical area.

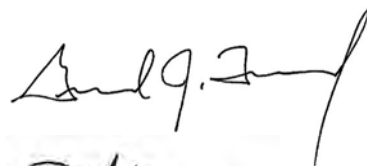

Sustainability also includes maintaining and enhancing profitability. Only a profitable business can create sustained, long-term value for its stakeholders. During 2019, we prioritized and advanced our three key operational initiatives to strengthen our cost position and enhance future cash flows and long-term value. In response to the COVID-19 pandemic and resulting significant negative impact on the global economy, we developed a comprehensive plan to preserve our company's financial strength and weather this period of uncertainty.

The mining industry plays a critical role in providing the metals necessary for global economic growth, a successful transition to a low-carbon economy, and the technologies necessary to improve the quality of life for billions of people around the world. This includes producing copper, which contains anti-microbial properties that reduce the spread of infectious diseases.

Our global team is actively engaged in the management and mitigation of the impacts of mining as we serve our customers and supply the global economy with responsibly produced copper. We will continue to accelerate and improve our stewardship efforts, which extend beyond the boundaries of our own operations. We will further our work to reduce our environmental footprint and strengthen our positive social impact in the communities and host countries where we live and work.

We are proud of how our workforce is responding to the increasing challenges facing our industry and to the more immediate global health crisis. Our continued dedication to sustainable and responsible copper production and our progress during the year have set a solid foundation for the future. We remain focused on our contributions to society as a leading responsible copper producer.

Freeport: Foremost in Copper.

**GERALD J. FORD**

Non-Executive Chairman of the Board



**RICHARD C. ADKERSON**

Vice Chairman of the Board,  
President & Chief Executive Officer



**FRANCES FRAGOS  
TOWNSEND**  
Corporate Responsibility  
Committee Chair

June 3, 2020

# Message from our Corporate Responsibility Committee Chair

Dear Stakeholders,

Freeport-McMoRan is committed to meeting the highest standards of environmental stewardship across its operations, respecting human rights in all of its business practices, and prioritizing the health, safety and well-being of its workforce, and the communities and host countries where the company operates. We recognize that the long-term success of the company and sustainable value creation are dependent on effective management, integration and governance of key ESG matters.

The Corporate Responsibility Committee (CRC), on behalf of Freeport-McMoRan's Board of Directors, is responsible for providing oversight of the company's management of environmental and social matters. The CRC regularly reviews the effectiveness of Freeport-McMoRan's strategies, programs and policy implementation to support health and safety, security, human rights, communities, the environment and government stakeholders.

We receive regular reports from management and meet frequently to discuss the most salient issues and evolving stakeholder perspectives. At every meeting, we are critically focused on the company's safety performance and efforts to eliminate fatalities and continually reduce injuries.

The CRC's oversight and engagement goes beyond the boardroom. In October 2019, I visited the company's Sierrita and Miami operations in Arizona, with a focus on reviewing the company's environmental management programs and tailings management systems. I was pleased to see the effectiveness of these programs in the field. The CRC has played an active role in the company's Tailings Stewardship Program since it was initiated more than 15 years ago and this year we supported the company's increased public disclosures regarding the tailings facilities.

Responsible production of metals is a core focus of multiple initiatives around the world and a key focus for Freeport-McMoRan. At the end of 2019, the International Council on Mining and Metals launched its Mining with Principles, which focuses on demonstrating the responsible production of metals through the site-level implementation and third-party validation of ICMM's new Performance Expectations. Management began implementing a self-assessment across the company's entire portfolio and expects to begin publicly reporting on the company's progress next year.

In 2019, the CRC also provided oversight of management's progress on advancing responsible value chains. We reviewed and supported the Board's adoption of the new Responsible Sourcing of Minerals Policy, which commits the business to identify and

mitigate potential human rights violations in supply chains for the minerals and metals that it may purchase.

The company's Human Rights policy commits it to respecting human rights, conducting business in a manner consistent with the UN Declaration of Human Rights and implementing the UN Guiding Principles on Business and Human Rights. I am proud to report that the 2019 Corporate Human Rights Benchmark assessed and ranked Freeport-McMoRan's human rights program first in North America across all companies and third across all global extractives companies assessed.

Diversity and inclusion is also a significant priority for the company, as reflected in our Board composition and in the company's management. The CRC is involved in overseeing and monitoring management's diversity and inclusion programs designed to increase diverse representation.

We are particularly proud of the company's free, online entrepreneurship training program, DreamBuilder, developed in partnership with Arizona State University's Thunderbird School of Global Management. The program has succeeded in empowering and educating women across 90 countries on creating business plans, raising capital, and building networks of successful business owners. In 2019, it was selected as the centerpiece program for the Academy of Women Entrepreneurs, a new initiative launched by the U.S. Department of State's Bureau of Education and Cultural Affairs. U.S. Embassies in 24 new countries across the globe will begin to promote and implement the program.

Freeport-McMoRan has a long history of robust sustainability programs and is continuously striving to embrace evolving stakeholder expectations and implement best practices. Stakeholders are increasingly seeking more frequent and transparent disclosures about sustainability strategy, programs and performance, and I look forward to continuing to provide guidance on management's expanded communications in this important area.

I am proud to communicate with you as Chair of the CRC, and I am equally proud of the work that the company is doing. In 2020, the CRC is focused on the health and safety issues associated with the COVID-19 pandemic. We will also continue to work with management to maintain focus, rigor and transparency on the initiatives and commitments that are most critical to the company's long-term business strategy and commitment to sustainable and responsible copper production.





Biodiversity conservation efforts at Cerro Verde, Peru.

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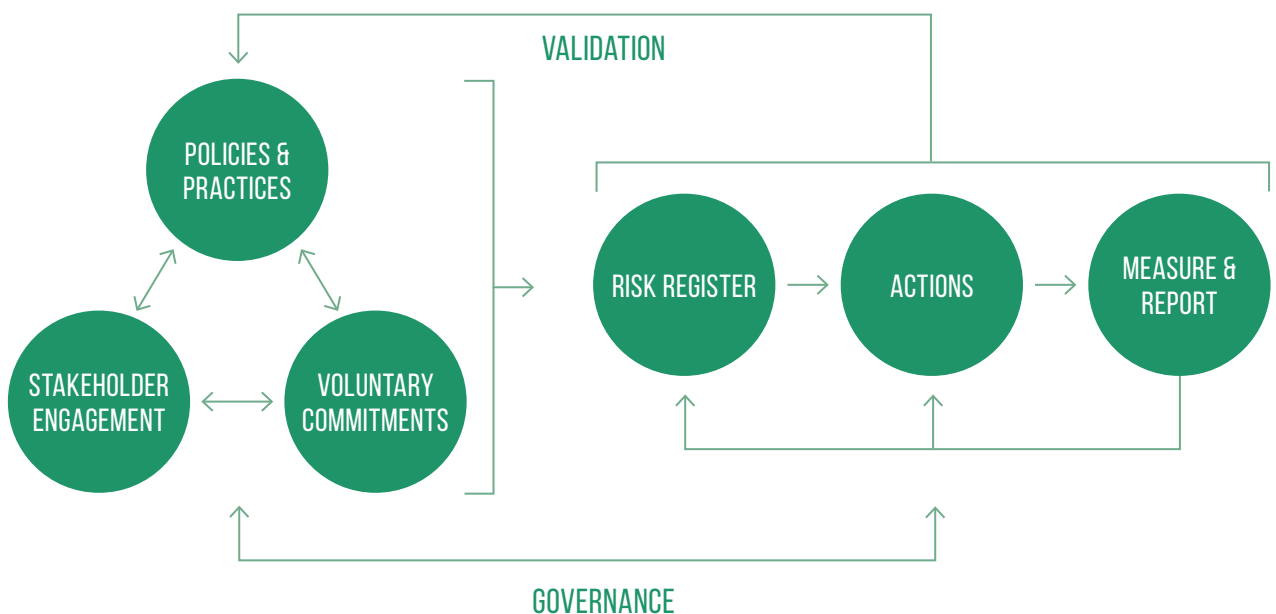
## PERFORMANCE DATA



## OUR APPROACH

Our company is a leading responsible copper producer – Freeport: Foremost in Copper. Our commitment to responsible copper production is visible in everything we do, driven by our core values of **Safety, Respect, Integrity, Excellence** and **Commitment**. Our values direct the decisions we make as a company and as individual employees. These values represent who we are and how we work – everyone, everywhere, every day. Our focus on responsible production is critical to establish and maintain acceptance from our local stakeholders through shared value creation and to meet society's responsible sourcing objectives necessary to supply the world with responsible copper.

Defining and implementing responsible production at Freeport-McMoRan is an iterative process focused on continuous improvement. The process incorporates our internal governance and policies as well as our external voluntary commitments. Ongoing stakeholder engagement is fundamental to informing our policies and processes as well as for sharing best practices and our performance across various ESG topics. Regular measurement and reporting supports our understanding of our current performance and the actions we need to take to improve. Third-party validation of our reporting supports us in meeting our internal and external commitments. The graphic below describes how we implement responsible production at Freeport-McMoRan.







Our dedication to responsible copper production is visible in everything we do, driven by our core values: Safety, Respect, Integrity, Excellence and Commitment

The Safford pit and mining complex in Arizona.



# Governance

At Freeport-McMoRan, sustainability is embedded in our values and business strategy. Governance and oversight of sustainability at the company starts with the Board of Directors (the Board) and cascades through leadership to our sites. Good governance requires strong leadership to ensure that the values of the company are integrated into everyday operations and business decisions. It also means having the structures and processes in place to facilitate decision-making and actions that advance the interests of our stakeholders.

## BOARD OF DIRECTORS

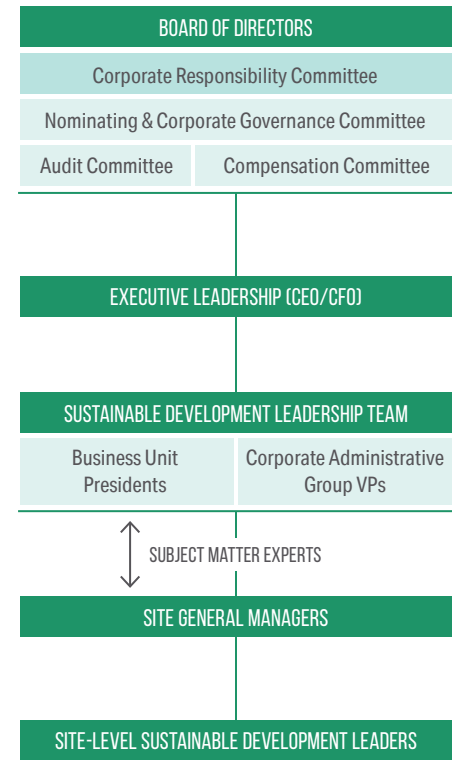
The Freeport-McMoRan Board oversees and guides the company's business strategy. One of the Board's primary responsibilities is to provide risk oversight on the company's policies and practices and their implementation throughout the organization.

In its risk oversight role, the Board reviews, evaluates and discusses with members of management whether the risk management processes designed and implemented are adequate in identifying, assessing, managing and mitigating material risks facing the company.

To support its risk oversight responsibilities, the Board has four standing committees, each composed entirely of independent directors: Audit, Compensation, Nominating and Corporate Governance, and Corporate Responsibility. Each committee regularly reports to the full Board.

## CORPORATE RESPONSIBILITY COMMITTEE

The Corporate Responsibility Committee (CRC), on behalf of the Board, is responsible for providing oversight to the company's management team on environmental and social matters. The CRC regularly reviews the effectiveness of management's strategies, programs and policy implementation with respect to health and safety,





security, human rights, employees and communities (including diversity and inclusion initiatives), the environment – including climate-related risks and opportunities, water management, tailings stewardship, community investment programs, government and stakeholder relations, and political and charitable contributions.

During 2019, the CRC met three times, and our CRC Chair attended a site visit at our Sierrita and Miami operations in Arizona. The CRC also received an update on management's engagement with the financial sector on key ESG matters, received various reports and considered numerous items with a particular focus on the topics in the sidebar.

### SUSTAINABLE DEVELOPMENT LEADERSHIP TEAM

Our Chief Executive Officer (CEO) has ultimate responsibility for the company's sustainability performance. The company's Sustainability Development Leadership Team (SDLT) includes members of the management team tasked with defining the sustainability strategy and implementing our policies, systems and programs across the business. The SDLT regularly reports to executive leadership, including our CEO and Chief Financial Officer, and members of the SDLT report to the CRC on key ESG matters.

The SDLT is sponsored by our Senior Vice President and Chief Administrative Officer and is led by our Vice President of Environmental Services and Sustainable Development, with participation from other members of the SDLT including our Chief Operating Officer, business unit Presidents, and Vice Presidents or senior representatives from groups including safety, security, supply chain, human resources, sales, legal, compliance, sustainability and finance functions.

Executive officers are held accountable for the company's sustainability performance through the company's performance-based annual incentive program (AIP). Sustainability metrics (ESG) collectively account for 25% of the AIP.

### 2019 CRC DISCUSSION TOPICS

#### ENVIRONMENTAL

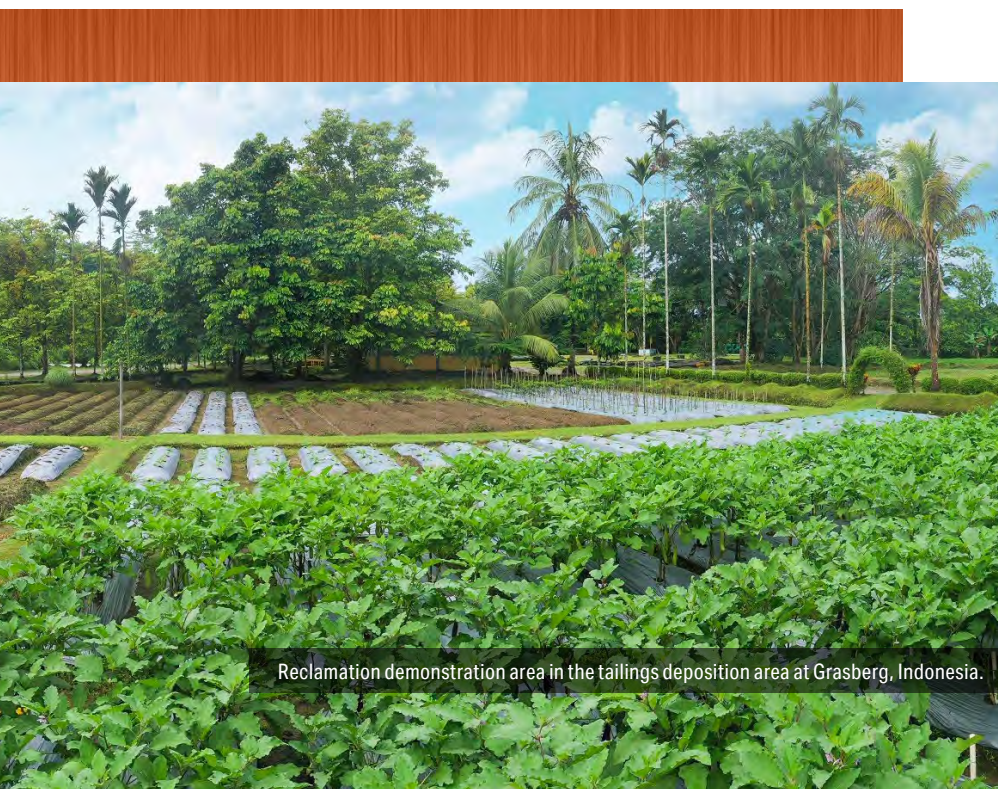
Environmental programs update  
Climate report preparation  
Tailings management & stewardship program

#### SOCIAL

Health & safety (including root cause analysis and corrective actions)  
Social investment & charitable contributions  
Diversity & inclusion initiatives  
Human Rights policy & program (update on Corporate Human Rights Benchmark results)

#### GOVERNANCE

Responsible Sourcing framework update  
Adoption of Responsible Sourcing of Minerals policy  
Update on political spending report  
Adoption of the 2018 UK Modern Slavery Act Statement



Reclamation demonstration area in the tailings deposition area at Grasberg, Indonesia.



For additional details on our Board, its committees, charters and governance, please refer to Freeport-McMoRan's 2020 **Proxy Statement** and the corporate governance section of our **website**.

## Principles of Business Conduct

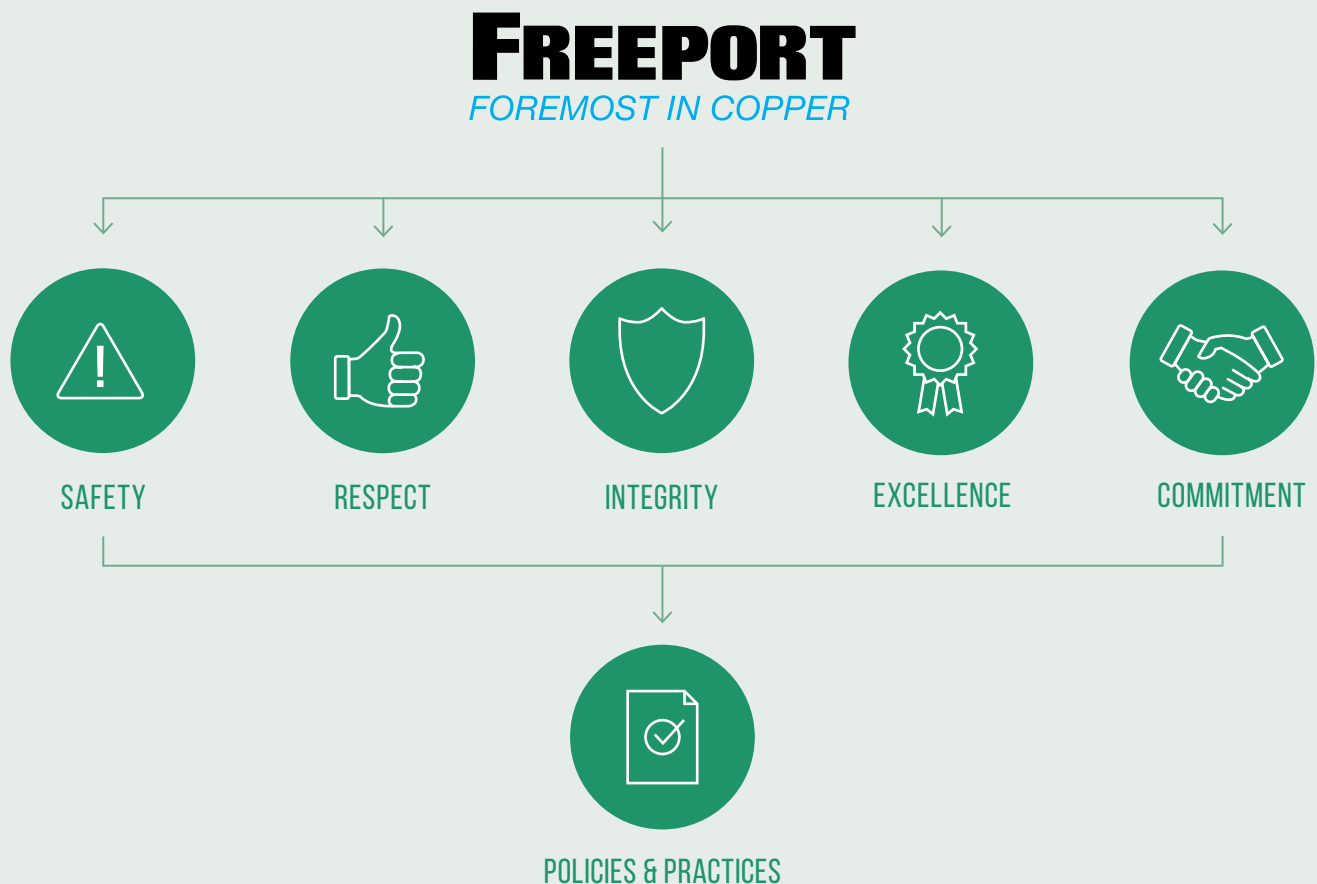
At Freeport-McMoRan, we are guided by our Principles of Business Conduct (PBC). Our PBC is the cornerstone of our commitment to ethical business practices.

It sets forth the global system of principles that our workforce must follow in all activities – from complying with laws to avoiding conflicts of interest to treating fellow colleagues and stakeholders with respect. The PBC highlights our core values – **Safety, Respect, Integrity, Excellence and Commitment** – and provides guidance for the application of these values to our business. It also defines the expected behavior of all of our employees and the Board itself.

Our PBC and corporate governance guidelines, along with the charters of our Board committees, provide the framework for

the governance of our company and reflect the Board's commitment to monitor the effectiveness of policy and decision-making at both the Board and management levels.

We conduct comprehensive training on our PBC, including annual certification by management-level employees and induction training for all new employees. This process consists of in-person or computer-based trainings and requires employees to certify that they understand it and have no known instances of non-compliance. Managers and supervisors also are responsible for ensuring that the employees who report to them understand these principles. Please refer to page 23 of this report for more information on our Compliance Line and grievance management.





We are guided by our Principles of Business Conduct, which highlights our core values



Our Cerro Verde mine in Peru supports organic quinoa farms in the Arequipa region.

## Policies & Practices

Our PBC, together with our global policies and practices, detail our expected behaviors and commitments to our stakeholders. Freeport-McMoRan's policies are listed in the table below and also are available in the governance section of our [website](#).

<b>ANTI-CORRUPTION</b>	Outlines procedures to meet the U.S. Foreign Corrupt Practices Act and other relevant anti-corruption laws, including laws in the countries where we operate.
<b>COMMUNITY</b>	Recognizes the vital role of stakeholder engagement and calls for collaboration with communities, including indigenous and vulnerable populations, to minimize and mitigate adverse impacts and pursue opportunities to maximize benefits.
<b>ENVIRONMENTAL</b>	Outlines our duty to minimize the impact of our operations on the environment and to protect and enhance the quality of the environment in areas where we operate, including commitments to achieve ISO 14001 certification at all operating facilities, support biodiversity programs in operational areas, and remediate sites for which we are responsible.
<b>HUMAN RIGHTS</b>	Outlines our dedication to respecting and promoting human rights wherever we do business and requires us to conduct business in a manner consistent with the United Nations Guiding Principles on Business and Human Rights. The Voluntary Principles on Security and Human Rights are the guidelines for our security programs.
<b>POLITICAL ACTIVITY &amp; SPENDING</b>	Our practice sets forth our expectations regarding political activity and spending and applies to Freeport-McMoRan and its affiliated political action committees.
<b>RESPONSIBLE SOURCING OF MINERALS</b>	Outlines our commitment to producing and sourcing minerals and metals responsibly, including respecting human rights and preventing bribery, fraud and corruption, and implementing the Organization of Economic Co-operation and Development (OECD) Guidelines for Responsible Mineral Supply Chains in Conflict-Affected and High-Risk Areas.
<b>SAFETY &amp; HEALTH</b>	Establishes our objective of zero workplace injuries and occupational illnesses and benchmarks to evaluate our performance. The policy also addresses the implementation of safety and industrial health audits at our operations on a regular basis.
<b>SUPPLIER CODE OF CONDUCT</b>	We believe in doing business only with suppliers and contractors who demonstrate the highest standards of ethical business conduct. The Supplier Code of Conduct is based on the PBC and outlines our expectations for suppliers.



FCX partnered with wildlife and habitat conservation groups to salvage and transplant nearly 750 agave plants in southern New Mexico and Arizona to support the federally endangered Mexican long-nosed bat, which are agave pollinators.

## Stakeholder Engagement

Freeport-McMoRan believes effective stakeholder engagement is founded on transparency and meaningful dialogue. Our goal is to foster mutual understanding, trust and cooperation with stakeholder groups on a variety of topics.

We have a broad range of stakeholders, including shareholders, employees, communities, customers and suppliers, regulators and policymakers, host governments, and nongovernmental organizations. We recognize the interests and concerns of our stakeholders can change over time. To learn about these changing needs and expectations, we believe ongoing and proactive engagement is imperative.

This dialogue strengthens our company by providing us access to our stakeholders' valuable perspectives on the topics that matter to them. These conversations inform our Board's decision-making, including on our policies, practices, programs and initiatives. These engagements are also an opportunity to share information about our strategy, practices and performance.

Responsibility for engaging with stakeholder groups is widely shared across the company and we engage through numerous

channels, with dedicated oversight from the CRC and SDLT. We maintain an ongoing, constructive and proactive shareholder and non-financial stakeholder engagement program through the year.

In 2019, at the corporate level, the company engaged with organizations ranging from sustainability analyst firms, financial institutions, nongovernmental organizations, governmental institutions, industry groups and civil society organizations regarding our sustainability programs and performance. At our operations, we regularly engage with local and regional community stakeholders, development institutions and civil society organizations. Our community engagement takes a variety of forms including community foundations, our formal grievance systems, community liaison officer interactions, workshops, participatory group panels, town hall meetings and specific surveys. We believe that effective stakeholder engagement can help reduce sustainability-related risks and enable us to continue to deliver positive contributions to society. For more information on our stakeholder engagement, please visit our [website](#).



# Voluntary Memberships & Commitments

Freeport-McMoRan is a member of numerous industry associations and we are involved in various organizations that provide a platform for advancing sustainability. We recognize the importance of collaboration with other thought leaders to help drive change and progress, and we believe regular engagement with stakeholders is fundamental to our own success. Through this work, we are able to listen to the views of a multitude of stakeholders, while also forming industry agreements and positions on our responsibilities across ESG issues and throughout the value chains to which we contribute.

Together with our internal policies, these commitments or engagements enable us to take meaningful action for our industry and our operations. The table below outlines our participation in a selection of these initiatives and external standards. For additional reporting of our memberships, please refer to the sustainability section of our [website](#).



The International Council on Mining & Metals (ICMM) is an organization dedicated to a safe, fair and sustainable mining and metals industry. As a member company, we are required to implement the 10 Mining Principles and produce an externally verified sustainability report in accordance with the Global Reporting Initiative (GRI) Standards Core option and the G4 Mining and Metals Sector Supplement, subject to the ICMM Assurance Procedure. FCX was a founding member of the ICMM in 2001.



The International Copper Association (ICA) brings together the global copper industry to develop and defend markets for copper and to make a positive contribution to society's sustainable development goals. FCX has been a member since its inception in 1989.



The United Nations Global Compact (the Compact) is a voluntary, corporate sustainability initiative of CEO commitments to implement universal sustainability principles and to support UN goals. FCX became a supporting member in March 2020.



The United Nations Guiding Principles on Business and Human Rights (UNGPs) are the global standard on business and human rights, providing a blueprint for companies to prevent and address the risk of adverse human rights impacts related to their business activities. FCX updated its Human Rights policy to include a commitment to the UNGPs in 2015.



The Extractive Industries Transparency Initiative (EITI) is the global standard to promote transparent and accountable governance in the extractives sector. FCX has endorsed and been committed to the EITI since 2008.



The The Voluntary Principles on Security and Human Rights (VPs) is a multi-stakeholder initiative that promotes implementation of a set of principles that guide companies in providing security for their operations in a way that respects human rights. The VPs are the guidelines for our security programs. FCX was a founding member of the VPs in 2000 and remains an active member today.



The United Nations Sustainable Development Goals (SDGs) are the UN agreed priority areas for global sustainable development between 2015 and 2030. We seek to make a positive contribution to the goals in the communities where we operate as well as with the commodities we produce.



The Task Force on Climate-related Financial Disclosures (TCFD) is an organization established by the Financial Stability Board to develop a set of recommendations on climate-related financial risk disclosures to be adopted by companies. FCX is committed to working towards TCFD alignment in its climate reporting.



The Wildlife Habitat Council (WHC) is a non-profit organization that promotes and certifies habitat conservation and management on corporate lands through partnerships and education. We have been a member of the WHC since 2006.

# Defining Responsible Production

Freeport-McMoRan is Foremost in Copper. Critical to this is our role in setting the benchmark for Responsible Production in the industry. Being a Responsible Producer means integrating sustainability in everything we do, everywhere, every day. This includes understanding the needs of our local and global stakeholders and working with institutions, partners and associations to innovate and drive change across the industry. We do this by identifying the commitments that will move the industry forward and enable us to make meaningful advancements at our operations and in our supply chains, such as the UNGPs and the VPs. Being a Responsible Producer also means purposefully working toward achieving the SDGs within our local communities as well as in our value chains. We work globally to translate these commitments to our business via the development of common industry frameworks.

## FRAMEWORK DEVELOPMENT

In 2019, we continued our work with both the ICMM and ICA to develop site-based sustainability frameworks that aim to provide greater assurance and transparency to stakeholders while continuously improving conditions at our operations.

Following comprehensive engagement with stakeholders, ICMM membership approved and published 38 performance expectations in late 2019, designed to augment its long held 10 Mining Principles for sustainable development. These expectations, along with topic specific Position Statements

and assurance and validation requirements, define ICMM's membership commitments. The 38 performance expectations must be validated by a third-party at a site level, with annual activities published, including how expectations will be met where a site falls short.

Also in 2019, the ICA developed a continual improvement responsible production framework called the Copper Mark. This voluntary framework requires that copper producers undertake third-party assessments against their performance on 32 requirements across ESG issues. The Copper Mark framework currently is focused on copper producers at the beginning of the supply chain, but it intends to develop criteria for fabricators and component producers in the coming years with the goal of establishing a chain of custody for downstream companies, such as automobile and electronics producers.

While both frameworks are functionally equivalent, the Copper Mark is designed specifically for the copper industry and intends to grow to connect the entire value chain for copper over time. In both cases, Freeport-McMoRan played a key role in the development of the requirements. In 2019, ahead of ICMM's required timing and Copper Mark's launch, all FCX sites self-assessed against both sets of criteria and Cerro Verde underwent third-party validation.



Community agriculture support programs in Arequipa, Peru.

# The Risk Register

Being a Responsible Producer also means evaluating ourselves against our commitments at both a site and corporate level and reporting regularly to our stakeholders in a transparent manner.

In order to translate our commitments to our everyday work, we use our Sustainable Development Risk Register (the Risk Register) process globally to identify and prioritize sustainability risks and actions. Identified risks are mitigated using local and global topic specific management strategies. The Risk Register prioritizes the most significant risks that could have negative consequences to our business and our stakeholders across areas including health and safety, human rights, environmental management, community development, and economic impacts.

By doing so, the Risk Register enables teams to prioritize their work and uncover unidentified risks in addition to examining new opportunities that can further drive our commitment to sustainable development. For example, the nature of the issues present at a mine in an arid region versus a tropical region are different as are the issues present at a location with political instability versus those in a location with stability. We work collaboratively to implement our various commitments, and use of the Risk Register allows management teams to tailor their site-level priorities, while ensuring the overall implementation is consistent globally.

## IMPLEMENTATION OF THE RISK REGISTER

The corporate Sustainable Development department works with subject matter experts globally to develop and maintain the Risk Register, updating it with new topics as they become relevant and working hand in hand with operations' team members so that prioritization processes are consistent with corporate procedures. The risks included in the Risk Register are mapped from our commitments to enable the Risk Register to be the focal point of internal and external assurance at both the corporate level and operating sites. In 2019, we updated the Risk Register to include all 38 Performance Expectations as well as Copper Mark requirements. We have also mapped the SDGs to the Risk Register to support identification of challenges and opportunities to progress our contribution across the goals.

Being a Responsible Producer means integrating sustainability in everything we do, everywhere, every day

## 2019 INTERNAL EVALUATION PROGRESS

In 2019, we developed a tool to assess our sites globally against both the updated ICMM Principles and Copper Mark frameworks to determine areas of strength and improvement. This process set the stage for focus in several key programs discussed later in this report, including, but not limited to: continuing UNGP implementation through stronger management systems, continuing human rights impact assessments and training, developing a long-term climate change strategy, strengthening our ambition with regards to biodiversity, improving our approach to building trust with indigenous peoples, and deepening our approach to supply chain due diligence.



## THE COPPER MARK

The Copper Mark is an assurance framework developed to demonstrate the copper industry's responsible production practices and contribution to the United Nations SDGs – beginning with SDG 12, Responsible Production and Consumption. The Copper Mark goes beyond compliance and focuses on continuous improvement of responsible production as well as the industry's contribution to advancing other United Nations SDGs beyond SDG 12. The Copper Mark sets the overall objectives for the industry as a whole and drives continuous improvement so that copper producers can improve the lives of their colleagues and neighbors, strengthen the communities where they do business, and increase the value delivered to customers and their consumers. Following its initial launch and expansion of participants, the Copper Mark intends to develop a chain of custody system and begin taking applications from downstream companies such as fabricators. Find out more at [www.coppermark.org](http://www.coppermark.org).





## Economic Value Contributed

We contribute to the wealth and prosperity of the countries, regions and communities where we operate by generating economic value that includes tax and royalty payments, local hiring and procurement, and community investments. Mining is an inherently cyclical business with production levels and profits fluctuating over the life of the mine, which can impact our social investments and other sustainability programs.

In 2019, Freeport-McMoRan's direct economic contributions totaled \$13.6 billion, which includes \$9.6 billion in payments to suppliers, \$2.4 billion in employee wages and benefits, \$1.0 billion in payments to providers of capital, \$415 million in taxes, royalties and other payments to governments, and \$100 million in direct community investments. We also made payments of \$2.7 billion for capital expenditures. Please refer to our 2019 Annual Report for more detailed information on our financial performance and to page 38 of this report for more information on our 2019 community investments.

### 2019 SUMMARY OF KEY ECONOMIC CONTRIBUTIONS BY OPERATING REGION

FOR THE YEAR ENDED DECEMBER 31, 2019 (\$ MILLIONS)	NORTH AMERICA <sup>1</sup>	SOUTH AMERICA	INDONESIA	EUROPE	OTHER COUNTRIES	TOTAL
Payments to suppliers	\$3,864	\$1,589	\$1,709	\$2,416	\$11	\$9,589
Employee wages and benefits	\$1,475	\$446	\$406	\$103	\$5	\$2,435
Payments to providers of capital:						
Dividends and distributions	\$291	\$73	\$9	—	—	\$373
Interest	\$423	\$156	\$25	\$40	—	\$644
(Refunds from) payments to governments <sup>2</sup>	(\$242)	\$65	\$583	\$4	\$5	\$415
Community investments	\$46	\$9	\$43	\$2	—	\$100
<b>Direct economic contributions</b>	<b>\$5,857</b>	<b>\$2,338</b>	<b>\$2,775</b>	<b>\$2,565</b>	<b>\$21</b>	<b>\$13,556</b>
Capital expenditures <sup>3</sup>	\$970	\$256	\$1,369	\$56	\$1	\$2,652

1 Includes parent company results.

2 Excludes employee payroll taxes, dividends, property taxes and certain other taxes, which are included in payments to suppliers and dividends. A reconciliation to the 2019 Cash Payments to Governments schedule on page 19 can be found on Freeport-McMoRan's website.

3 Includes costs for capital projects, which include additional payments to suppliers, employee wages and benefits, payments to providers of capital and payments to governments, not included in the payments to government line in table above.

Note: These amounts were derived primarily from FCX's publicly reported segment data. For disclosure of FCX's segment data in accordance with generally accepted accounting principles (GAAP), see FCX's 2019 Form 10-K pages 159 – 165.

# Performance Targets

2019 TARGET	2019 PERFORMANCE	2020 TARGET
<b>GOVERNANCE</b>		
Comprehensive training on PBC, including annual certification of management-level employees	✓ All employees were trained in 2019, including a 100% certification rate of management-level employees	Comprehensive training on PBC, including annual certification of management-level employees
Train 90% of selected employees on anti-corruption laws, regulations and company policies and procedures	✓ In 2019, 100% of the employees selected to participate in the online training completed the course	Train 90% of selected employees on anti-corruption laws, regulations and company policies and procedures
<b>SOCIAL</b>		
<b>HEALTH &amp; SAFETY</b>		
Incur zero fatalities	✗ We regret to report 3 work-related fatalities occurred in 2019	Incur zero fatalities
Total recordable incident rate (TRIR) <sup>1</sup> of 0.73	✗ At 0.74 for 2019, we did not meet our target TRIR	Target of TRIR of 0.70
<b>HUMAN RIGHTS</b>		
Incur zero gross human rights <sup>2</sup> violations at our operations by employees and contractors	✓ We did not incur any gross human rights violations at our operations caused by employees or contractors	Incur zero gross human rights violations at our operations by employees and contractors
<b>WORKFORCE</b>		
Increase the percentage of women, including representation in managerial roles, to 15%	✗ Women comprise 13% of our employee population and hold 12% of all managerial positions	Increase the percentage of women, including representation in managerial roles, to 15%
<b>COMMUNITIES</b>		
Invest (in aggregate) 1% of the previous 3 years' annual mining operations revenue in community programs (\$166 million in 2019)	✗ Approximately \$100 million was invested in community programs across our operations (\$66 million below our 2019 target)	Invest (in aggregate) 1% of the previous 3 years' annual mining operations revenue in community programs (2020: \$165 million)
<b>ENVIRONMENT</b>		
<b>ENVIRONMENTAL EVENTS</b>		
Incur zero significant environmental events <sup>3</sup>	✓ We did not incur any significant environmental events	Incur zero significant environmental events
Incur zero penalties in amounts exceeding \$100,000	✓ We did not pay any individual penalties exceeding \$100,000 in 2019	Incur zero penalties in amounts exceeding \$100,000
<b>CLIMATE</b>		
N/A	● N/A	Publish climate report in 2020
N/A	● N/A	Achieve 15% reduction in CO <sub>2</sub> e <sup>4</sup> per ton of copper cathode produced in the Americas by 2030, on a 2018 baseline
<b>WATER</b>		
N/A	● N/A	Publish water stewardship report in 2020

<sup>1</sup> TRIR = [(Fatalities + Lost-Time Incidents + Restricted Duty Incidents + Medical Treatment) x 200,000]/Total Hours Worked.

<sup>2</sup> Gross Human Rights Violation – There is no uniform definition 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.

<sup>3</sup> Significant environmental event is defined as a consequence rating of 3 or higher on our Risk Register.

<sup>4</sup> CO<sub>2</sub>e = carbon dioxide equivalent.

Note: All performance targets are annually recurring and company-wide, unless otherwise noted.



## BUSINESS INTEGRITY

Freeport-McMoRan is committed to the highest level of ethical and legal conduct in all of our business activities. Acting ethically involves more than simply complying with laws and regulations. It involves recognition that our decisions affect others. By keeping this in mind, we aspire to earn the respect, trust and confidence of our stakeholders.

### Anti-Corruption

Freeport-McMoRan maintains zero tolerance for corruption of any kind, and we expect the same from our employees, contractors and suppliers. Freeport-McMoRan does not obtain a business advantage through bribery, improper payments, kickbacks or any other illegal means. No employee or contractor may offer, pay, solicit or accept bribes in any form or under any circumstance, including facilitation payments. In addition, payments to government officials are forbidden.

Our Anti-Corruption Policy and Guidelines require compliance with the United States Foreign Corrupt Practices Act (FCPA) and other applicable laws of the countries and jurisdictions where we operate. We recognize that any violation of the FCPA or other anti-corruption laws of jurisdictions where we operate could result in significant criminal or civil fines and penalties, litigation and loss of operating licenses or permits, as well as significant reputational risk.

In addition to our annual PBC training, we provide mandatory annual anti-corruption training for specific groups of employees using a risk-based approach. For example, senior-level employees who may interact with government officials are required to complete the training. The online training course supplements our classroom training programs to extend the reach of our overall compliance efforts.

In recognition of the potential legal and reputational liability that could result from actions of our business partners and contractors under the FCPA and other laws, the company implements an online due diligence platform, the Freeport Compliance eXchange (FCeX). FCeX is a survey-based software platform designed to assess risk in the areas of anti-corruption, international trade and human rights. FCeX has enhanced our ability to identify, assess and mitigate compliance risks.

Annually, we perform company-wide audits with the assistance of our internal audit firm, Deloitte, to assess risk and plan for the following year's audit strategy. Formal fraud risk assessments have been implemented at Atlantic Copper, El Abra, Cerro Verde, PT-FI and our corporate offices and mapped with business controls, which are tested and reviewed annually.





Acting ethically involves more than simply complying with laws and regulations, it involves recognition that our actions affect others

Ore crusher at the Grasberg Block Cave underground mine in Indonesia.



## Political Engagement

Freeport-McMoRan is committed to the highest level of ethical and legal conduct regarding its political activity and spending practices, and to rigorous compliance with applicable laws and regulations.

We recognize that public policy decisions can significantly affect our operations, future business opportunities, employees, shareholders and the communities where we operate. For this reason, we exercise our right and responsibility to participate in public policy matters by following public matters that are important to us and interacting, where appropriate, with elected and appointed government officials, regulators and their staff.

We are a member of various trade associations and other organizations that provide information and assistance with policy issues of concern to the company. When we fund a trade association, we do so because we believe the association generally represents our best interests, although importantly, we may not support an association's position on every issue.

In addition to operating in the United States, we have significant operations in Chile, Indonesia, Peru and Spain. We work cooperatively with local, regional and national governments wherever we have operations. From time to time, issues may arise in these jurisdictions that affect our operations. With concurrence from senior management, we may engage in dialogue with government officials on issues that affect our business goals and objectives, and the jobs that are thereby created. We only engage in non-partisan political activity and spending outside of the United States as permitted by, and in strict compliance with, applicable laws and regulations, including the FCPA.

The company's political activity and spending practices are overseen and approved by senior management. Annually, the Board's CRC reviews our political activity and spending practices. Our political spending also is subject to legal review and external audit.

Our practice is to make information concerning all political contributions available to our stakeholders annually by posting our political contributions to the sustainability section of our company [website](#).



Lone star open-pit development in Arizona.



# Transparency of Government Payments

Freeport-McMoRan operations contribute significantly to national, regional and local development through payments to host governments via taxes, royalties and other financial obligations. Increased transparency of natural resource revenues and payments promotes better governance and accountability regarding the distribution of natural resource revenues.

The Extractive Industries Transparency Initiative (EITI) is a global standard to promote transparent and accountable management of natural resources. Freeport-McMoRan has endorsed and committed to support the EITI since 2008. This support includes direct financial contributions from the company as well as contributions through the ICMM of which we are a founding member. Freeport-McMoRan maintains significant mining operations in Indonesia and Peru, both of which are EITI-implementing countries, and we actively support and participate in associated in-country processes.

In addition to our country-level EITI commitments and regulatory reporting obligations, our practice is to voluntarily report cash payments to governments in all jurisdictions where we conduct business, as presented in the table below.

## CASH PAYMENTS TO GOVERNMENTS<sup>1</sup>

FOR THE YEAR ENDED DECEMBER 31, 2019 (\$ MILLIONS)	U.S.	CHILE	PERU	INDONESIA	OTHER COUNTRIES <sup>2</sup>	TOTAL
Corporate Income Taxes, Net of Refunds	\$(267)	\$14	\$22	\$448	\$9	\$226
Withholding Taxes on Foreign Dividends	\$1	\$2	\$5	\$35	\$1	\$44
Employee Payroll Taxes <sup>3</sup>	\$343	\$10	\$54	\$80	\$27	\$514
Dividends	-	-	-	-	-	-
Royalties and Net Severance Taxes	\$25	\$1	\$28	\$135	-	\$189
Property Taxes	\$74	-	-	\$68	\$2	\$144
Other Taxes and Fees <sup>4</sup>	\$42	\$15	\$55	\$196	(\$13)	\$295
<b>Total</b>	<b>\$218</b>	<b>\$42</b>	<b>\$164</b>	<b>\$962</b>	<b>\$26</b>	<b>\$1,412</b>

<sup>1</sup> This schedule reflects a voluntary effort by Freeport-McMoRan to capture its cash payments to governments (net of refunds).

<sup>2</sup> Represents cash payments to governments by Freeport-McMoRan's other business groups that are located outside of the countries where Freeport-McMoRan conducts its primary operations.

<sup>3</sup> Includes payroll taxes collected on behalf of employees and paid to governments.

<sup>4</sup> Includes customs and export duties, as well as withholding tax on foreign services.

**>70%**  
of the world's  
copper is used in  
applications that  
deliver electricity<sup>1</sup>

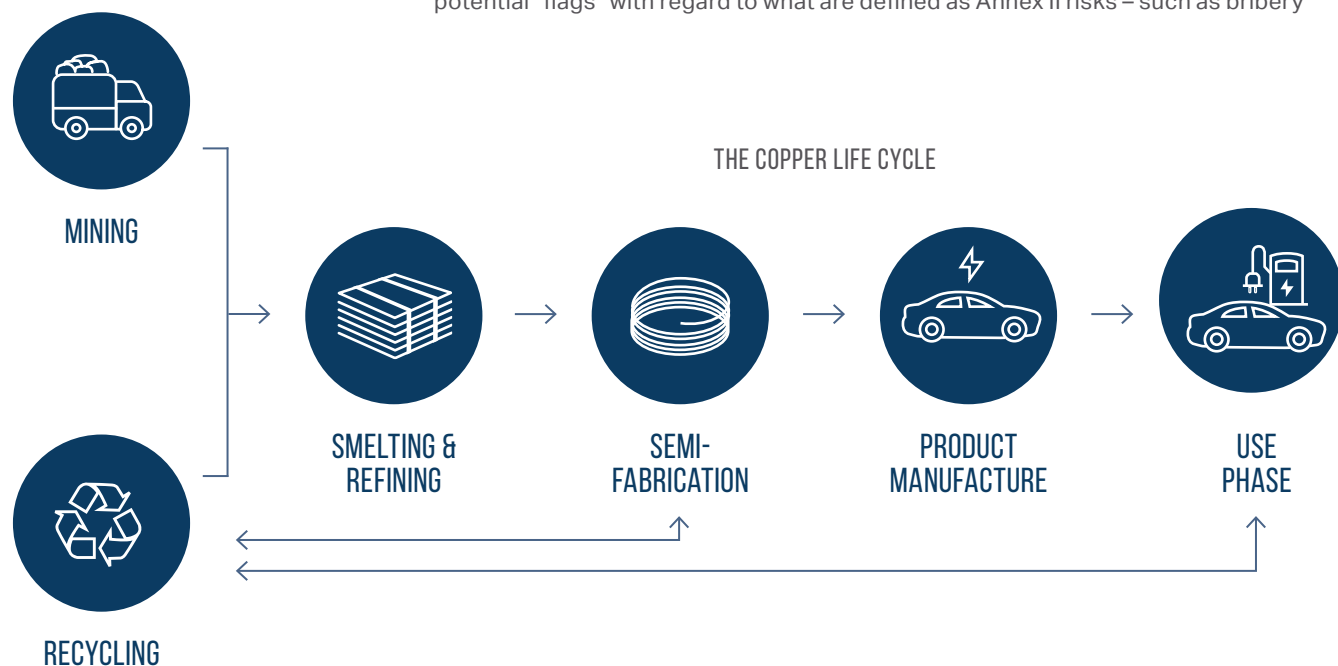
## Responsible Value Chains

Over 70% of the world's copper is used in applications that deliver electricity. This makes copper a crucial contributor to the energy transition and a decarbonized world. As the energy transition continues, copper use is expected to increase in electric vehicles and their charging stations, renewable energy technologies such as solar and wind, as well as the necessary connections for these technologies to grids. The increased copper demand should not come at a cost to sustainability. As one of the world's largest copper producers, we understand that we play a critical role in this transition and we work hard to responsibly deliver our copper to customers and markets around the world. We do this in three key ways: (1) through our own responsible sourcing efforts, working to identify and mitigate risks in our supply chains; (2) managing the risks of our products and by-products in use by ensuring these risks are well understood and managed; and (3) working to better understand the full life cycle impacts of our products along the value chain.

### RESPONSIBLE SOURCING OF MINERALS & METALS

In 2019, we adopted and published our new Responsible Sourcing of Minerals Policy, which commits the business to identifying and mitigating human rights violations in our supply chains of minerals and metals used in our downstream processing facilities. The policy describes how we implement the Organization of Economic Co-operation and Development (OECD) Guidelines on Mineral Supply Chains in Conflict Affected and High Risk Areas in our supply chain of minerals and metals. It is critical to address the requirements of the new London Metals Exchange Policy on Responsible Sourcing, where we trade several of our products. It is also a requirement of both the ICMM Mining Principles and the Copper Mark. While we had previously implemented a similar policy at our Kokkola cobalt refinery in Finland, in 2019, we began extending this focus to the rest of the business with a first priority on our two copper smelters where we buy concentrates and other mineral bearing materials.

To do this we assess our incoming metal and mineral supply chains to identify potential "flags" with regard to what are defined as Annex II risks – such as bribery



<sup>1</sup> Copperalliance.org



and corruption, trafficking, and child or forced labor – by the OECD Guidelines. We then go through a risk-based due diligence process to help us better understand these “flags.” These results then are reviewed by the applicable internal committee and appropriate actions are taken. Actions can include working together with the supplier to identify and implement an action plan, termination, and general collaboration to build capacity. In 2019, one supplier was eliminated from our supply chain, and due diligence was initiated for several more.

In 2020, we will begin implementing the program in the molybdenum business and will strengthen training globally to help improve our management system. For a complete report on these activities, please see our [website](#).

## RESPONSIBLE SOURCING OF GOODS & SERVICES

Our Supplier Code of Conduct and compliance screening processes are the foundation of our responsible sourcing program for goods and services. This is a significant task, as it equates to over 20,000 suppliers that provide a wide breadth of goods and services – from small catering businesses in remote locations to large multi-nationals that produce heavy machinery. In 2019, we continued strengthening this approach by developing a more advanced risk and data-based responsible sourcing framework.

Our work on this framework in 2019 focused on updating our screening systems for identifying risks across suppliers. This included working to update supplier questionnaires used in our FCeX process as well as subscribing to country-level risk indices. It also included selecting a new enterprise software that supports the new Responsible Sourcing framework.

In 2020, we will be implementing this system along with the updated screening process to: (1) enable efficient risk assessment, which includes identification and management of risk, (2) track progress against any required action plans, and (3) support collaboration with our suppliers. As we continue to implement the Responsible Sourcing framework in 2020, we also will focus on improving visibility of local spend and increasing opportunities for local suppliers where feasible.



Electrowinning at our operations in El Abra, Chile.

## HOLISTIC ASSESSMENT OF OUR VALUE CHAINS

In 2019, we continued our work to update our Life Cycle Assessments (LCA) of cobalt and molybdenum. LCAs enable us to contribute meaningfully to the global dialogue on the circular economy and the energy transition by providing comprehensive data on the environmental aspects of our products to stakeholders, such as industry associations or customers. This data supports industry associations in their development of industry averages, which are useful for larger studies conducted by regulators and researchers that capture the use of our products in downstream applications such as power cables and automobiles. The data is also useful to customers who are evaluating sourcing options. Internally, LCAs help us better understand the positive and negative impacts of changes in technologies and mine plans on environmental issues such as climate change and local air pollution. Over the next two years, we will utilize these studies to assist in more advanced climate change assessments.

**20,000+**

suppliers provide a wide breadth of goods and services – from small catering businesses in remote locations to large multi-nationals that produce heavy machinery

### SUPPLIER DUE DILIGENCE ENGAGEMENT





# Compliance Line

Among other reporting mechanisms, Freeport-McMoRan maintains a Compliance Line to provide guidance and assistance to workforce members with any questions or concerns related to our PBC, policies or procedures. To encourage our workforce to report potential violations of business conduct, our Compliance Line enables anonymous reporting. The Compliance Line also is available to suppliers (including contractors) through our Supplier Code of Conduct.

During 2019, 285 reports were made through the Freeport-McMoRan Compliance Line relating to various topics, including employee workplace conduct, environment, health and safety, protecting company assets, and conflicts of interest. All reports are investigated and, if substantiated, the appropriate disciplinary action is taken, up to and including termination of employment.



The El Abra open-pit copper mine in Northern Chile.



## PEOPLE

At the core of our business is people. At each of our operations, Freeport-McMoRan aims to be a preferred employer, neighbor, business partner and supplier. We are committed to responsibly managing our social impacts on people, which includes focusing on the health, safety and security of our workforce and host communities and respecting the rights of people who may be impacted by our business.

Freeport-McMoRan's global workforce is the foundation of our company's success. Our workforce is passionate about supporting the communities where we live and work and making a positive impact in the world.

In the communities where we operate, we aim to work in partnership with our local stakeholders to understand their needs and support them in developing their own sustainable futures. We are deeply committed to supporting the health and well-being of our host communities, including the indigenous peoples near some of our operations, by supporting education, health, capacity building and economic development.

Our various global policies – Community, Safety and Health, Human Rights, and PBC – and our commitments as a founding member of ICMM collectively outline our expectations for helping to protect, support and champion people in a sustained manner. Freeport-McMoRan believes that when people are empowered to make decisions to determine their own future – whether it be our workforce or communities – we can transform tomorrow together.





We are committed to responsibly managing our social impacts, which include focusing on the health, safety and security of our workforce and host communities

Human rights training event at Cerro Verde, Peru.



# Health & Safety

## WHY IT MATTERS?

Mining by its nature is associated with high-risk work that must be carefully understood and managed. On a daily basis, our workforce engages in activities such as drilling and blasting rock, operating heavy machinery, using chemicals, working with high voltage electricity, working at heights, working with high temperature materials as well as other complex tasks. At Freeport-McMoRan, our highest priority is the health, safety and well-being of our employees, contractors, suppliers and the communities where we operate. We understand that the safety of our people is critical to our operational success and efficiency and ultimately to our ability to deliver long-term value to our stakeholders.

## OUR APPROACH

At the foundation of our sustainability approach – and one of our core values – is safety. Our objective is to achieve zero workplace fatalities and to decrease injuries and occupational illnesses. We are committed to providing a safe and healthy workplace and providing the training, tools and resources needed so our workforce can identify risks and consistently apply effective controls. We share information about potential fatal events, near misses and best practices throughout the company and engage with industry peers to continuously improve our health and safety performance.

During 2019, we developed a refreshed health and safety strategy and slogan, Safe Production Matters, to globally align priorities, empower safe work behaviors and strengthen our safety culture. We are focused on fatality prevention through the use of data and technology as well as behavioral science principles. We have identified key focus areas we believe will have the most positive effect on our health and safety success today and in the future. The strategy is being rolled out company-wide in 2020.

## Policies & Programs

- **Safety and Health Policy** – States our commitments, processes and management systems to meet our health and safety objectives.
- **Contractor Health and Safety Manual** – Defines the minimum expectations and requirements for contractors working at our operations.
- **Occupational Health and Safety Management System** – Our framework for managing risks and compliance obligations is certified in accordance with the internationally recognized Occupational Health and Safety Assessment (OHSAS) 18001 Standard. OHSAS requires third-party site-level verification of requirements, with a goal to prevent fatalities and reduce incidents. This standard is being replaced with the new ISO 45001 Health and Safety Management System, and company-wide conversion currently is expected to be complete in 2021.

Our Vice President of Health and Safety oversees safety in the organization, including implementation of company-wide initiatives, safety audit programs and incident investigations. Safety performance is reported regularly to executive management. The Board's CRC reviews adherence to our safety and health policy, safety statistics and trends, and incident reports and provides input on the overall direction of the company's health and safety programs.



El Abra workforce in Chile.

## COPPER & PUBLIC HEALTH: METAL OF THE FUTURE

The COVID-19 global health pandemic has spotlighted the substantial antimicrobial properties of copper. The same properties that make copper a good conductor of electricity also enable it to kill microbes effectively. Because copper has a free electron in its orbital shell, it easily takes part in oxidation-reductions, or redox, reactions. These properties enable copper to reduce, and in certain cases significantly diminish, the transmission of bacteria, viruses and other pathogens in health-care or general public settings. In a hospital, this can be the difference between a patient leaving healthy or acquiring an additional illness while admitted. The World Health Organization estimates that globally over \$80 billion is spent on hospital acquired infections every year. Copper can play an important role in reducing these infections, an important contribution to sustainability. Learn more at [www.copper.org](http://www.copper.org).



Fatality Prevention

Our Fatal Risk Management (FRM) program is aimed at achieving our objective of zero workplace fatalities by focusing on preventative measures. As part of the program, we seek to identify potentially fatal risks in the field and apply the controls most critical for avoidance. To date, we have identified 23 potentially fatal risks common to some or all of our operations and placed highly visible fatal risk icon placards at work areas where these specific risks are present.

Our FRM program is underpinned by our culture of Safe Production and leading by example at all levels of the organization. We expect every employee to take ownership of their own safety and the safety of their co-workers and the community around them. Our front-line supervisors play a vital role in reviewing assigned tasks for each shift and assisting crewmembers with identifying potentially fatal risks and ensuring everyone on the job is engaged and understands the hazards and required critical controls.

We regularly verify and audit our critical controls to assess their proper use and effectiveness. Critical control verifications prioritize high-risk tasks that rely more on behaviors than engineered controls and provide immediate leading indicator data to strengthen our FRM program as well as our overall health and safety system. We use a mobile platform that guides verifiers through a checklist to validate critical controls are in place and effectively implemented for a task with exposure to a fatal risk. The system captures any variance with our critical controls and allows us to create action plans to address these gaps.

Fatal Events

Regrettably, we incurred three fatal injuries in 2019: two from a single event at our Grasberg operation in Indonesia and one at Tyrone in New Mexico. In 2019, one fatality occurred related to a 2018 incident at our Chino operations in New Mexico (included in 2018 statistics per the date of the injury per U.S. Mine Safety and Health Administration (MSHA) requirements). While we have a strong culture of safety at all levels of our organization, these incidents underscore that we must do better.

To facilitate learning from fatal and potentially fatal events (PFE) and to help prevent reoccurrence, we conduct an investigation that includes a root cause analysis for every incident. Findings, including pre-incident failures and post-incident corrective actions, are formally shared across the organization. When a fatality or PFE occurs, we review the incident with senior management and site senior leadership to understand what happened, take corrective action as appropriate, and discuss opportunities for company-wide improvements. We also review and discuss all fatalities with the Board and the CRC.

Anyone on the job is expected to **STOP WORK** immediately if critical controls are missing, deemed ineffective or if an unsafe working condition exists

2019 WORKPLACE FATALITIES*			
PT-FI Papua, Indonesia	TYRONE New Mexico, USA	CHINO New Mexico, USA	
Two employees were inundated with wet muck and killed when a mud rush occurred in an ore bin at the Grasberg open pit.	A contractor was fatally injured when a relief valve failed during the installation of hydraulic jacks to lift a mine shovel.	An employee was seriously injured in a 2018 event when the man lift failed while working on an electronic shovel. The individual passed away in 2019.	
			* 2019 fatalities included one fatality related to an incident that occurred in 2018 at our Chino operations in New Mexico. The individual passed away in 2019, and the incident was not reported in 2018 due to this timing. Per U.S. MSHA regulations, the fatality has been retroactively accounted for in 2018 statistics.

We are pleased to see a continued downward trend in the number of high-risk safety incidents

## HEALTH &amp; SAFETY PERFORMANCE DATA

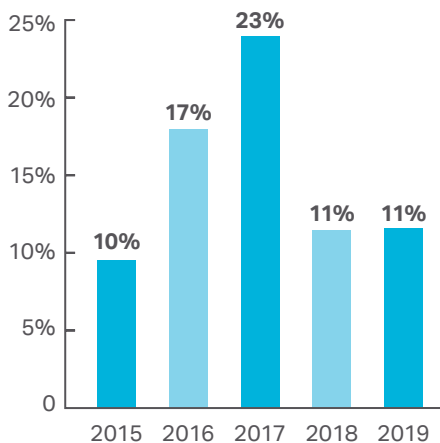
	2015	2016	2017	2018	2019
Total Recordable Events	535	474	445	466	526
% High Risk <sup>1</sup>	10%	17%	23%	11%	11%
Total Recordable Incident Rate (TRIR) <sup>2</sup>	0.61	0.72	0.76	0.71	0.74
TRIR Annual Target	0.56	0.56	0.63	0.70	0.73
Number of Fatalities <sup>3</sup>	3	6	5	1	3

<sup>1</sup> Our Sustainable Development Risk Matrix defines high-risk events as incidents that have the potential to result in permanent disabilities or a fatality.

<sup>2</sup>  $TRIR = [(Fatalities + Lost-time Incidents + Restricted Duty Incidents + Medical Treatment) \times 200,000] / \text{Total Hours Worked}$ .

<sup>3</sup> 2019 fatalities included one fatality related to an incident that occurred in 2018 at our Chino operations in New Mexico. The individual passed away in 2019, and the incident was not reported in 2018 due to this timing. Per U.S. MSHA regulations, the fatality has been retroactively accounted for in 2018 TRIR.

Note: Our safety statistics include both employees and contractors at all of our locations. We define total recordable incidents according to the requirements of the U.S. Department of Labor's Mine Safety and Health Administration (MSHA).

TOTAL RECORDABLE EVENTS  
% HIGH RISK<sup>1</sup>

<sup>1</sup> Our Sustainable Development Risk Matrix defines high risk events (incidents that have the potential to result in permanent disabilities or a fatality).

## PERFORMANCE

We measure our safety performance through regularly established benchmarks, including our company-wide Total Recordable Incident Rate (TRIR), which includes employees and contractors. In 2019, we worked 142 million hours and recorded 526 reportable injuries during the year, compared to 131 million hours and 466 reportable injuries in 2018. Our 2019 TRIR was 0.74 per 200,000 man-hours worked, missing our 0.73 target for the year.

Part of the reason for the increased total reportable injuries and TRIR is due to low-energy events such as sprains and strains at certain North American sites, which has been a trend for the last several years. In 2019, we implemented an Industrial Athlete Program to help address and prevent the low-energy incidents through the promotion of pre-shift warm-ups. The voluntary program is designed to support our workforce in staying healthy and fit for duty.

Conversely, we are pleased to see a continued downward trend in the number of high-risk safety incidents, which reflects our sharp focus on workplace tasks with the highest potential consequences and critical control implementation to minimize risk and prevent fatalities. In an effort to better understand and define the spectrum of our high-risk recordable incidents, in 2017, we added an additional category to our risk matrix to quantify high-risk events as either "actionable" or "monitor." While we have always been focused on high-risk events, this change resulted in elevating more incidents to a higher level, which drove increased action items to help prevent reoccurrence. This explains the increase in high-risk events in 2017, and the subsequent improvement in 2018 and 2019, as the action items implemented supported the decreasing number of high-risk incidents.



# Human Rights

We are  
committed  
to respecting  
the rights of  
all people

## WHY IT MATTERS?

Human rights are internationally recognized, defined in the Universal Declaration of Human Rights and codified in international law. Mining activities have the potential to impact the way people enjoy these rights – whether as employees, contractors, suppliers, community members, human rights defenders or others. Freeport-McMoRan recognizes that respecting human rights, as outlined in the UN Guiding Principles on Business and Human Rights (UNGPs), is an expectation of stakeholders that can influence our social license to operate and affect market access for our products. Not only does it make good business sense – treating people with respect is simply the right thing to do.

## OUR APPROACH

Respect is a core value for Freeport-McMoRan. We are committed to respecting the rights of all people, including our employees, contractors and suppliers, community members, and others who may potentially be impacted by our business activities. We take this obligation seriously in all aspects of our business, and we expect the same of our business partners.


Not only is our responsibility to respect human rights a business imperative, we also believe it represents a unique opportunity. We aim to promote human rights through proactive engagement with host governments and communities and by providing training to our employees and contractors. Our corporate level Human Rights Working Group supports our site-level implementation of the UNGPs.

We participate in multi-industry dialogues on respect for human rights including Business for Social Responsibility's human rights working group, Sustainability 50's executive-level, peer-to-peer collaboration forum on human rights, ICMM's Community Support Working Group, and the Voluntary Principles on Security and Human Rights (VPs). These external initiatives, together with local and international-level stakeholder engagement, influence our human rights approach.

## Policies & Programs

- **Human Rights Policy** – States our commitments to the Universal Declaration of Human Rights, the UNGPs and the VPs.
- **Supplier Code of Conduct** – Based on our PBC and sets forth our expectations for suppliers and contractors in areas such as safety, human rights, anti-corruption, community and environment. The company has incorporated standard language on human rights into our contract templates.
- **Responsible Sourcing of Minerals Policy** – Adopted and published in 2019, commits our business to identifying and mitigating human rights violations in our supply chains of minerals and metals for our downstream processing facilities.

Application of our Human Rights Policy is supported by our PBC and other core policies (Anti-Corruption, Community, Environmental, and Safety and Health). These policies and supporting management systems along with relevant external standards and initiatives form the overall framework that guides our sustainability programs and management of human rights risks.



Construction of the  
underground rail system  
at the Grasberg Block  
Cave in Indonesia.



Please refer to the **Human Rights** section of our website for more information on our overall human rights approach, including how we are managing salient human rights topics. We always are open to direct engagement with stakeholders on our human rights approach.

## PERFORMANCE

We developed a dashboard of human rights issues related to our operational activities to frame our UNGPs implementation. The dashboard reflects the scope of our potential human rights risks and impacts. Each dashboard topic is mapped to specific human rights to support a comprehensive, rights-driven approach.

As we seek to further embed respect for human rights across our organizational activities, we use our Risk Register process to identify the risks to people at each operation and address potential and actual impacts on rights-holders. This process is informed by ongoing stakeholder engagement, grievance management and the results of human rights impact assessments (HRIAs).

HRIAs are the primary way we conduct specific human rights due diligence at our operations. Our HRIAs are supported by Verisk Maplecroft, a third-party global risk analytics and advisory firm, using a methodology aligned with the UNGPs. They involve direct input from a broad cross-section of internal and external rights-holders and support continuous improvement of our management systems by testing their effectiveness in identifying and addressing potential, actual and perceived human rights risks and impacts. Our Human Rights Dashboard defines the scope of these assessments.

The responsible sourcing programs we are advancing also support human rights due diligence for suppliers of both goods and services and minerals and metals for further processing.

## HUMAN RIGHTS DASHBOARD

Topics reflected in the dashboard are mapped to recognized international human rights

### CORPORATE HUMAN RIGHTS BENCHMARK

In 2019, the CHRB assessed Freeport-McMoRan's human rights program and performance and ranked us 6th among 200 of the largest publicly traded agricultural, apparel, extractives and ICT manufacturing companies, 1st among all North American companies assessed, and 3rd among all global extractives assessed. Learn more at [www.corporatebenchmark.org](http://www.corporatebenchmark.org).

EMPLOYEES	VALUE CHAIN	COMMUNITY	ENVIRONMENT	THIRD PARTIES
Working conditions	Working conditions	Standards of living / quality of life	Pollution	Conduct of private security forces
Safe and healthy working conditions	Safe and healthy working conditions	Community health and safety	Water security	Conduct of government security forces
Discrimination	Discrimination	Economic activity / livelihoods	Waste and hazardous materials management	Contribution to conflict
Freedom of association and collective bargaining	Freedom of association and collective bargaining	Minorities and indigenous peoples	Increased exposure to natural hazards	Presence of artisanal / small-scale miners
Child labor	Child labor	Displacement / resettlement		Corruption
Privacy	Privacy	Cultural heritage		NGOs and civil society groups
Forced and compulsory labor	Forced and compulsory labor	Children's rights, including access to education		Judicial system (access to remedy)



## VOLUNTARY PRINCIPLES ON SECURITY & HUMAN RIGHTS (VPs)

The VPs serve as guidelines for our security and human rights programs, including interactions with host government police and military personnel and private security contractors. Our annual reports to the Voluntary Principles Plenary are available on our website and include country implementation details for Indonesia and Peru, our higher risk jurisdictions for security and human rights matters.



Cerro Verde improves irrigation and access to clean water to support farming in Arequipa, Peru.

## AMERICAS

- Following completion of a site-level HRIA in 2018, our Chino and Tyrone operations in New Mexico commenced implementation of action plans to address priority risks and impacts during 2019.
- In 2019, we also initiated implementation of an HRIA at our El Abra operation in Chile. An initial desk-based assessment of human rights risks and impacts was conducted, however field work, initially scheduled for November, was deferred due to social unrest throughout the country. We are deferring field work until conditions warrant.

## INDONESIA

- In 2019, PT-FI continued its Human Rights Ambassador program. Launched in 2018, the program provides representatives from contractor companies with "train the trainer" instruction on human rights and the VPs. Those trained are responsible to serve as Human Rights Ambassadors within their respective companies, promoting awareness of PT-FI's human rights policy, emphasizing shared responsibility in respect for human rights and delivering annual human rights training for their company's workforce conducting work in the PT-FI project area.
- During 2019, PT-FI also conducted a project development sustainability review for the construction of its new smelter in Gresik, Indonesia. This review process supports the integration of sustainability considerations into development or expansion project phases and is designed to help multi-disciplinary project teams identify risks, unintended consequences, trade-offs and opportunities – including those relating to human rights and security – so they may be addressed early and through each stage of project development.

## GRIEVANCE MECHANISMS & REMEDY

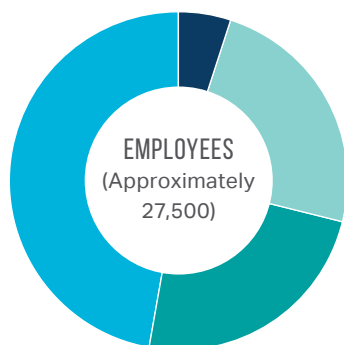
While we seek to avoid causing and contributing to adverse impacts on individuals and communities, we acknowledge that they may occur. We are committed to providing for or cooperating in remediation of adverse impacts that are caused or contributed to by our business activities.

We have established grievance mechanisms for employees, community members, and members of our supply chain and others to report concerns. These mechanisms help us address concerns early and remediate impacts directly. The ICMM's updated good practice guidance on Handling and Resolving Local-level Concerns and Grievances, together with input from employees, community members and their legitimate representatives, is informing updates to our community grievance mechanism.

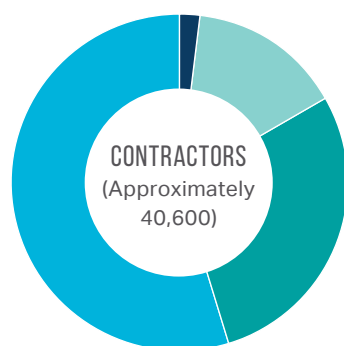
## Workforce

### GLOBAL WORKFORCE

(As of December 31, 2019)



North America	46%
Indonesia	25%
South America	24%
Europe/Other	5%



Indonesia	54%
North America	29%
South America	15%
Europe/Other	2%

### WHY IT MATTERS?

Freeport-McMoRan believes that diverse, inclusive and representative workforces offer a broad range of experience, knowledge, background, culture and heritage, which can drive innovation, enhance our operations and improve our relationships with stakeholders. We understand that our people are our greatest strength and are our competitive advantage. However, maintaining a skilled, stable and diverse workforce in the mining industry can be challenging due to the cyclic nature of mining tied to commodity price fluctuations, geographically remote operations, shifting local demographics, technological advances that are changing the way we work and competition for talent from both inside and outside of the industry.

### OUR APPROACH

Freeport-McMoRan operates in regions of varying ethnic, religious and cultural backgrounds, and we often are the largest employer in our local communities. A key to our success is the ability to recruit, retain, develop and advance talented employees with diverse perspectives. We focus on attracting and retaining talented people by offering quality employment with competitive compensation and opportunities for professional development. We are committed to fostering a culture that is safety-focused, respectful, inclusive and representative of the communities where we operate.

### Policies & Programs

Our PBC, Human Rights Policy, Supplier Code of Conduct and other core policies outline our company culture, our commitment to doing what's right, and the expectations for all employees and contractors. These policies are available in the local languages of the regions where we operate, and it is our expectation that our workforce understand and comply with our trainings, policies and procedures.

We respect the rights of our employees, including rights to freedom of association and collective bargaining and prohibiting forced, compulsory or child labor and human trafficking. We do not tolerate any form of harassment or discrimination against individuals based on race, color, sex, religion, national origin, disability, age, veteran's status or any other characteristic protected by applicable law.

### PERFORMANCE

At the end of 2019, Freeport-McMoRan's global workforce was comprised of approximately 27,500 employees and 40,600 contractors. The change from the prior year of 26,800 employees was due to personnel increases across our North America, South America and European operations. Our largest increase was at our Safford operations in Arizona due to the development of the new Lone Star mine.



For more information on our policies, please refer to the "Business Integrity" section of this report (page 16) and to our company [website](#).



## DIVERSITY & INCLUSION

At the end of 2019, 13% of our global workforce was represented by women, flat from 2018 levels. Representation ranges across geographies with a high of 19% in North America to a low of 7% in Indonesia, where we are faced with unique challenges.

We remain short of achieving our global target of 15% women representation in the global workforce. Women made up 21% of our global hires in 2019, helping to increase the female share of our workforce over its current level at 13%. However, the 2019 employee attrition rates among women (12%) remained higher than men (8%), demonstrating the challenge of not only attracting talented women into our organization, but also ensuring appropriate employee engagement, inclusion and career development efforts in order to retain our female employee talent.

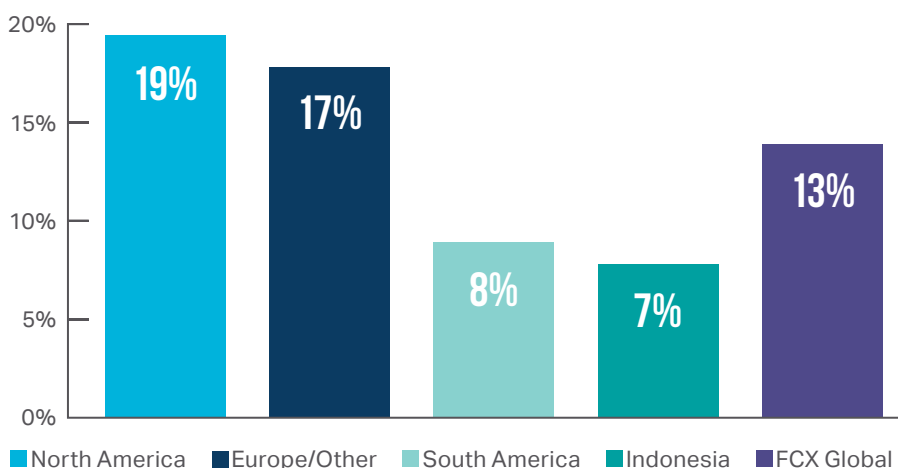
In 2019, we launched a global initiative to further strengthen our focus on diversity and inclusion in the workplace. Our initial focus areas include executive training and various human resource processes, including identifying more diverse applicant pools and measuring trends.

In 2019, we launched a global initiative to strengthen our focus on diversity and inclusion in the workplace

### WOMEN IN LEADERSHIP POSITIONS (%)

	2015	2016	2017	2018	2019
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%
<b>Total Workforce</b>	<b>11%</b>	<b>10%</b>	<b>12%</b>	<b>13%</b>	<b>13%</b>

### 2019 WOMEN EMPLOYED BY REGION (%)



Our 2019 Women's Development Day was attended by more than 200 employees from across our North American operations, providing an opportunity for networking and leadership development

#### Americas

- Our El Abra operation implemented Chile's voluntary gender equality and work-life balance ordinance to enhance gender equality in the workplace through various measures such as equal pay review, training employees on managing unconscious bias, providing personal protective equipment designed specifically for women, inclusive language and graphics in formal communications, and appropriate representation on hiring panels. A third-party audit of the management system was conducted in 2019, and the certification was awarded in 2020, making El Abra the first private mining company to receive this certification in Chile.

#### Indonesia

- At PT-FI, women comprise the majority of our trained MineGem workforce, running some of the most advanced robotic haulage technology in PT-FI's underground mines. Of our 51 remote equipment operators, 30 are women – half of which are Papuan women. Recruiting women into this role has provided additional opportunities as Indonesian law prohibits women from working in underground mines. With the use of this technology, PT-FI employees safely operate equipment hundreds of feet underground while working from an office building on the surface. The results have been positive, with women operators achieving higher productivity rates than their male colleagues.

#### LOCAL HIRING & SKILLS DEVELOPMENT

One of our greatest opportunities to contribute to local communities is through local employment and capacity building. Local employment directly contributes to the economic and social development of surrounding communities. Hiring locally also incorporates local cultures and knowledge into our company which can strengthen our programs.

Hiring locally is a commitment we make to the communities surrounding our operations and to our host countries. Most people employed at our operations are host country nationals. We retain expatriate expertise for managerial and technical roles only when it is not available in local communities. To further these efforts, expatriates receive cultural training upon their arrival to a new location. On average, expats represent less than 1% of people employed at our operations globally.

In 2020, we will be working to establish more robust identification and analysis of our local and national employment rates across our operations.



Kathleen Quirk, FCX Chief Financial Officer, with women remote equipment operators at the Grasberg underground complex in Indonesia.



## Americas

- In North America, we employ 440 Native Americans/Alaskan Natives which reflects a 55% increase in the last five years.
- Through collaboration with the San Carlos Apache Tribe, we created the San Carlos Training Institute in Arizona in 2012 to increase the skills and employability of local and rural workforces. The program curriculum ranges from heavy equipment operations and maintenance to electrical applications. Since the Institute's inception, 1,352 students have enrolled in the program, including 160 new students in 2019, and 318 graduates have been employed with the company. An additional 81 graduates have gained employment outside of the company. Through the end of 2019, enrollees had a 50% graduation rate.

## Indonesia

- Approximately 98% of PT-FI employees are Indonesian nationals, 40% of whom are indigenous Papuans. We continuously are investing in our local communities in Papua by implementing programs to support the development of their skills and employability.
- Our Papuan Sustainable Human Capital Development Program is designed to increase opportunities for indigenous Papuans to join our workforce directly or through contractors that support our operations. The program includes a three-week course to enhance life and work skills by teaching teamwork, behavioral safety and workplace compliance expectations. PT-FI also provides a monitoring and coaching program to support successful adaptation into the working environment. Through 2019, a total of 244 Papuans have completed the program and now are working with contractor organizations throughout PT-FI operations.

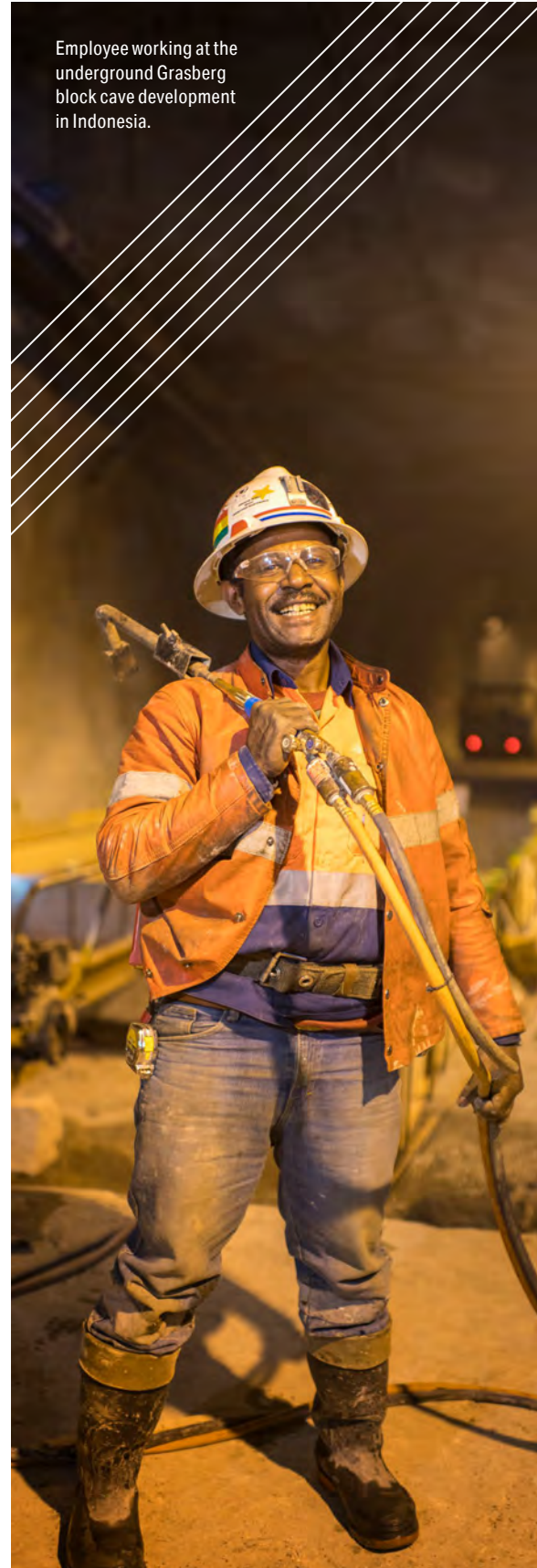
## EMPLOYEE ENGAGEMENT

We proactively communicate information to our employees. The feedback we receive through employee engagement helps us better understand our impact, assess emerging issues and address concerns in a timely manner. We engage with our employees through various communications channels including our company intranet, online collaboration tools, digital signage at sites, employee magazines, videos, surveys and access to formal grievance mechanisms.

In 2019, we implemented a new social media effort for our employees, communities and other stakeholders. We also introduced the Agile way of working at our Americas operations through our Americas' Concentrator initiative. Agile principles encourage everyone to take ownership and provide ideas and solutions at all levels of the organization, which supports improved internal communication, collaboration and ultimately increased productivity levels.

Our engagement efforts include organizational performance improvements using varying tools and processes to help our employees grow throughout their careers. We also offer courses to enhance the skills of current and future leaders in areas such as communication methods, mentoring and time management.

Employee working at the underground Grasberg block cave development in Indonesia.



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

## EMPLOYEE RETENTION

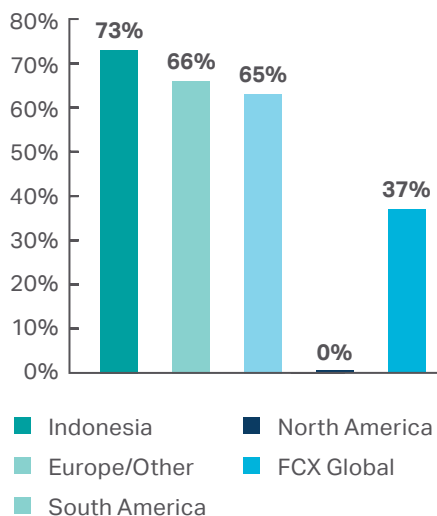
To help improve our understanding of workforce dynamics and changing trends, we track employee turnover, including voluntary resignations, involuntary layoffs and retirements. In 2019, our total employee turnover rate was 9%, an increase from 7% the year prior. In 2019, the increased turnover rate in Europe/Other was driven by the partial sale of our Cobalt business in Finland during the year, which also contributed to our higher turnover rate globally. The total turnover rate was 8% among male employees and 12% among female employees. Employees under the age of 30 had the highest turnover rate at 16%.

## LABOR RELATIONS

During 2019, we continued to maintain positive and collaborative relationships with the unions that represent our employees, working cooperatively with 15 unions in eight locations worldwide. Approximately 37% of our global employee population is covered by collective labor agreements (CLA). Our operations in Indonesia, Europe and South America are all covered by a minimum of 65% representation. In North America, our workforce is not represented by unions. Our hourly employees elect to work directly with company management rather than through union representation utilizing our Guiding Principles contract that all workforce members sign when joining the organization. It is a contract that sets out how we work together within the values of the company to achieve our collective goals. Most recently updated in 2018 with input from employees, the Guiding Principles include a problem solving process that complements our broader employee grievance mechanisms described above. It is a unique approach that adds significant value to both the workforce and the company.

We engage openly with our employee and union leadership to negotiate and uphold labor agreements, recognizing that prolonged strikes or other work stoppages can adversely affect our business, our workforce and regional stakeholders. There were no strikes or lockouts at any of our operations in 2019. Collective bargaining is conducted at locations of mutual agreement, with facility accommodations made onsite or in satellite offices for workers' representatives to assemble.

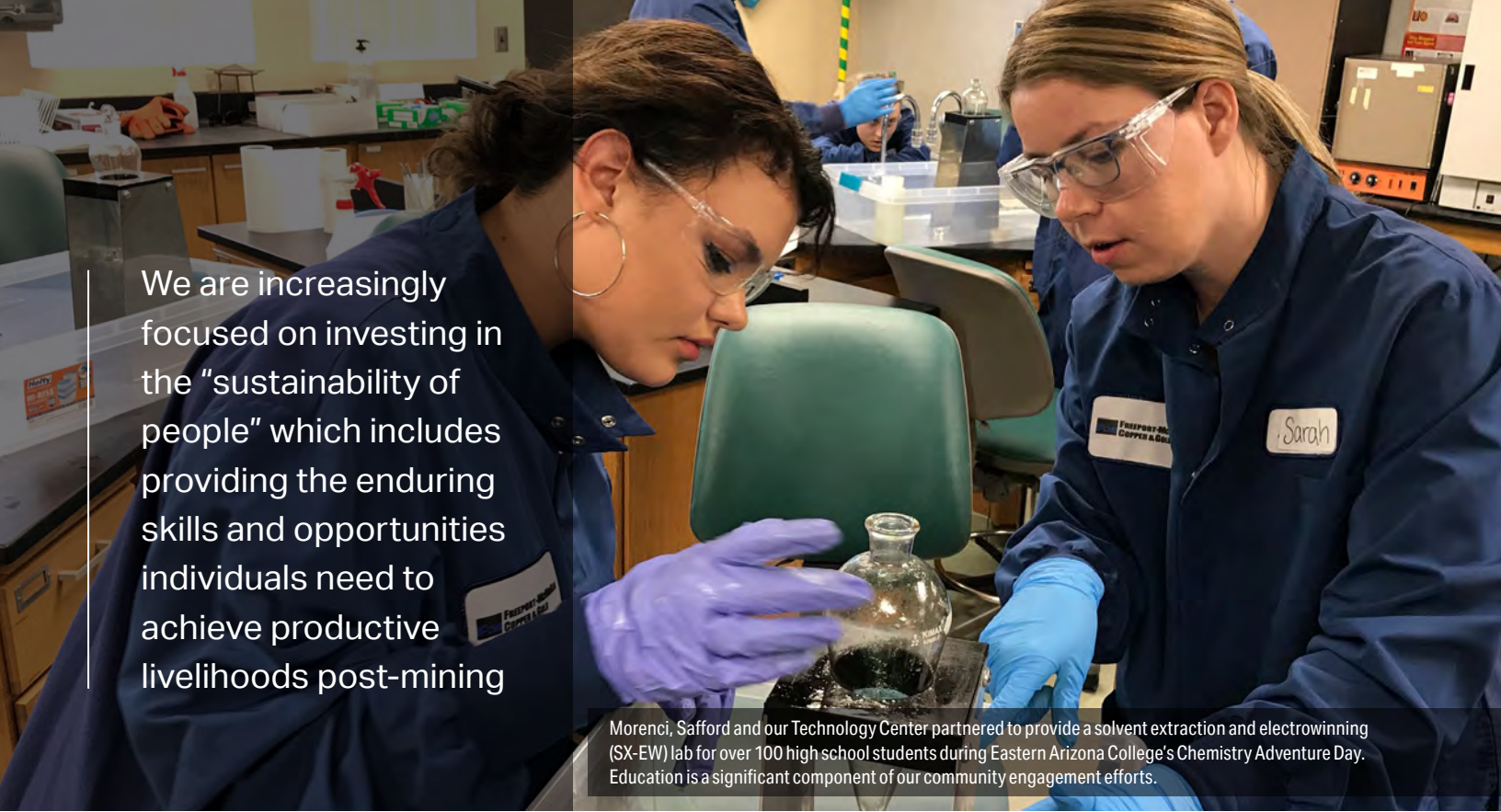
EMPLOYEES UNDER COLLECTIVE LABOR AGREEMENTS IN 2019



EMPLOYEE TURNOVER BY REGION & GENDER (%)

	2015	2016	2017	2018	2019
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%
<b>Total</b>	<b>9%</b>	<b>10%</b>	<b>28%</b>	<b>7%</b>	<b>9%</b>
Male	9%	9%	29%	6%	8%
Female	11%	17%	19%	9%	12%





We are increasingly focused on investing in the “sustainability of people” which includes providing the enduring skills and opportunities individuals need to achieve productive livelihoods post-mining

Morenci, Safford and our Technology Center partnered to provide a solvent extraction and electrowinning (SX-EW) lab for over 100 high school students during Eastern Arizona College's Chemistry Adventure Day. Education is a significant component of our community engagement efforts.

## Communities

### WHY IT MATTERS?

The relationship between a mine and local communities is dynamic. Mining is an inherently cyclical business with production levels and profits fluctuating over the life of the mine. While the majority of Freeport-McMoRan's assets are long-lived, mining resources are finite. We must aim to support our host communities during the entire life-cycle of the mine, not only managing and mitigating our impacts, but by providing sustainable benefits that will exceed the lifespan of our operations. Further, increasing automation and shifts in the global economy are changing mining methods, processes and labor requirements. Collectively, these challenges make it increasingly important for mining companies to work collaboratively with local communities to support them in developing the necessary skills and capacity to adapt and succeed over the long-term.

### OUR APPROACH

Freeport-McMoRan works actively through engagement, investment and partnership activities to support our host communities in maximizing the social and economic benefits of mining. Our work increasingly is focused on supporting our communities to develop the requisite skills to successfully adapt to technological and economic changes in the future in order to reduce their dependency on mining over the long-term. This includes building a foundation of resiliency during times of commodity market fluctuations or other economic disruptions after fluctuations that may have social impacts.

While each of our community programs are tailored to the site-specific dynamics of the operation and host communities, our overarching objectives in partnership with our local stakeholders are to: (1) build enduring trust, (2) minimize or mitigate any negative impacts from our operations while maximizing the benefits, (3) support our communities in building resiliency and citizen well-being over the life of the mine, and (4) develop the skills and capacity to thrive beyond the mine.

### Policies & Programs

- **Community Policy** – Mandates engagement and collaboration with local communities to minimize and mitigate unavoidable adverse impacts while maximizing opportunities to deliver value from our presence.
- **Engagement and Development Plans** – Each of our operating mine sites maintains a five-year community engagement and development plan, updated annually, which provides a strategic framework for their approach toward engaging with and providing development assistance to the communities and neighboring tribal stakeholders near our operations.

### Community Engagement & Social Investments

Early and ongoing community engagement and constructive dialogue is fundamental to understanding our actual, potential and perceived impacts, building trust, and identifying social investment and development priorities. Our regular engagement with communities and stakeholders helps to build a localized understanding of what contributes to community welfare, its sustainability and any gaps that might exist. It also enables us to share information about operational activities and facilitate dialogue.

Our community engagement takes place in a number of different formats depending upon the cultural context. The primary ways we engage with communities are through Community Partnership Panels in the U.S., Community Roundtables in South America and Community Development and Empowerment Teams in Indonesia. All three models focus on transparent communication and dialogue and are comprised of local leaders and citizens representing a broad range of stakeholder groups in each community. In addition to these engagement models, each operation engages with stakeholders frequently through situation or topic-specific meetings, presentations or community outreach office hours.

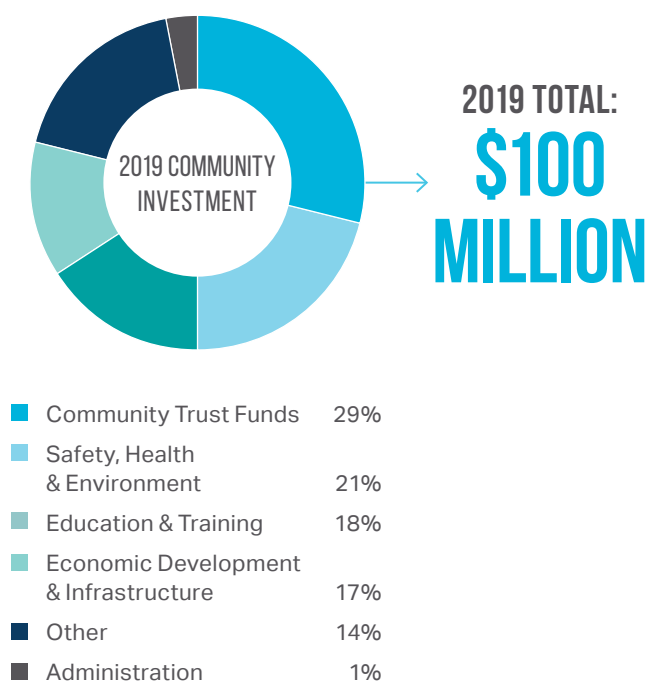
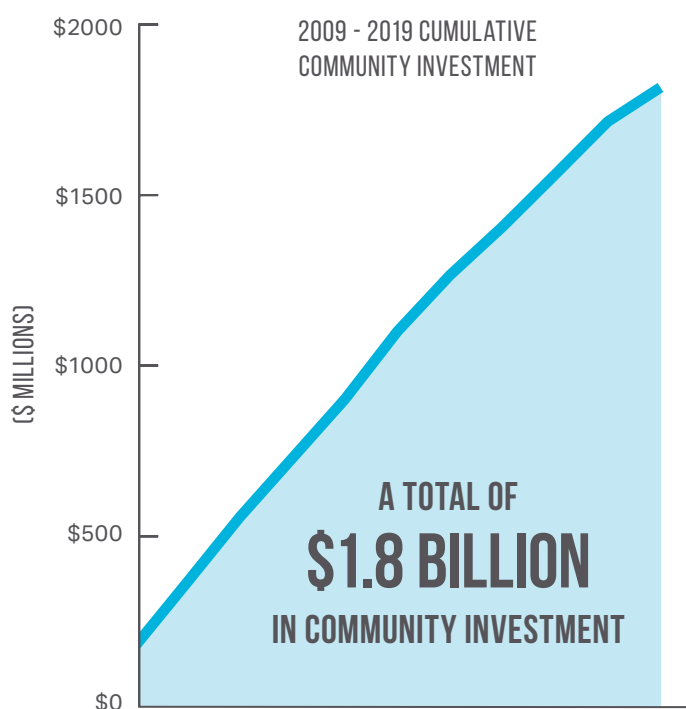
Our social investment programs are informed by our community engagement efforts and partner inputs and are focused on education, skills development and capacity building, safety and health programs, small-scale infrastructure, and identification and development of alternative economic opportunities. We increasingly are focused on investing in the "sustainability of people." This includes providing enduring and adaptable skills and opportunities individuals need to achieve productive

livelihoods, particularly post-mining, and to play a progressively active role in the future prosperity of their own communities.

### PERFORMANCE

We held more than 100 community engagement meetings through our formalized processes, such as Partnership Panels and Roundtables, and an estimated 600 additional engagements throughout the year. Our social investment programs are funded directly through each operation and the respective foundation or community trust funds we have established and maintain in the U.S., Chile, Peru and Indonesia. We believe communities understand their needs best, and we seek to continuously understand those needs through our ongoing engagement while also empowering them through community-led processes that direct our investments to the programs that meet their immediate and longer-term needs.

Annually, we seek to invest 1% of the averaged previous three years revenues into our community programs. Our revenues, and corresponding community investments, tend to vary year to year due to a variety of factors including the cyclical nature of the business. In 2019, Freeport-McMoRan invested \$100 million into social programs around the world, less than our 2019 target of \$166 million. Because the target is a lagging metric, it can remain high due to prior year revenues in the face of declining commodity prices that decrease revenue and community program spending in current or future years, which was the case in 2019. Over the last ten years, since we first established a community investment target, Freeport-McMoRan has invested more than \$1.8 billion dollars in community development initiatives.





In the U.S. alone,  
we invested over  
**\$5 MILLION**  
in programs that  
strengthened economic  
opportunity in our  
communities, with a  
particular focus on small  
business development



Participant in the Dreambuilders program in Peru.

## AMERICAS

### Community & Economic Development

- In 2019, we invested over \$3.6 million in economic opportunity and small business initiatives among our U.S. operating communities, and an additional \$1.5 million in projects to strengthen local systems that create a thriving business environment. The largest of our programs, DreamBuilder, a free, online entrepreneurship education and training program for women, continued to expand its reach. Now in its eighth year, we've helped train more 60,500 women across 90 countries, primarily the U.S., Chile and Peru where we operate, equipping them with the skills and confidence needed to become financially independent business owners.
- We continued our long-standing partnership with Local First Arizona, working with rural businesses to increase local spending, develop a process to attract new businesses and increase local tourism. In 2019, we launched a new pilot effort to provide loans to small business owners in Graham County who could not qualify for traditional bank loans. To date, the program has a 95% repayment rate and has encouraged the city of Safford to commit additional funds to expand the loan pool and stimulate small business growth.

### Education & Training

- Freeport-McMoRan and College Success Arizona (CSA) have partnered over the past five years to help students statewide leave college with a degree or certification in hand. This comprehensive system of support, encouragement and accountability is the reason more than 70% of CSA scholars graduate from college in six

years – a rate significantly higher than the 26% Arizona average. Approximately 70% of CSA scholars, particularly those from rural communities, are first-generation college students, and 85% are from low-income families. In 2019, we finalized an agreement with CSA to administer our scholarship program for Native American students from our partner tribes, a population with an even higher risk of dropping out, providing scholarship funds for tuition and the critical support needed to complete their college education.

### Health & Nutrition

- In Peru, anemia in children under five years of age is widespread, impacting intellectual and cognitive development. Cerro Verde's comprehensive nutrition program aims to contribute to the reduction of the anemia rate and increase nutrition education in our neighboring communities. In the Uchumayo district, we provide equipment, screenings, supplements and education in coordination with the health centers and schools. Through 2019, 55% of children under the age of 5 years old have been screened in our direct area of influence – the districts of Uchumayo, Yarabamba, Tiabaya, La Joya and Matarani Port – and to date we have seen a 9% reduction in childhood anemia rates.
- We also have trained over 80 public schools in the area of influence through our healthy lunchbox project, which promotes healthy eating habits in the educational community. In coordination with Peru's National School Food Program "Qali Warma," we support equipping kitchens and school canteens and educating mothers and food preparation committees on proper nutrition.

## INDONESIA

**Community & Economic Development**

- The Freeport Partnership Fund for Community Development (Partnership Fund) contributes 1% of annual PT-FI revenues for use in local community and indigenous peoples' development projects focused on health, education, economic development, training and small-scale infrastructure. PT-FI's 2019 contribution to the Partnership Fund was \$27.7 million, totaling more than \$825 million since its inception in 1996.
- During 2019, PT-FI completed a process to convert the management and organizational structure of the Partnership Fund into an Indonesian Foundation with the goal that the new foundation will eventually achieve financial and managerial self-sufficiency and strengthen the long-term effectiveness of PT-FI's social investments.

**Education & Training**

- Our Nemangkawi Mining Institute (NMI) in Papua, founded in 2003, has placed 2,764 apprentice graduates into full-time employee and contractor positions at PT-FI, 90% of whom are indigenous Papuans. NMI recently evolved its focus on upskilling Papuans to support their entry into the workforce anywhere in Papua for a sustainable future.

**Public Health**

- Malaria, HIV/AIDS and tuberculosis remain the most common infectious diseases that afflict our neighboring communities. Located in the lowland town of Timika, the Mitra Masyarakat hospital is PT-FI's flagship health initiative, funded through the Partnership Fund. The hospital has significant positive impacts on our neighboring communities by addressing these diseases. The hospital also provides Papua's indigenous populations – the Amungme and Kamoro as well as the five neighboring ethnic groups – Dani, Damal, Nduga, Mee and Moni (collectively known as the "seven suku") – with free, high-quality health care, including surgical procedures.
- PT-FI also works closely with the local Mimika government to support the provision of health services in the region through capacity building, construction of clinics and malaria control programs. With the goal of achieving greater independency and sustainability of public health care, PT-FI is working to hand over PT-FI-run public health infrastructure, services and best practices to the local Mimika government.

**COMMUNITY GRIEVANCE MECHANISMS**

To support constructive engagement and resolution of issues that may arise, we maintain site-level grievance mechanisms where community members can share their questions, concerns and/or complaints, outside of any other engagement forum. The community grievance mechanisms are part of our commitment to provide access to remedy. They also serve as an early warning system and help to manage and reduce potential risks by identifying and addressing problems before potential escalation into larger conflicts.

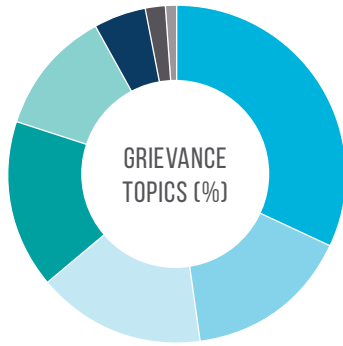






Local entrepreneur with his cacao crop in the Grasberg Mine project area in Indonesia.

## 2019 GRIEVANCES



Community Benefits	32%
Other	16%
Health & Safety	16%
Environment	16%
Land Rights	12%
Physical Damage	5%
Employment	2%
Indigenous Peoples	1%

*Other includes security, town site/housing and other grievances not listed above.*



United States	67
Indonesia	60
Chile	29
Peru	9
Europe	5

Our community grievance mechanisms are available in local languages, tailored to local cultures and allow us to document issues and concerns raised by local community members and respond in a timely manner. Grievances are typically received by community engagement team members in the field, through engagement at established company/community forums, in writing via physical drop boxes or via local telephone hotlines. Regardless of how they are received, they are reported to the site Community Grievance Officer, who relays the grievance to the relevant department for evaluation. Community engagement team members help investigate grievances and work with community members to acknowledge the grievance, address concerns, solve problems and mitigate or remedy impacts. For grievances with potentially high community impacts, senior management and applicable government authorities are engaged, as appropriate.

During 2019, our global operations recorded 170 community grievances in our web based management system predominantly regarding community benefits, environmental concerns, health and safety and land rights. This system allows us to track grievances, identify thematic trends, report resolutions and measure our performance.

The ICMM's updated good practice guidance on Handling and Resolving Local-level Concerns and Grievances, together with input from community members and their representatives, are informing updates to our community mechanisms anticipated for rollout in 2021. This guidance integrates the effectiveness criteria outlined in the UNGPs.

# Indigenous Peoples

## WHY IT MATTERS?

Indigenous peoples have been present for thousands of years in aboriginal territories around the world. These populations inhabit landscapes that collectively hold some of the world's most diverse people, languages, cultures and biodiversity. Freeport-McMoRan acknowledges that some indigenous peoples have historically occupied areas near our operations or have ancestral connections to these lands, and we are committed to engaging with these groups to establish and maintain long-term relationships built on transparency and trust that earns our social license to operate.

## OUR APPROACH

Freeport-McMoRan's local stakeholder engagement and social investment objectives include formal interactions with indigenous peoples in Papua, Indonesia; Native Americans in the United States; and the traditional communities of Alto El Loa in Chile.

Our approach aims to respect the social, economic and cultural rights of indigenous peoples, including supporting their effective representation and participation in engagements with our company. This approach includes adherence to the ICMM Position Statement on Indigenous Peoples and Mining and working towards obtaining free prior and informed consent for new projects and material expansions of existing projects. Through ongoing engagement, cultural promotion and preservation projects, as well as training and development programs, Freeport-McMoRan seeks to address needs while being sensitive to cultures and customs of indigenous people.

## AMERICAS

We continue to build our relationships with federally recognized Native American Tribes in the Southwestern United States, including the Hualapai Tribe, the San Carlos Apache Tribe, the Tohono O'odham Nation, the White Mountain Apache Tribe and other tribes that have historically occupied areas or have other ancestral connections to lands near our operations.

During 2019, we maintained our Native American College Scholarship Program, Dreamcatcher entrepreneurship training program and San Carlos Training Institute to support skills and education development for tribal students. Over the last eight years, 286 college scholarships have been awarded to tribal members through our scholarship program, and an additional 67 women entrepreneurs from our partner tribes and the Navajo Nation have been trained to start or grow small businesses on their respective reservations through Project Dreamcatcher. We also continued our Native American Partnership Fund that prioritizes funds to education and training, health and wellness, cultural preservation, economic development, and environmental protection and management programs.

In May 2019, due to our ongoing commitment to respect the cultural heritage of Native American tribes and to further our mutually respectful relationships with both the Tohono O'odham Nation and the Mescalero Apache schools, we were invited to support and participate in the Mescalero Apache school and Mescalero Apache families' annual pilgrimage to an area near our New Mexico operations to harvest agave for their cultural use and dietary purposes. We hosted a similar event at our Sierrita operations for Tohono O'odham community members.

Our El Abra mine in Chile operates in close proximity to Alto Loa, which is comprised of 12 indigenous communities. In 2019, we were actively engaged with 15 indigenous groups near the city of Calama, including relationships with seven new indigenous groups that obtained legal recognition during the year. El Abra also continued its indigenous peoples apprenticeship program established in 2017 to provide work experience for students that have completed their post-secondary education. Seven communities currently participate in the program, and through 2019, more than 110 employment positions have been filled by members of neighboring communities.





## INDONESIA

PT-FI has engaged with Papua's indigenous populations – the Amungme and Kamoro as well as the five neighboring ethnic groups – Dani, Damal, Nduga, Mee and Moni (collectively known as the “seven suku”) – for decades through multiple formal agreements that promote workforce skills training as well as health, education, economic development, public infrastructure development, and participatory monitoring and evaluation of PT-FI funded projects.

During 2019, PT-FI contributed over \$2.2 million to the Tiga Desa (Three Villages) Program and has invested over \$95 million since it was first established in 2000. The program has invested in various community infrastructure projects in the highland Amungme communities of Aroanop, Wa'a Banti and Tsinga, which surround the PT-FI project area.

In 2019, PT-FI continued its collaboration with the indigenous Kamoro lowland communities. As part of the levee extension construction necessary to maintain the safety of our controlled riverine tailings system, some of the traditional waterways used by the Kamoro have been impacted. We continued work with the Kamoro on the mitigation strategy, which includes regular passenger boats and bus services to improve access between coastal villages and Timika to support the development of economic livelihoods, health and education.

Our approach aims to respect the social, economic and cultural rights of indigenous peoples



The May 2019 cohort of Project DreamCatcher, an entrepreneurial training program for Native American women, celebrate their achievement.



# ENVIRONMENT

Freeport-McMoRan recognizes that the very nature of our business depends on and impacts the natural environment. Our goal is to conduct our mining and processing operations in a manner that minimizes adverse impacts on the environment and enables ecosystems to be protected and maintained through responsible environmental stewardship.

We believe that environmental protection and stewardship are the keys to ensuring the long-term viability of our business, including maintaining the necessary support from our host communities and governments. We are committed to sound environmental practices at all of our operations with a focus on continuous improvement.

Our workforce incorporates environmental awareness into their daily activities and implement actions necessary to protect the environment. This commitment is reflected in the highest level of our executive management and is one of the principal responsibilities of the Board's CRC, which provides oversight to management on the effectiveness of our environmental practices.

## POLICIES & PROGRAMS

Our Environmental Policy serves as the framework for the protection of natural resources in the regions where we live and work. The policy is based on our objective to be compliant with laws and regulations and to minimize environmental impacts using risk management strategies based on valid data and sound science. It requires that we review and account for the environmental effects of our activities throughout the mining life-cycle and that we plan and conduct our operations in a manner that optimizes the economic use of resources while minimizing the adverse environmental effects.

All of our mining and mineral processing operations and technology centers maintain Environmental Management Systems (EMS) certified to ISO 14001:2015. As part of the EMS, our workforce is trained on site-specific subject areas, receives annual environmental refresher training and is monitored closely and supported in the field by environmental professionals through our Boots in the Field program.

Site management teams identify, manage and mitigate environmental risks through our Risk Register and the use of environmental critical control systems designed to prevent significant environmental incidents from occurring at our operations. We maintain a strict focus on implementing critical controls to eliminate off-site releases and prevent impacts to water resources.

At the corporate level, we maintain subject matter experts (SMEs) who train, develop and support site teams, routinely conduct site visits and manage a group of site-based SMEs. Collectively, they are responsible for building technical expertise, ensuring consistency in our environmental programs and sharing best practices.



A full-page photograph of two men in a mangrove forest. They are wearing white hard hats, blue long-sleeved shirts, and high-visibility green safety vests. The man on the left is holding a clipboard and looking towards the right. The man on the right is also looking towards the right. They are standing on a muddy ground with many exposed mangrove roots. In the background, there are dense green mangrove trees. A teal-colored rectangular box is on the left side of the image, and a thin teal line runs diagonally across the top right. The text 'We are committed to sound environmental practices at all of our operations with a focus on continuous improvement' is written in white inside the teal box.

We are committed to  
sound environmental  
practices at all of our  
operations with a  
focus on continuous  
improvement

PT-FI environmental monitoring team surveys mangrove growth in the tailings deposition area in Indonesia.



## PERFORMANCE

The EMS at each of our operations are independently audited on an annual basis. During 2019, we also conducted internal environmental audits at nine operations, and our facilities were inspected by governmental regulatory agencies on approximately 210 routine occasions. Since 1996, an independent environmental audit has been conducted at PT-FI every three years, and the next audit is scheduled for completion in 2020, subject to global health conditions around the COVID-19 pandemic. An executive summary and responses to the most recent 2017 audit recommendations are posted on our [website](#). All operations have corrective and preventive action programs associated with the overarching EMS as well as audit and inspection findings.

For 2019, Freeport-McMoRan had two global environmental targets: (1) incur zero environmental penalties over \$100,000 on an individual basis, and (2) incur zero significant environmental events as defined in our Risk Register process. We met both objectives in 2019.

Fines paid in 2019 included two Notices of Violation (NOV) at Sierrita for dust events related to a tailings impoundment in 2018 (\$30,000) and one at Cerro Verde in 2007 (\$94,682). In addition, we funded a \$200,000 supplemental environmental project in 2019 associated with the Sierrita dust events.

Late in 2019, we had two new dust-related NOVs at Sierrita. Typically, when our operations receive a NOV from a regulatory agency, the citations involve brief and minor exceedances of permit conditions or other record-keeping violations, which have zero or minimal environmental impact.

We are committed to constantly improving our environmental performance across all of our operations. For example, in order to address the ongoing dust occurrences at Sierrita, which has been a challenge for the company, we have implemented additional control measures including the formation of a new tailings dust control management team, development of a wireless GPS system to track dust suppressant applications, and establishment of daily satellite imagery of the tailings facility.

## ENVIRONMENTAL COMPLIANCE INDICATORS

	2015	2016	2017	2018	2019
Reportable spills or releases of hazardous or toxic chemical <sup>1</sup>	15	33	25	17	33 <sup>2</sup>
NOVs related to permit exceedances, spills, releases or other compliance matters	2	5	5	13	6
# of Significant Environmental Events (as defined by the Risk Register)	–	–	–	1	–
Cumulative Environmental Penalties	\$43,000	–	\$317,000 <sup>3</sup>	–	\$124,682 <sup>4</sup>

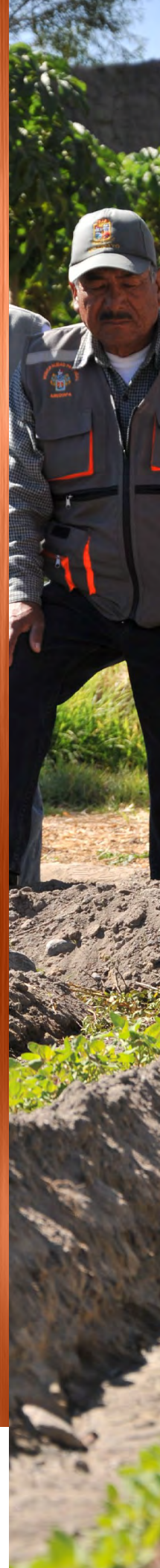
<sup>1</sup> Reportable spills excludes spills at PT-FI associated with pipeline sabotage. Due to increased security efforts, the number of sabotage-related spills reported at PT-FI decreased from 68 in 2018 to 16 in 2019.

<sup>2</sup> 2019 reportable spills included 14 releases of 75 kg (or less) of NH<sub>3</sub> or SO<sub>2</sub> at our Rotterdam molybdenum plant associated with malfunctions of the catalytic oxidizer.

<sup>3</sup> 2017 penalties paid were from NOVs at Cerro Verde in 2006 and 2008.

<sup>4</sup> 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 extended legal appeal process.

Note: As a result of methodology changes or corrections, prior year data may be updated.







# Climate

## WHY IT MATTERS?

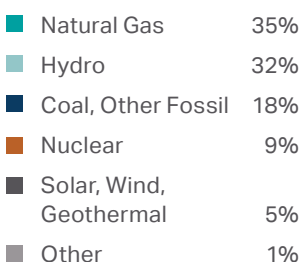
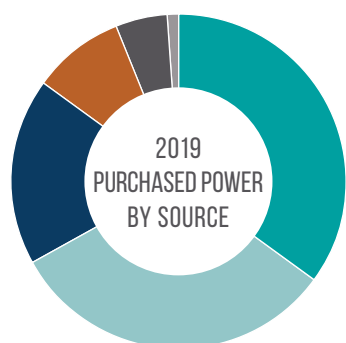
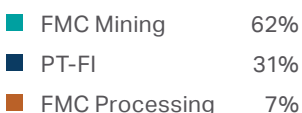
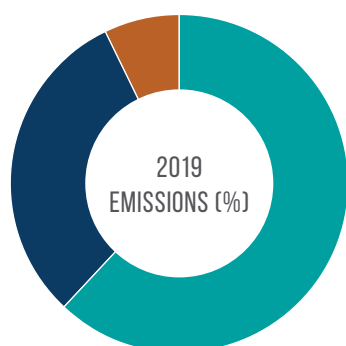
Freeport-McMoRan recognizes that climate change poses considerable near and long-term challenges for society and to our own financial and operational performance. Mining is energy-intensive and generates significant greenhouse gas (GHG) emissions that contribute to climate change. However, copper plays an essential role in the technologies necessary to develop and deliver clean energy, helping to transition the world to a low-carbon economy. We believe we have the opportunity to supply the world with responsibly produced copper, which includes operating in a way that manages and mitigates our GHG emissions and other climate-related risks.

## OUR APPROACH

Reducing emissions and improving our energy efficiency provides us with cost savings and environmental benefits within and beyond our operating boundaries. Particularly in the Americas, we have spent the last three decades focused on developing and implementing innovations across our mines and processes which have resulted in lower costs and enhanced energy efficiency.

As part of our ICMM membership, we are committed to implementing the ICMM Climate Change Position Statement requirements as well as the Performance Expectations at a site and corporate level as included in the Mining With Principals framework. These obligations include: implementing governance, engagement and disclosure processes, advancing site-level adaptation and mitigation solutions, engaging with host communities as well as others in value chain, monitoring and disclosing our Scope 1 and 2 emissions, and working towards more aligned reporting of Scope 3 emissions. We are also implementing the requirements of the Copper Mark, which include establishing and reporting on site-level GHG and energy metrics. Finally, we are committed to aligning our climate strategy and related disclosures with the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD) in the coming years. Concurrent with this sustainability report, we published our first stand-alone Climate Change report, based on these commitments. We have provided a brief summary of our climate change efforts in the following pages, and we encourage you to read the full report available on our [website](#) for more detail on our approach, historical performance, and strategy going forward.

In 2019, Cerro Verde continued to provide technical assistance to support agricultural productivity and cattle ranches in the region, completing more than 10,000 visits with 885 producers.



**70%**  
reused  
components

**465**  
rebuilt  
haul trucks



**150,000 & \$1 BILLION**  
metric tons  
GHGs avoided      new capital  
avoided

## PERFORMANCE

As shown below, our global annual absolute CO<sub>2</sub> equivalent emissions range between 8-10 million metric tons per year, with approximately 70% from our FMC operations (including FMC Mining and FMC Downstream Processing) and 30% from PT-FI in Indonesia. Our FMC emissions are dominated by Scope 2 emissions as a result of purchased electricity while PT-FI's are dominated by Scope 1 emissions, resulting from coal use to generate reliable electricity for our remote operations in the eastern Indonesian province of Papua.

### ANNUAL GHG EMISSIONS (METRIC TONS)

	2015	2016	2017	2018	2019
<b>FMC MINING<sup>1</sup></b>					
Scope 1	2,040,012	1,772,308	1,763,407	2,049,720	2,241,039
Scope 2 <sup>2</sup>	4,007,548	3,834,801	3,349,819	2,774,994	2,705,132
Total	6,047,560	5,607,109	5,113,226	4,824,714	4,946,171
<b>FMC DOWNSTREAM PROCESSING<sup>3</sup></b>					
Scope 1	275,451	240,647	239,102	254,961	264,083
Scope 2 <sup>2</sup>	428,875	366,260	341,298	389,827	337,937
Total	704,326	606,907	580,400	644,788	602,020
<b>PT-FI</b>					
Scope 1	3,384,208	3,082,180	2,528,388	2,935,480	2,464,261
Scope 2	–	–	–	–	–
Total	3,384,208	3,082,180	2,528,388	2,935,480	2,464,261
<b>FCX Total</b>	<b>10,136,094</b>	<b>9,296,196</b>	<b>8,222,014</b>	<b>8,404,982</b>	<b>8,012,451</b>

<sup>1</sup> FMC Mining includes Bagdad, Cerro Verde, Chino, Climax, El Abra, Henderson, Morenci, Safford, Sierrita and Tyrone.

<sup>2</sup> 2015-2017 Scope 2 emissions calculated using a location-based method; 2018-2019 Scope 2 emissions calculated using a market-based method.

<sup>3</sup> FMC Downstream Processing includes Atlantic Copper Smelter and Refinery, Bayway Rod and Wire, Ft. Madison Moly Special Products, Kokkola Cobalt Refinery, Miami Smelter and Rod, Norwich Rod, Rotterdam, Stowmarket and El Paso Refinery and Rod.

## AMERICAS

In 2019, we undertook a significant effort to analyze our GHG emissions in the Americas back to 2012. This work has enabled us to identify levers for change in the future and has reaffirmed our approach to asset optimization and processing innovation. Over the last decade, we have developed and implemented industry leading technologies for leaching of oxide ores, implemented step change crushing technologies that reduce energy demand by over 30% per metric ton of milled material and developed a new, highly efficient process for leaching sulfide concentrates that replaces traditional smelting and refining.

We also have implemented an asset management strategy where we rebuild engines, frames and truck beds, resulting in the reuse of approximately 70% of a typical haul truck. This net result is over \$1 billion in capital avoidance, and an estimated GHG emissions avoidance of 325 tons of CO<sub>2</sub> equivalent per truck, or more than 150,000 metric tons in the last decade.

In addition, the gradual decarbonization of country-level energy grids, combined with specific power purchase contract terms for renewables, allows us to maintain our focus on lowering operating costs while reducing the amount of GHGs emitted per metric ton of product.



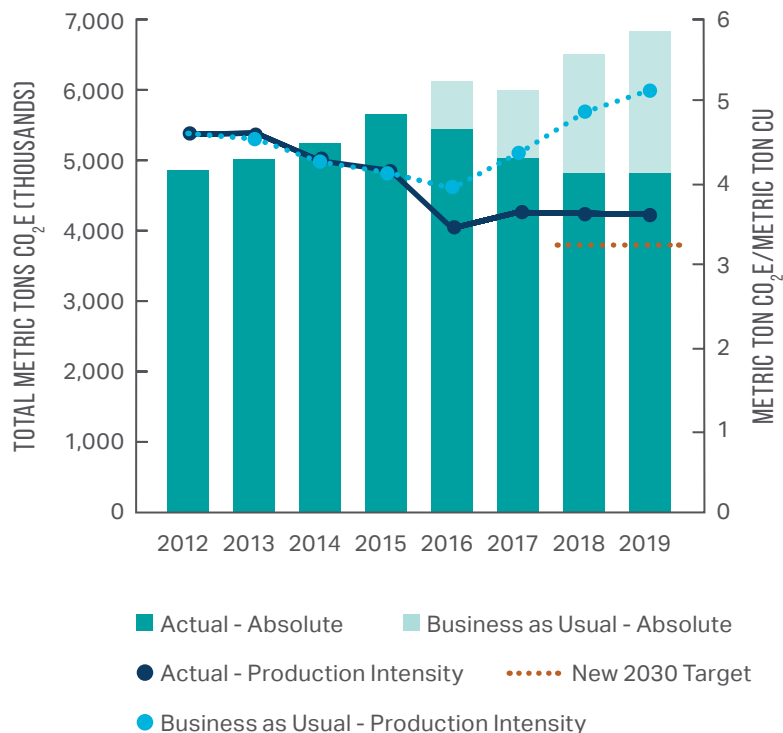
Between 2012-2016, ore grades at our operations decreased, requiring more ore to be both moved and processed to produce the same amount of copper. This resulted in emissions climbing during the period. However, we took the following actions which countered our increasing emissions trend:

- **2014-2016:** We installed new highly efficient milling technology at Morenci and at Cerro Verde, which enabled significant improvements in absolute emissions intensity as well as significant production gains at both sites.
- **2014-2019:** We saw a significant decrease in the carbon intensity of our electricity consumption due to Peru and Arizona grid decarbonization trends.
- **2018:** Advances in information allowed us to switch to a market-based approach for a significant portion of our delivered electricity, enabling us to reflect actual emissions versus estimates calculated using the standard published grid factors provided by regulators.

The graphic to the right illustrates both our absolute and intensity performance for our copper operations (excluding downstream of refining) and includes projections of what our performance would have been ("Business as Usual") in the absence of the above actions. On an absolute basis, our total GHG emissions for this part of the business remain stable at 4.8 million metric tons, which is 30% lower than our Business As Usual projections. On an intensity basis, Americas' performance has improved significantly with carbon intensity per metric ton of copper produced decreasing by 18% versus 2012 levels and 30% lower than Business as Usual.

Looking forward, we expect to achieve similar success as we did in the last decade. We have set a corporate target to achieve an additional 15% reduction in carbon emissions per metric ton of copper produced in the Americas by 2030, using a 2018 baseline. Over the next several years, the company will be focused on recovery from COVID-19 impacts by maintaining safe and financially viable operations as well as supporting the economic recovery of the communities where we operate. As business conditions allow, we will look for opportunities to invest in innovative mining and processing technologies as a means of working towards our 2030 emissions reduction goal, as well as to further develop our climate change strategy.

#### AMERICAS COPPER GHG REDUCTION PERFORMANCE



■ Actual - Absolute    ■ Business as Usual - Absolute  
● Actual - Production Intensity    ● New 2030 Target  
● Business as Usual - Production Intensity

CO<sub>2</sub>e = carbon dioxide equivalent.



On an intensity basis, our 2019 GHG emissions in the Americas are **30% LOWER** than projected due to successful innovations in mining, processing and reporting

Electricity from a 15 MW solar facility located at Bagdad powers approximately 5% of the site's operations.

### INDONESIA

PT-FI accounts for approximately 30% of total FCX emissions, and approximately 50% of the company's total direct, Scope 1, emissions. This is primarily related to its self-generation of coal-fired electricity for reliable power due to its extremely remote location. In 2017, we saw a significant reduction in emissions due to an export ban from Indonesia, which limited the amount of concentrate we were permitted to ship and required us to reduce production at site. In 2019, another significant reduction was experienced as a result of ramping down our open-pit operation during the transition to underground operations. Overall, while PT-FI's emissions have reduced over 27% since 2015, they are likely to increase somewhat in 2020-2021 as our transition to underground mining is completed and underground production levels normalize.

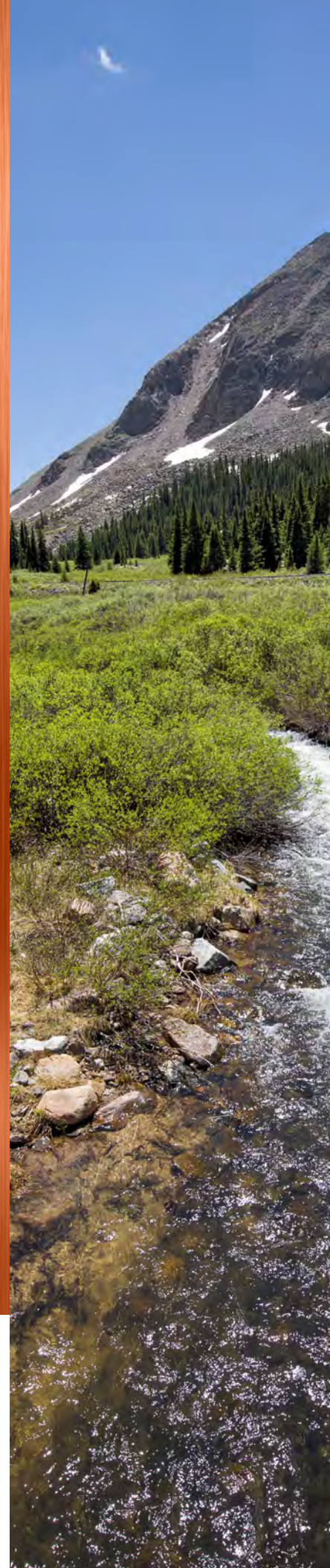
Electricity for our remote PT-FI operations in the eastern Indonesian province of Papua remains reliant on coal-fired power for electricity and alternative sources of energy are not currently reasonably available. PT-FI invests in projects to improve energy efficiency and engages on an ongoing basis to identify alternative sources of energy but the physical and economic challenges are significant. The Paniai Regency of Papua, which borders the Mimika Regency where PT-FI is located, holds the potential for large-scale hydropower projects and a significant natural gas resource is located in West Papua. Access to these resources or the development of renewable energy sources would enable PT-FI to shift to lower carbon electricity over the longer term.

### SUSTAINABLE ENERGY SOLUTIONS IN COMMUNITIES

In 2019, to enhance Indonesian family incomes and help to raise them above the poverty line in support of achieving the SDGs, PT-FI, Freeport-McMoRan and the Arizona State University's School of Sustainability implemented two sustainable energy activities in Papua, Indonesia.

The objectives of the first project were to reduce fish storage costs and improve quality by producing ice via a solar panel system. Sustainability of the activity relies on the participation of a local Catholic-affiliated cooperative, Maria Bintang Laut (MBL), that operates the system.

The Amungme and other indigenous groups grow, harvest, process and sell cacao with the assistance of local cooperatives to stimulate economic growth and reduce dependence on PT-FI. Cacao farmers were losing a sizable portion of their harvest during the drying stages because Papua is very humid and wet with limited amounts of direct sunlight. For the second project, the partners developed a simple, effective cacao greenhouse dryer constructed from local materials. This reduced losses and provided a simple sustainable solution requiring no electricity.







# Water Stewardship

## WHY IT MATTERS?

Access to safe water is a fundamental human right. Water is essential to the well-being of our communities and the environment and is necessary for our mines, smelters, processing facilities and reclamation projects. Many of our operations are located in arid environments where competition for water supply is significant. Although from time to time the PT-FI Highlands in Indonesia is also susceptible to lack of rainfall, management of excess water supply is the primary challenge. The unique circumstances at each of our operations reinforce the critical importance of managing the impacts of our activities on water availability and quality, optimizing our water utilization, and respecting the rights of others.

## OUR APPROACH

Freeport-McMoRan is dedicated to responsibly managing water resources. We recognize the importance of working collaboratively with stakeholders in order to secure access to water in a socially and environmentally responsible manner, and we are dedicated to continuous improvement of our water stewardship programs.

## Policies & Programs

While implementation varies depending on the site-specific circumstances of each operation, Freeport-McMoRan maintains an extensive global water management program designed to balance the needs of our operations with the needs of our communities and the sustainability of the environment and ecosystem. The goals are the following:

1. Improve water use efficiency in our processes
2. Minimize use of fresh water at our operations
3. Reduce our water footprint by transitioning to renewable or recycled water sources
4. Continually review water supplies and its impact on the surrounding community, environment and ecosystem, including possible impacts from climate change and other regulatory and legal changes

We are implementing the ICMM Water Position Statement, which outlines our commitment to responsible water use and public reporting. During 2020, we also plan to publish our first corporate water report to enhance our transparency and accountability of our water management.

Our Climax operations in Colorado reclaimed this area of the Arkansas river by restoring the river channel and revegetating the area from historical mining structures, and today, we continue vegetation monitoring to help inform future reclamation projects.

Water is essential to the well-being of our communities and the environment and is necessary for our mines, smelters, processing facilities and reclamation projects

### Water Use Efficiency

In order to efficiently manage water resources, we must understand water availability requirements. We have developed ground water and hydrologic (predictive) models to understand water availability at each of our sites. We also apply operational-based models to understand our utilization and inventory management requirements.

With this information we are able to identify opportunities to minimize water loss (such as evaporation or seepage), recycle and reuse water, and maintain compliance with water quality standards. Taken together, these ongoing studies inform our efforts to reduce our overall water utilization – including requirements for fresh water – where operational efficiencies and production requirements permit.

In addition to optimizing water use at our mining facilities, our water management practices are aligned with strategic objectives designed to maintain the safe operation and structural stability of our tailings storage facilities. As of 2019, our successful efforts in recycling water reduced our reliance on new freshwater needs to 18% of our total water demands.

### Water Footprint

To achieve a reduced water footprint at our operations, we continuously analyze the sources of our water and actively seek renewable and recycled sources. In 2019, we have made progress in achieving this management objective and actively are engaging with the ICMM Water Working Group and member companies to develop industry reporting metrics that enable us to communicate transparent and consistent water information to stakeholders. We also serve as a leading member of an international coalition conducting studies to bring desalinated water to the Southwest United States and are working with another international coalition to capture raw sewage and convert it into usable water. In 2019, the company was able to offset 63% of its fresh water needs in Arizona through recharging Colorado River water in areas of the state where water is needed.

### Water Quality Management

Monitoring water quality is an important component of our water management program, necessary to measure our impacts on surface and groundwater resources. We collect thousands of water samples each year across all of our operations. The samples are analyzed for various chemical and physical parameters either at our own certified laboratories or at independent laboratories. The results of the analysis are compared to historical data trends and applicable regulatory standards determine how we are impacting overall water quality. The results help us prioritize our efforts to protect water resources. During 2019, we collected and analyzed more than 19,000 water quality samples at our operations in the Americas.

### Stormwater Management

Preventing on-site and off-site impacts to water resources also is core to our water management program. Stormwater is actively captured, managed and contained on-site for operational use through various diversions, containment structures and dams. We are reviewing the potential for more frequent and intense precipitation events that could result in impacts to on-site and off-site water resources. This information will help us evaluate our capacity to route on-site water to areas with adequate storage capacity.

Each of our active mining and metals processing facilities evaluate climate-related risks and opportunities through the Risk Register process. This includes reviewing the potential for physical climate risks, including impacts on water supplies and quality, in order to reinforce the resiliency of revenue generating operations and support community well-being. In 2019, we had one significant weather event, which occurred at our El Abra operations in Chile in February when record rainfall in the nearby Andes Mountains caused flooding throughout the normally arid region. The floods resulted in a 21-day closure of our mine and significant damage to the communities throughout the Alto El Loa region. Following the event, the El Abra relief team worked on proactive measures and lessons learned, including construction of a second access road to the mine area, additional access to the conveyor for maintenance and work with the communities to rebuild damaged infrastructure.



Cerro Verde, in partnership with the regional government and communities, provides clean drinking water for hundreds of thousands of people in Arequipa, Peru.



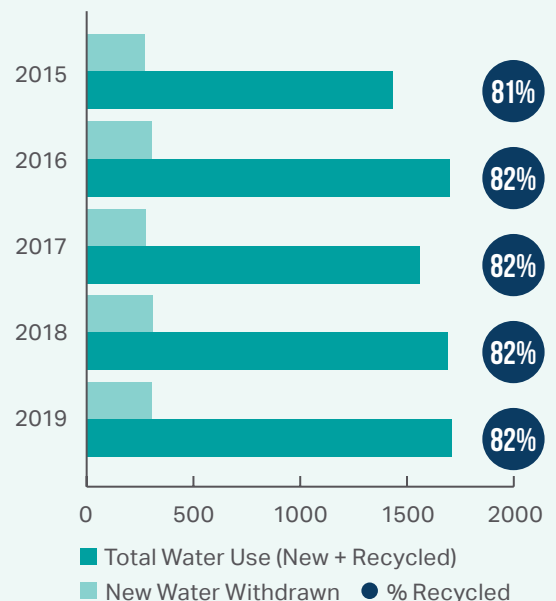
## WATER USAGE

MILLION CUBIC METERS (M <sup>3</sup> )	2015	2016	2017	2018	2019
Total New Water Withdrawn <sup>1</sup>	271	303	275	311	303
<b>Total Water Recycled</b>	<b>1,164</b>	<b>1,399</b>	<b>1,285</b>	<b>1,378</b>	<b>1,409</b>
Total Utilized Water (Withdrawn + Recycled)	1,435	1,702	1,560	1,689	1,711
<b>% Recycled of Total Water Utilized</b>	<b>81%</b>	<b>82%</b>	<b>82%</b>	<b>82%</b>	<b>82%</b>
Total Water Discharge <sup>2</sup>	–	–	–	106	96
Water Use Efficiency <sup>2</sup>	–	–	–	87%	87%

1 Withdrawals or Fresh Water = surface water + groundwater + stormwater + sea water + third-party supply (such as municipal wastewater effluent).

2 We started reporting discharge quantities and water use efficiency in 2018.

## TOTAL & NEW WATER WITHDRAWN (M<sup>3</sup>)

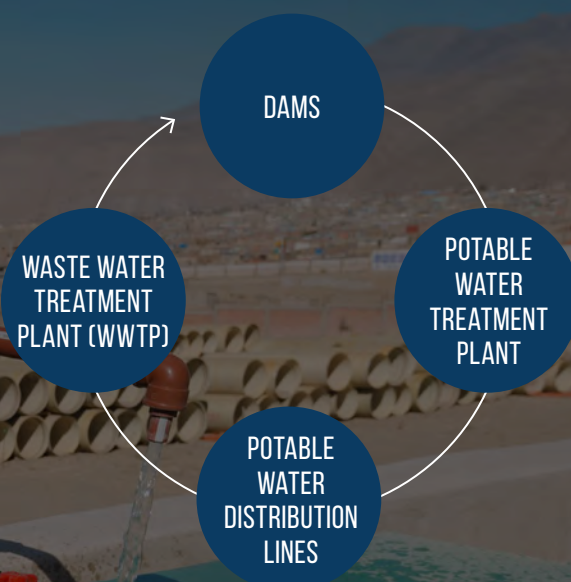


## PERFORMANCE

Our objective is to maintain high rates of recycled or reused water in our total water utilization, and our performance has exceeded 80% in recent years. In 2019, our operations utilized 1,711 million cubic meters of water, including new water withdrawals of 303 million cubic meters. 82% of our total utilized water was from recycled or reused sources. By accounting for discharge quantities of 96 million cubic meters, our water use efficiency was 87% for 2019.

We utilized  
**4X MORE**  
recycled water  
than new water  
in 2019

## CERRO VERDE WATER INFRASTRUCTURE



Cerro Verde is the world's largest copper concentrating facility located in the arid Arequipa region in Southern Peru. To support water requirements for mining and processing and for our local communities, Cerro Verde has made significant investments in local water infrastructure:

1. Co-financed the construction of dams to increase water storage capacity from the Chili River
2. Built a water treatment system for potable drinking water
3. Supported improved lines for potable drinking water throughout Arequipa
4. Built the Waste Water Treatment Plant (WWTP) to treat wastewater

The construction of the WWTP treatment and collection facility has improved the water quality in the Chili River, benefitting more than 1 million people in Arequipa. Today, 50% of Cerro Verde's water utilization is from the WWTP and 50% is sourced from the Chili River.

# Tailings Management

## WHY IT MATTERS?

The health and safety of our people, communities and the environment is our top priority and fundamental to Freeport-McMoRan's extensive tailings management programs. Tailings are the by-products of processing and extracting metals from ore. Typically, our tailings comprise a slurry of finely ground natural rock particles, which are transported from processing facilities to management and storage facilities. We recognize that a failure of tailings facilities and other impoundments at any of our mining operations could cause severe – and in some cases catastrophic – property and environmental damage and loss of life.

## OUR APPROACH

Freeport-McMoRan has comprehensive measures in place to ensure that the facilities are designed, built, operated and monitored to minimize risk to employees, neighboring communities and the environment. We have a strong commitment from our Board and executive management to provide the necessary resources to our operations to maintain the safety of our facilities and the integrity of tailings management systems and to continuously improve these systems.

In addition to applicable regulations, we implement the ICMM Position Statement on Preventing Catastrophic Failure of Tailings Storage Facilities as an integral component of our tailings management systems and various national and international guidelines. We continue to engage in industry initiatives on tailings management, including initiatives led by ICMM, and we support the development of a safety-focused global tailings standard that can be widely adopted to improve performance of the broader industry and minimize risks of catastrophic failures to as low as reasonably practicable.

Safe, robust and reliably constructible designs are paramount. For new tailings projects, we work with our Engineers of Record (EoRs) and seek input from our Tailings Review Boards (TRBs) on siting studies which consider various technologies based on rigorous Multiple Accounts Analysis (MAA) for site context and selected evaluation criteria. Our MAA approach provides transparent rationale for identifying the preferred Tailings Storage Facility (TSF) alternatives by using a broad internal stakeholder group to consider evaluation criteria, scoring and weights. This stakeholder group ensures decisions made at our operations reflect our corporate values and include environmental, technical, social and economic aspects. Once we understand preferred options, conceptual and design phases proceed with our EoR and we engage external stakeholders on formal options studies, as appropriate. We engage our TRBs throughout the selection and design process and typically continue with the same EoR and TRB members into construction and operations (only making personnel changes in the best interest of the facility).

## AMERICAS

Freeport-McMoRan affiliates in the Americas currently operate 18 active TSFs and manage 58 inactive or reclaimed TSFs.

FACILITIES BY DESIGN & STATUS	UPSTREAM	CENTERLINE	DOWNSTREAM
Active	13	5	–
Inactive or Closed	52	5	1

2019 Tailings Review Board quadrennial review of Morenci tailings facility in Arizona.





## Policies & Programs

Our objective is to have zero catastrophic structural failures at any of our TSFs. Our programs take into account the significant consequences that would result from a potential failure, and we apply substantial financial and technical resources, both internal and external, to materially reduce the likelihood of failures.

Our Tailings Management and Stewardship Program launched in 2004 has evolved significantly over the last 15 years. Today, we employ substantial engineering expertise, technological monitoring, and local and corporate management oversight to validate these facilities are designed, built, operated and monitored to minimize risk to employees, neighboring communities and the environment. These safeguards generally fall within four categories: (1) engineering and design; (2) rigorous adherence to construction and operational parameters through monitoring and use of technology; (3) multi-tiered oversight; and (4) adherence to practices grounded in continuous improvement and learning from past experiences, including industry failures and best-practices. The safeguards are effectively implemented through the promotion of open and ongoing communication throughout the organization and a bias for action at all levels.

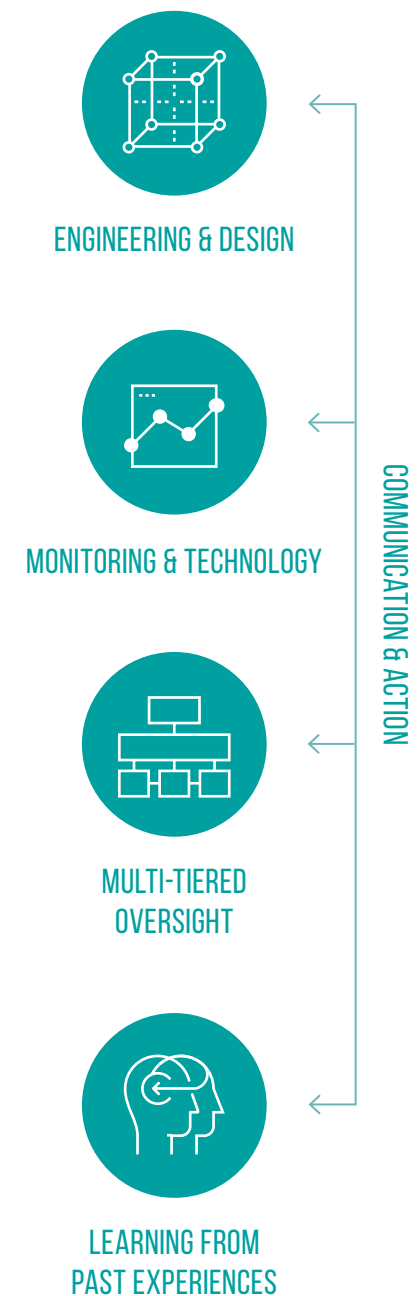
## Governance

Freeport-McMoRan maintains multi-tiered oversight of the TSFs at its operational sites:

- **Corporate Senior Leadership** – Participates in key decisions and provides resources to site management.
- **Corporate Tailings and Water Team** – Technical resource provides guidance and direction to site tailings team along with development and review of program initiatives.
- **Site Tailings Management, Engineers and Operations** – Implements the program and regularly monitors, identifies and addresses potential risks.
- **Engineer of Record (EoR)** – External resource provides expert design, technical support, inspection, review and guidance to achieve design intent.
- **Tailings Stewardship Team (TST)** – Third-party engineer and internal expert team inspects all tailings facilities, reviews documents and monitoring data, identifies potential deficiencies, and recommends corrective actions.
- **Technical Review Boards (TRB)** – Third-party internationally known expert panels provide independent opinions and guidance on the physical integrity, safety and performance of our TSFs and management systems and has direct access to Senior Corporate Leadership.

For closed and inactive sites, we have a similar oversight structure that reports through the Vice President of Environmental Services and Sustainable Development and includes the same site-level engineers, EoRs, TSTs and TRB structures.

## TAILINGS MANAGEMENT & STEWARDSHIP



Tailings Stewardship & Management is an integral component in our safe production culture

## Performance

Our EoRs and site engineers inspected our TSFs multiple times throughout the year. Our TST visited all active sites and seven inactive sites, each with multiple TSFs, in 2019. Our TRBs visited two sites for quadrennial reviews and met for interim review updates for nine sites (each with multiple TSFs), as well as for five specific TSF projects during 2019. The review and inspection processes produce recommended actions, which we track until implemented. Examples include actions we began in 2018 and continued in 2019 to construct buttresses out of an abundance of caution. We completed a buttress at Sierrita that is sized for TSF raising over the next ten years. We initiated construction of a buttress at Henderson and will continue to raise it in a proactive phased approach in coming years.

For more information on our extensive Tailings Stewardship Program, including 2019 key enhancements and activities, please refer to our [website](#).

## INDONESIA

PT-FI operates a controlled riverine tailings management system implemented based on methods approved and permitted by the Government of Indonesia. PT-FI tailings are the finely ground natural rock particles that remain after the economically valuable minerals have been removed from the ore. The tailings are transported from the concentrating facility along with water and a very small quantity of concentrating reagents. These reagents have been demonstrated to dissipate within a short distance of the concentrating facility.

## Policies & Programs

The PT-FI tailings management system uses an unnavigable river to transport the tailings and natural sediments from the concentrator in the Highlands to a large engineered and managed deposition area in the Lowlands, referred to as the ModADA. The river is not used for potable water, agriculture, fishing or other domestic or commercial uses. Levees have been constructed on both the East and West sides of the ModADA to laterally contain the footprint of the tailings and natural sediment within the designated area. Quantities of finer tailings and other sediments deposit in the estuary and the sea to the South.

This system design was selected after a careful and comprehensive analysis of more than 12 alternatives in partnership with the Government of Indonesia. After evaluating the topographical, seismic and geotechnical, geological, climatological and environmental conditions of the project area, it was clear that a conventional style tailings dam in the Highlands would not have been safe, stable or effective. Independent, environmental management expert audits have reaffirmed that this management system is the best and safest site-specific management alternative. This system has been in service for more than 20 years and has performed safely with no human health related issues.

## Governance

In addition to regular internal and external audits and assessments, PT-FI tailings management oversight includes the following:

- **FCX Corporate Senior Leadership** – Participates in key decisions and provides resources to site management.
- **FCX Corporate Tailings and Water Team** – Technical resource provides technical support and assists with guidance and direction for site tailings team and associated program initiatives.
- **Site Tailings Management, Engineers and Operations** – Implements the program and regularly monitors, identifies and addresses potential risks associated with ModADA and coastal zone areas.
- **External Design Engineer** – External resource provides design, ongoing engineering support, periodic inspections, and levee construction quality review.
- **ModADA Management Board (MMB)** – Multi-disciplinary expert panel that provides oversight and recommendations to PT-FI leadership and engineering teams on priority activities. They meet onsite to assess system performance and risks associated with the ModADA and coastal zone area and focus on the structural integrity of the levees and the geochemical stability of the deposition. They track progress on detailed recommendations as well associated stakeholder engagement.



The ModADA Management Board is an expert panel that meets on-site to assess tailings system performance and to provide oversight and recommendations to PT-FI leadership and engineering teams



ModADA Management Board members inspect the performance of the levee in a tailings deposition area in Indonesia.

## Performance

PT-FI's environmental impacts are well-documented, monitored and managed and have been subject to the Government of Indonesia's regulatory oversight, including the approval of the environmental impact analysis (AMDAL) for PT-FI operations and the approval of annual work plans. Impacts of the system, including increases in sedimentation, were predicted in numerous studies and are consistent with the design and operation. Monitoring programs have established, except for elevation changes, the environmental impacts of the tailings deposition are reversible at the end of the mine's life.

Large-scale demonstration reclamation projects show that several land use options are possible after final closure of the deposition area. When mining is completed, this area can be reclaimed with natural vegetation or used for agriculture, forestry, grazing of livestock and aquaculture among other options, depending on stakeholder ambitions.

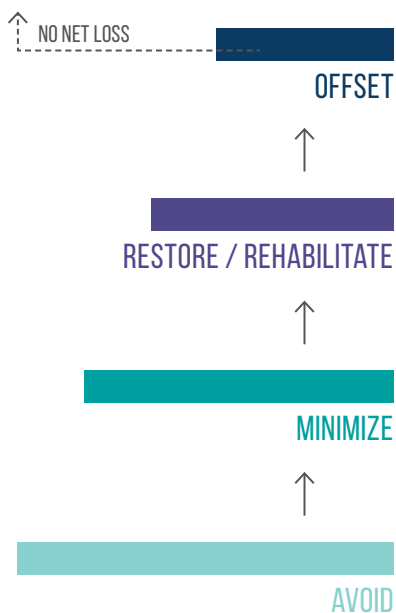
PT-FI and Indonesia's Ministry of Environment and Forestry recently established a new framework known as the "Tailings Roadmap" to drive continuous improvement in environmental practices in PT-FI's operations. Issued in December 2018 and amended in January 2019, KepMen 594 is the regulatory action known as the Tailings Roadmap. The basic elements of this framework include three studies to increase tailings retention within the Lowlands, to protect the coastal ecosystem and to evaluate large-scale beneficial uses of tailings within Indonesia. The approved Terms of Reference for these studies were signed in the fall of 2019. The scalability and economic viability of tailings reuse, whether for transportation infrastructure (roads and bridges) or building infrastructure (formed products such as prefabricated building walls), is currently being evaluated. The current aspirational target date for completion of the studies is September 2020, although the impacts of COVID-19 on that date are uncertain.



For more information on our controlled riverine tailings management system, extensive biodiversity and reclamation work at PT-FI, please refer to our [website](#).

# Biodiversity

## MITIGATION HIERARCHY



## WHY IT MATTERS?

Biodiversity sustains and stabilizes healthy ecosystems – which provides people with valuable resources, like food and water, necessary to ensure quality of life. Climate change, including global warming and its impact on water supplies, together with human activity is disrupting biodiversity and contributing to its loss. Freeport-McMoRan is committed to proactively managing the impacts of our mining operations on the environment including biodiversity. Proactive management is critical to maintaining social acceptance from our local communities and expected by our global stakeholders.

## OUR APPROACH

Freeport-McMoRan seeks to avoid and minimize the adverse impacts of our operations on biodiversity and ecosystem services while promoting opportunities to conserve and enhance resources in the areas where we operate.

In 2019, we continued our efforts to begin implementation of the mitigation hierarchy – a framework that emphasizes best practices for managing biodiversity and ecosystem services through the avoidance, minimization and restoration of impacts. We manage risks and potential impacts with the long-term ambition of 'no net loss' for new mines and major expansion projects at existing mines. In 2019, we developed guidance for consistent and rigorous application of the mitigation hierarchy across all operations.





## Policies & Programs

In addition to our Environmental Policy, which states our commitment to contribute to the conservation of biodiversity, and our Environmental Management Systems – our framework for understanding the potential impacts of our operations on biodiversity – we also implement the following:

- **ICMM Position Statement on Mining and Protected Areas** – We have addressed the commitments in our operational practices, including committing to no mining nor exploring in World Heritage Sites.
- **Wildlife Habitat Council's Conservation Certification (WHC)** – We participate in the program, which formally recognizes meaningful biodiversity conservation, environmental education and community outreach programs. Eighteen of our operating sites and facilities currently are certified through WHC, 15 of which are recognized with gold-tier certifications.

## Stakeholder Engagement

Our conservation initiatives aim to produce benefits for both biodiversity and people, build trust, and support our social license to operate. We seek to engage our employees, local communities and other interested stakeholders in this work. We foster diverse partnerships with global stakeholders across private and public sectors and civil society to achieve greater accountability and promote the long-term efficacy for our biodiversity projects. These collaborations often serve as the basis for our community outreach and STEM education opportunities for learners of all ages. For example, in 2019, employees across our North American sites engaged approximately 1,500 students and community members through pollinator-focused education and outreach activities, including Earth Day celebrations, pollinator education workshops and hands-on planting events in the field. A key internal stakeholder engagement effort is our annual biodiversity photo contest. Each year, employees submit photos from across the business with winning photos featured in WHC's annual calendar, used to showcase efforts by member companies to enhance and preserve wildlife. The 2019 winning photos are available to view on our [website](#).

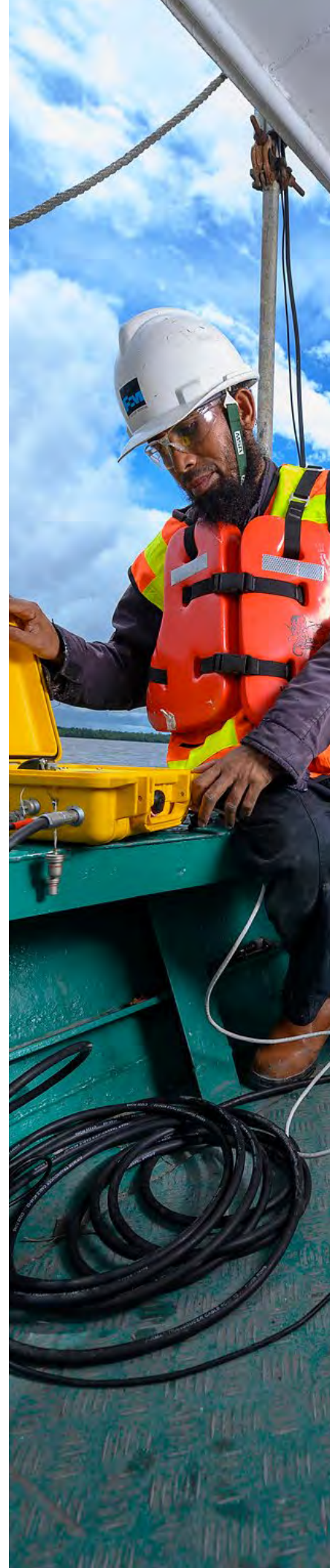
We aim to foster diverse partnerships with global stakeholders to achieve greater accountability and promote the long-term efficacy of our biodiversity programs

## AMERICAS

Our commitment to biodiversity conservation is further evidenced by our Biodiversity Action Plans that aim to address risks while promoting conservation opportunities. The plans are based on an adaptive management approach that allows us to effectively address new biodiversity risks resulting from operational and ecological changes at the sites. All of our sites in North America have implemented Wildlife Protection Plans and several operations also are implementing risk-based Avian Protection Plans that focus specifically on minimizing potential risks to migratory birds.

We conduct site-specific, multi-year biodiversity programs either voluntarily or due to regulatory obligations. These programs are designed to address the most significant biodiversity issues at each site, including the following:

SITE / LOCATION	2019 BIODIVERSITY HIGHLIGHTS
<b>TYRONE, MIAMI &amp; MORENCI</b> New Mexico, Arizona	Continued implementation of management plans developed in consultation with the U.S. Fish and Wildlife Service to support conservation of federally listed species, including the spikedace and loach minnow fish and the southwestern willow flycatcher birds. In 2019, we conducted our annual surveys as part of our management plans (spring and fall for fish species and summer for bird species).
<b>CHINO</b> New Mexico	Collaborated with Bat Conservation International, Borderlands Restoration and other NGOs to salvage over 600 agaves near the mine, which serve as primary food source for the bats. The agaves were replanted in community greenspaces across our Arizona and New Mexico sites. In May 2019, over 100 salvaged agaves were donated to our tribal partners for cultural uses.
<b>MORENCI</b> Arizona	In June 2019, continued our efforts to trans-locate bighorn sheep from the mine to other habitats in the state in collaboration with Arizona Department of Game and Fish.
<b>SIERRITA</b> Arizona	In January/February 2019, salvaged and relocated 176 endangered Pima pineapple cactus from the mine site to a company-owned conservation easement.
<b>HENDERSON</b> Colorado	In June/July 2019, the Colorado Parks and Wildlife Department surveyed the boreal toad population on our property as part of our ongoing conservation partnership.
<b>CERRO VERDE</b> Peru	Progressed conservation programs to protect endemic cacti and endangered species, including the guanaco and Peruvian long-snouted bat. Continued monitoring increased aquatic and avian species in the Chili River.
<b>EL ABRA</b> Chile	Advanced biodiversity management programs to support regionally endemic vegetation and wildlife in the Salar de Ascotán wetlands and biological corridors.







## INDONESIA

PT-FI's operations located in Papua, Indonesia, encompass multiple ecosystems and host one of the richest and most biodiverse regions in the world. Conserving and protecting Papua's biodiversity and ecosystem is a priority for both PT-FI and Freeport-McMoRan. Through the site's Biodiversity Action Plans, we aim to:

1. Recognize the important role biodiversity plays in sustainable development.
2. Establish a strong partnership with multiple stakeholder groups involved in conservation and natural resource management, including local governments and citizens.
3. Effectively manage local biodiversity for the region, including monitoring, restoration, reclamation and reforestation programs.
4. Provide biodiversity education, research and information opportunities.

Ongoing biodiversity inventories are conducted regularly to ensure we have the latest information to better understand mine-related impacts on biodiversity. Using that information, we can develop appropriate biodiversity conservation programs using principles of restoration ecology for rehabilitation and restoration of disturbed areas in the Grasberg minerals district.

Flora and fauna from Papua often become the object of illegal trade. Countering illegal wildlife trade is a priority for Papua's natural resource agencies and part of PT-FI's commitment to biodiversity conservation. PT-FI cooperates with the Indonesia Animal Rescue Center, Papua Regional Police, Forest Protection & Nature Conservation, Forest Rangers, Forestry Department, Lorentz National Park Center, and Wasur National Park Center to repatriate protected animals to their habitats. To date, PT-FI has assisted in releasing back in their natural habitat more than 46,000 pig-nosed turtles, 139 Black-capped lories, 21 dusky pademelons, seven yellow-crested cockatoos and six double-wattled cassowary, including the release of a pair of cassowary in 2019 into Lorentz National Park that were confiscated from an animal smuggler. Selected initiatives of PT-FI's biodiversity management program include:

## RESEARCH & MONITORING

PT-FI conducts research and monitoring in area ecosystems ranging from approximately 4,000 meters above sea level to coastal and marine areas. Routine flora and fauna monitoring is conducted through collaboration with consultants, research organizations and universities.

## EDUCATION & BIODIVERSITY OUTREACH PROGRAMS

Education and outreach is a major focus of PT-FI's biodiversity efforts, including construction of wildlife sanctuaries and the creation of the Natural Succession Discovery Park on a former tailings disposal area to serve as an outdoor education classroom. PT-FI has established wildlife areas, partners with local schools for education outreach, and provides internships at an on-site nursery for high school and college students. In 2019, 2,697 school children visited the Discovery Park and 58 volunteers supported PT-FI planting mangroves in the estuary.

## CONTINUED RE-VEGETATION & RESTORATION

The Ajkwa and Waii Islands in the Ajkwa Estuary to accelerate mangrove colonization has resulted in approximately 300 hectares of newly formed land through 2019.

## PROGRESSIVE RECLAMATION & RESTORATION

The sub-alpine ecosystems at Grasberg have resulted in reclamation of 411 hectares of overburden stockpile areas with native plant species.



Please refer to our **website** for more information on PT-FI's expansive biodiversity-related programs.

Sediment sampling in the Ajkwa River estuary near the Grasberg minerals district, Indonesia.

# Mine Closure & Reclamation

## WHY IT MATTERS?

Mining requires the development of infrastructure such as open-pit mines, roads and processing facilities that can alter the natural environment. Mining companies are responsible for managing these impacts, which include reclamation of the land for post-mining use. The purpose of reclamation is to return areas impacted by mining and processing activities to a healthy state with lands that support productive post-mining land use. Freeport-McMoRan understands that effectively reclaiming disturbed land and responsibly closing our mine sites is critical to maintaining the trust of our local communities, governments and other interested stakeholders.

## OUR APPROACH

Freeport-McMoRan's reclamation and mine closure planning processes are integral to our site planning and ongoing operations. We engage local communities, governments and other interested stakeholders early and often on these issues, and we seek to minimize land disturbances whenever possible.

At each of our operations, we have mine closure and reclamation plans with site-specific environmental measures designed to minimize long-term impacts, promote eco-system re-establishment and protect the watersheds where we operate. To support future anticipated closure and reclamation costs, each operating mine site has asset retirement obligations which are estimated and accounted for in accordance with the Securities and Exchange Commission's requirements and subject to review by an independent accounting firm.

Due to the geological nature of the deposits and large resource base, most of our mining operations are long-lived, so implementation of closure plans may not occur for years or decades in the future.

Our reclamation programs incorporate multiple aspects associated with environmental management and community well-being, such as water and air quality, erosion, wildlife and grazing habitats, and revegetation programs – all elements working together to advance ecosystem reestablishment. Although our traditional post-mining land use has been focused on wildlife habitats, we are increasingly exploring opportunities for open space, wildlife habitat, grazing habitat, recreational and educational use, renewable energy sites, and new industrial uses of our lands post-closure.

In 2019, we hosted our second annual Henderson Sustainable Development and Entrepreneurship Challenge in partnership with the Colorado School of Mines. Over 100 Mines students in attendance were asked to form teams and pitch concepts to the company for repurposing the mill's 10,300 acres of land near Parshall for when the mines' resource is eventually depleted. Last year, the challenge focused on the mine's surface facilities on the east side of the Continental Divide near Empire, Colorado. All ideas for both challenges were required to show a socioeconomic benefit to the surrounding communities, as well as be economically sustainable, socially acceptable and provide a positive and lasting legacy in the state of Colorado. The most important outcome from the Henderson Challenge is for county leadership to understand that there are viable options for supporting long-term economic development once the mine ceases operation.

In 2019, we hosted our second annual Henderson Sustainable Development and Entrepreneurship Challenge in partnership with the Colorado School of Mines to develop ideas for repurposing the mill's 10,300 acres of land near Parshall in Grand county, Colorado.



# Waste Management

## WHY IT MATTERS?

In addition to mining and mineral processing wastes, such as tailings, waste rock, slags, sludges and other residue, our operations generate non-mining waste which requires proper end-of-life management. Responsible management and disposal of these materials is critical for complying with environmental regulations and to maintaining community and environmental health and social acceptance of our operations.

## OUR APPROACH

Freeport-McMoRan is committed to reducing our environmental impact, which includes the effective management of our mining and non-mining wastes alike. The volume of mining and processing wastes varies depending on site operating plans and is managed in designated, engineered stockpiles and impoundments.

For non-mining waste, we continuously evaluate opportunities to reduce the quantity generated. We implement robust practices to identify, categorize, store and manage non-mining wastes, and we strive to increase recycling and reuse of non-mining waste materials in our operations whenever possible. We also evaluate our hazardous waste streams, and when possible, substitute materials with lower toxicity into our processes.

## Policies & Programs

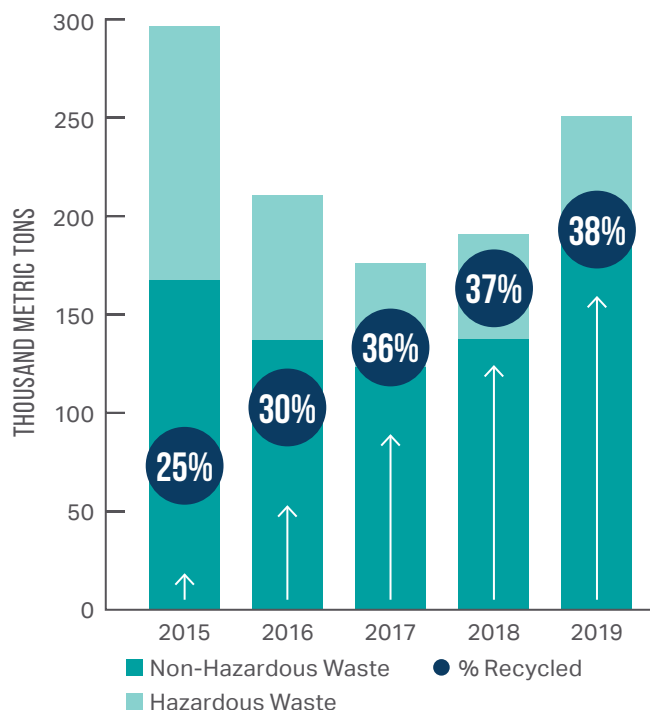
Freeport-McMoRan has a dedicated global waste management team composed of subject matter experts from across the company. The team is responsible for advancing our technical expertise and developing leadership skills through multi-site collaboration. Our experts provide guidance on applicable laws and regulations to support global consistency in our waste management programs and the company's Environmental Policy. The program identifies best practices and opportunities for continuous improvement. We follow local and national regulations and seek to meet or exceed industry best practices for disposing responsibly.

## PERFORMANCE

Our operations generate relatively small quantities of non-mining waste relative to our mining and processing wastes. Our non-mining wastes fall into two categories: (1) non-hazardous, such as tires, scrap metal, obsolete equipment, HDPE pipe, domestic waste and wood waste, and (2) hazardous, such as used oil, chemicals, solvents, batteries, reagent packaging and fluorescent lightbulbs.

In 2019, we generated approximately 251,000 metric tons of non-mining wastes, of which 23% was hazardous and 77% was non-hazardous. When possible, our materials are evaluated for other end-of-life uses in accordance with applicable regulations and are recycled back into our own operations or into the global value chain.

## NON-MINING WASTE GENERATED & RECYCLED



Over the last nine years, Cerro Verde in Peru has repurposed wood and other materials from the mine to make new school furniture for children in the districts surrounding our operations. In 2019, we delivered 65 desks and 150 chairs to schools and educational institutions.

Over the last five years, we have decreased the percentage of hazardous waste material generated by more than 20% and increased our recycling rate of non-mining wastes by more than 12%



## ABOUT THIS REPORT

### FOCUS AREAS

#### ENVIRONMENTAL

Environmental Management  
Climate  
Water Stewardship  
Tailings Management  
& Stewardship  
Biodiversity  
Waste Management  
& Reclamation

#### SOCIAL

Health & Safety  
Human Rights  
Workforce  
Community Engagement  
& Development  
Engaging with  
Indigenous Peoples

#### GOVERNANCE

Anti-Corruption  
Ethics & Integrity  
Board & CRC Leadership  
Responsible Value Chains  
Product Stewardship  
Political Spending

Freeport-McMoRan is committed to communicating regularly and transparently with our stakeholders about how we do business. One way we do so is by publishing our Annual Report on Sustainability. The 2019 sustainability report provides information on how we are addressing the key environmental, social and governance matters that we and our stakeholders view as most important to our business. This report is intended to be a companion to our 2019 Annual Report and 2020 Proxy Statement as well as the Sustainability section of our website.

The 2019 report focuses primarily on the operations of Freeport-McMoRan's subsidiaries: Freeport Minerals Corporation (FMC) in the Americas and PT Freeport Indonesia (PT-FI) in Indonesia for the period January 1, 2019, to December 31, 2019, unless otherwise indicated. All data is effective as of December 31, 2019, unless otherwise noted. For additional information on all topics that are important to Freeport-McMoRan, please visit our [website](#).

### GLOBAL REPORTING INITIATIVE (GRI)

This report, in combination with a separate GRI Index available on our website, has been prepared in accordance with the GRI Standards Core option and the G4 Mining and Metals Sector Supplement. Freeport-McMoRan has published a sustainability report annually since 2001 and we have reported under GRI guidelines and standards since 2005. The GRI is an international reporting framework commonly used by companies and other organizations to guide sustainability reporting.

In line with the GRI process, we conduct a Sustainability Reporting Prioritization Assessment process to delineate the key focus areas important to our business and our stakeholders. The results of our assessment help inform the development of our Annual Report on Sustainability and the key focus areas disclosed. Our 2019 key focus areas are listed to the left. Additional information about the assessment process is located on our [website](#).

### Cautionary Statement Regarding Forward-Looking Statements

*This report contains forward-looking statements, which are all statements other than statements of historical facts. The words "anticipates," "may," "can," "plans," "believes," "estimates," "expects," "projects," "targets," "intends," "likely," "will," "should," "could," "to be," "potential," "assumptions," "guidance," "future" and any similar expressions are intended to identify those assertions as forward-looking statements. Freeport-McMoRan (FCX) cautions readers that forward-looking statements are not guarantees of future performance and actual results may differ materially from those anticipated, expected, projected or assumed in the forward-looking statements. Important factors that can cause FCX's actual results to differ materially from those anticipated in the forward-looking statements include, but are not limited to, factors described under the heading "Risk Factors" in FCX's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the U.S. Securities and Exchange Commission (SEC), as updated by FCX's subsequent filings with the SEC, and available on our website at [fcx.com](#).*





Native American community affairs team explores harvesting opportunities for the White Mountain Apache and San Carlos Apache Tribes on company-owned property near Morenci, Arizona.

## EXTERNAL ASSURANCE

Freeport-McMoRan's sustainability reports have been independently verified since 2005. External assurance of our 2019 reporting was conducted by Corporate Integrity Ltd. in accordance with the ICMM Mining Principles Assurance and Validation Procedure, which can be found at [ICMM website](#). Since 2009, site-level external assurance has been completed multiple times at all active mining and metals processing operations. We conduct site-level external assurance at operations at a minimum of once every three years, with annual assurance engagements at PT-FI and Cerro Verde.

## THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs)

The SDGs provide an ambitious framework for sustainable development globally, including in the countries where we operate. They are the UN agreed priority areas for global sustainable development between 2015 and 2030.

Freeport-McMoRan seeks to make a positive contribution to the SDGs while mitigating any potential impediments to their realization. We are in the process of prioritizing areas where we can help advance the SDGs, at both the corporate and asset levels, while enhancing our existing programs that align with SDG objectives.

A cross-reference to the SDGs and reported information is available in our GRI Content Index available on our website.

## ADDITIONAL RESOURCES



Sustainability Website  
[VIEW](#)



'19 Annual Report  
[VIEW](#)



'20 Proxy Statement  
[VIEW](#)



'19 Climate Report  
[VIEW](#)



GRI Content Index  
[VIEW](#)



Report Archive  
[VIEW](#)

# Assurance Statement

The Freeport-McMoRan Inc. (Freeport-McMoRan) 2019 Annual Report on Sustainability, including information referenced by the Global Reporting Initiative (GRI) Sustainability Reporting Standards published on the Freeport-McMoRan web site, has been prepared and presented by the management of Freeport-McMoRan.

## SCOPE

Corporate Integrity Ltd., in accordance with Freeport-McMoRan management's instructions, was asked to perform:

1. A review of policies and systems in place in relation to the International Council on Mining & Metals (ICMM) Sustainable Development (SD) Framework, using as a basis the ICMM Sustainable Development Framework: Assurance Procedure and the Core option of the GRI Sustainability Reporting Standards.
2. A review of statements made in the 2019 Annual Report on Sustainability and information referenced by the GRI Content Index.

Our assurance work covered Subject Matters 1 to 5 referred to in the ICMM SD Framework: Assurance Procedure. Our assurance work scope covered all the Freeport-McMoRan mining and metals processing operations defined by the reporting boundaries of the 2019 Annual Report on Sustainability.

This year's programme is part of an ongoing process to conduct this assurance scope of work at all major Freeport-McMoRan mining and processing sites at least one time every three years. The programme includes annual site-level assurance visits to Cerro Verde and PT-FI.

Due to the international COVID-19 crisis, it was not possible to complete all planned site visits or to conduct a Head Office visit. As a result, our assurance work involved selective reviews of documents, interviews and/or site visits as follows:

- Cerro Verde Mine, Peru: A site visit was carried out
- PT Freeport Indonesia (PT-FI)- Grasberg Mine, Indonesia: A site visit was carried out
- El Abra Mine, Chile – a video conferencing assessment was carried out, with an agenda designed to achieve, within practical limits, as much visibility as a site visit. A physical site visit to El Abra had been carried out by Corporate Integrity Ltd. for the 2018 reporting cycle.
- Head Office - video conferences were undertaken to further review certain data and disclosures within the 2019 Annual Report on Sustainability.

## KEY FINDINGS

Based on our review, its scope and limitations:

- Nothing has come to our attention, which causes us to believe that the information reported by Freeport-McMoRan in the 2019 Annual Report on Sustainability and information referenced by the GRI Content Index regarding Freeport-McMoRan implementation of the ICMM assurance commitment with respect to subject matters 1 to 4, has been materially misstated.
- Nothing has come to our attention to cause us to believe that Freeport-McMoRan is not reporting in accordance with the GRI Standards: Core option.

## METHODOLOGY APPLIED

Through document reviews, physical observations where possible, and interviews at the selected sites and head office, the work activity involved the following.

For Subject Matters 1 to 3 in the ICMM SD Framework: Assurance Procedure;

1. A review of Freeport-McMoRan policies and their alignment to ICMM's 10 SD principles and ICMM Position Statements at corporate and site level.
2. A review of processes in place to identify and prioritise SD risks and opportunities at corporate and site level during the reporting period and the results of the identification and prioritization process.
3. A review of the systems and approaches that Freeport-McMoRan used to manage its identified material SD risks and opportunities and to implement ICMM's 10 SD principles at corporate and site level.



For Subject Matters 4 and 5 in the ICMM SD Framework: Assurance Procedure;

4. Review of Standard Operating Procedures (SOPs) for the collection and assimilation of GRI reported performance information involving:
  - a) An assessment to evaluate the risk of misstating reported information for quantitative topic-specific disclosures reported. The assessment looked at site level reported performance data for GRI topic-specific disclosures and considered materiality in the context of corporate level reported information. On this basis, certain topic-specific disclosures were selected for verification activities at the selected sites. The assessment methodology was based on ISO 31000, Risk Management Guidelines.
  - b) A review of data reporting, collection and consolidation processes undertaken at Head Office.
  - c) Review of statements made in the 2019 Annual Report on Sustainability and information referenced by the GRI Content Index regarding Freeport-McMoRan sustainable development processes and achievements in 2019 including its implementation of the ICMM SD Framework. This involved management interviews with members of the company's Sustainable Development Leadership Team. This also involved documentation reviews in support of corporate level reported information.
  - d) Review and selective testing for accuracy of qualitative statements made in the 2019 report and information referenced by the GRI Content Index.
  - e) Assessment of Freeport-McMoRan's claim to be reporting in accordance with the GRI Standards: Core option.

#### LIMITATIONS OF THE WORK PERFORMED

This work has been carried out by checking samples of information and documents that have been made available during the period of assurance activity by Freeport-McMoRan. There were some physical constraints on assurance activities undertaken in 2020 for the operating year 2019, due to circumstances associated with the COVID-19 pandemic.

Information provided that has been deemed to be independently verified by other third parties has been considered to be appropriately verified, and was not subjected to re-verification by Corporate Integrity Ltd.

Our evidence gathering procedures have been designed to obtain a limited level of assurance on which to base our conclusions.

The assurance statement provided by Corporate Integrity Ltd. is not intended to be used as advice or as the basis for any decisions, including, without limitation, financial or investment decisions.

#### STATEMENT OF INDEPENDENCE

The independence of our team has been reviewed and none of the Corporate Integrity Ltd. assessors involved in this project presents a conflict of interest to the integrity of this assurance statement.

Standard Applied to This Engagement: International Standard on Assurance ISEA3000 (revised) – Assurance Engagements other than Audits & Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board (IAASB).

*corporate***INTEGRITY**

David Shirley & Raj Aseervatham  
Directors  
Corporate Integrity Ltd.



## PERFORMANCE DATA

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



	2015	2016	2017	2018	2019
<b>SOCIAL</b>					
<b>HEALTH &amp; SAFETY</b>					
Total Recordable Events	535	474	445	466	526
% High Risk <sup>3</sup>	9.7%	17.1%	22.7%	10.9%	11.0%
Total Recordable Incident Rate (TRIR) <sup>4</sup>	0.61	0.72	0.76	0.71	0.74
Number of Fatalities	3	6	5	1	3
<b>HUMAN RIGHTS</b>					
Gross Human Rights Violations <sup>5</sup>	–	–	–	–	–
<b>WORKFORCE</b>					
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 <sup>6</sup>	43%	47%	39%	37%	37%
<b>WOMEN IN LEADERSHIP POSITIONS</b>					
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%
<b>Total Workforce</b>	<b>11%</b>	<b>10%</b>	<b>12%</b>	<b>13%</b>	<b>13%</b>
Attrition Rate – Women	11%	17%	19%	9%	12%
% of New Hires - Women	15%	15%	22%	21%	21%
<b>EMPLOYEE TURNOVER BY REGION &amp; GENDER</b>					
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%
<b>Total Workforce</b>	<b>9%</b>	<b>10%</b>	<b>28%</b>	<b>7%</b>	<b>9%</b>
% Male	9%	9%	29%	6%	8%
% Female	11%	17%	19%	9%	12%
<b>EMPLOYEE TURNOVER BY AGE GROUP</b>					
<30 Years	11%	13%	23%	13%	16%
30-50 Years	7%	6%	28%	5%	6%
>50 Years	17%	19%	31%	8%	11%

## PERFORMANCE DATA

	2015	2016	2017	2018	2019
<b>SOCIAL</b>					
<b>COMMUNITIES</b>					
<b>COMMUNITY INVESTMENTS (\$ MILLIONS)</b>	<b>\$138</b>	<b>\$129</b>	<b>\$153</b>	<b>\$155</b>	<b>\$100</b>
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 <sup>7</sup>	14%	13%	15%	15%	14%
Administration	16%	14%	3%	3%	1%
<b>NO. GRIEVANCES BY GEOGRAPHY</b>					
Chile	6	8	33	37	29
Europe <sup>8</sup>	–	–	–	5	5
Indonesia	90	64	64	76	60
Peru <sup>9</sup>		8	17	15	9
United States <sup>10</sup>	49	25	38	93	67
<b>Total</b>	<b>145</b>	<b>105</b>	<b>152</b>	<b>226</b>	<b>170</b>
<b>GRIEVANCES BY TYPE (%)</b>					
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 <sup>11</sup>	30%	14%	13%	11%	16%
<b>PROCUREMENT SPEND DISTRIBUTION (\$ MILLIONS)</b>					
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
<b>Total</b>	<b>\$9,062</b>	<b>\$7,059</b>	<b>\$13,857</b>	<b>\$9,604</b>	<b>\$10,555</b>
% 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
<b>ENVIRONMENT</b>					
<b>CLIMATE</b>					
<b>FMC MINING<sup>12, 13</sup> (CO<sub>2</sub>E METRIC TONS)</b>					
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
<b>PURCHASED POWER BY SOURCE</b>					
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%	–	–	–
<b>FMC DOWNSTREAM PROCESSING<sup>13, 14</sup> (CO<sub>2</sub>E METRIC TONS)</b>					
Scope 1	275,451	240,647	239,102	254,961	264,083
Scope 2	428,875	366,260	341,298	389,827	337,937
<b>PURCHASED POWER BY SOURCE</b>					
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%
<b>PTFI (CO<sub>2</sub>E METRIC TONS)</b>					
Scope 1	3,384,208	3,082,180	2,528,388	2,935,480	2,464,261
Scope 2	–	–	–	–	–
<b>FCX GLOBAL (CO<sub>2</sub>E METRIC TONS)</b>					
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
<b>Scope 1 + 2 Total</b>	<b>10,136,094</b>	<b>9,296,196</b>	<b>8,222,014</b>	<b>8,404,983</b>	<b>8,012,451</b>
Scope 3	561,821	618,819	706,214	750,332	692,336
<b>AIR EMISSIONS (THOUSAND METRIC TONS)</b>					
NOx	40.7	41.2	38.4	37.6	42.9
SOx	10.1	7.8	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

## PERFORMANCE DATA

	2015	2016	2017	2018	2019
<b>ENVIRONMENT</b>					
<b>WATER UTILIZATION (MILLION CUBIC METERS)</b>					
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
<b>Total New Water Withdrawn</b>	<b>271</b>	<b>303</b>	<b>275</b>	<b>311</b>	<b>303</b>
<b>Total Water Recycled</b>	<b>1,164</b>	<b>1,399</b>	<b>1,285</b>	<b>1,378</b>	<b>1,409</b>
<b>Total Utilized Water (Withdrawn + Recycled)</b>	<b>1,435</b>	<b>1,702</b>	<b>1,560</b>	<b>1,689</b>	<b>1,711</b>
% Reused/Recycled of Total Water Utilized	81%	82%	82%	82%	82%
Total Water Discharge <sup>15</sup>	–	–	–	106	96
Water Use Efficiency (%) <sup>15</sup>	–	–	–	87%	87%
<b>NUMBER OF TAILINGS IMPOUNDMENTS<sup>16</sup></b>					
Active	18	18	19	18	18
Closed/Inactive	52	52	56	59	58
<b>Total</b>	<b>70</b>	<b>70</b>	<b>75</b>	<b>77</b>	<b>76</b>
<b>MINING &amp; MINERAL PROCESSING WASTE</b>					
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
<b>NON-MINING WASTE &amp; RECYCLABLE MATERIAL (THOUSAND METRIC TONS)</b>					
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
<b>Total Non-Mining Waste Generated</b>	<b>280.6</b>	<b>196.0</b>	<b>176.1</b>	<b>190.8</b>	<b>250.6</b>
% Recycled	25%	30%	36%	37%	38%
<b>NON-HAZARDOUS (THOUSAND METRIC TONS)</b>					
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
<b>Total</b>	<b>156.9</b>	<b>126.7</b>	<b>123.2</b>	<b>137.5</b>	<b>193.5</b>



	2015	2016	2017	2018	2019
<b>ENVIRONMENT</b>					
<b>HAZARDOUS (THOUSAND METRIC TONS)</b>					
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
<b>Total</b>	<b>123.7</b>	<b>69.3</b>	<b>52.9</b>	<b>53.3</b>	<b>57.1</b>
<b>USED OIL (THOUSAND CUBIC METERS)</b>					
Onsite	0.1	–	0.1	0.1	0.1
Offsite	9.8	7.6	9.7	12.2	11.2
<b>Total</b>	<b>9.9</b>	<b>7.6</b>	<b>9.8</b>	<b>12.3</b>	<b>11.3</b>
% Recycled	100%	100%	100%	100%	100%
<b>LAND (IN HECTARES)</b>					
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
<b>ENVIRONMENTAL EVENTS</b>					
Reportable spills or releases of hazardous or toxic chemicals <sup>17, 18</sup>	15	33	25	17	33
NOVs - permit exceedances, spills, releases or other compliance matters <sup>19</sup>	2	5	5	13	6
Significant environmental events (as defined in the Risk Register)	–	–	–	1	–
Environmental Penalties (\$ thousands) <sup>20, 21</sup>	\$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 Our sustainable development Risk Register defines high risk events as incidents that have the potential to result in permanent disabilities or a fatality.

4  $TRIR = [(Fatalities + Lost-time Incidents + Restricted-duty Incidents + Medical Treatment) \times 200,000] / \text{Total Hours Worked}$ .

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 NH<sub>3</sub> or SO<sub>2</sub> 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.



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## We Welcome Your Feedback

We would love to hear from you. Please contact us at [ir@fmi.com](mailto:ir@fmi.com) or [sustainability@fmi.com](mailto:sustainability@fmi.com) to ask questions and provide input to our company.

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