

CDP**Climate Change 2017 Information Request**

Freeport-McMoRan Inc.

Module: Introduction**Page: Introduction****CC0.1****Introduction**

Please give a general description and introduction to your organization.

Freeport-McMoRan Inc. (Freeport-McMoRan or the company) is a leading international mining company with headquarters in Phoenix, Arizona. The company operates large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum. We are the world's largest publicly traded copper producer.

The company's portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world's largest copper and gold deposits, and significant mining operations in North America and South America, including the large-scale Morenci minerals district in Arizona and the Cerro Verde operation in Peru. Additional information about Freeport-McMoRan is available on our website at fcx.com.

The company's remaining oil and gas assets are excluded from the boundary of this report.

We are a significant supplier of critical metals to the world's economies. Copper, molybdenum and cobalt are part of a supply chain on which modern society depends. The generation and transmission of electricity, our means of communications and transportation, and the infrastructure that surrounds us all depend on the metals we produce. In 2016, copper accounted for approximately 70% of our revenues. As we look to the future, copper will continue to be essential in these basic uses as well as contribute significantly to new technologies for energy efficiencies, to advance communications and to enhance public health. Copper's end-use markets (and their estimated shares of total consumption) are construction 31%, consumer products 24%, electrical applications 24%, transportation 11% and industrial machinery 10%. Molybdenum is a key alloying element in steel and the raw material for several chemical-grade products used in catalysts, lubrication, smoke suppression, corrosion inhibition, and pigmentation. Molybdenum, as a high-purity metal, is also used in electronics such as flat-panel displays and in super alloys used in aerospace. Cobalt is widely used in industry as an important metal in super alloys for jet engines, in healthcare, in batteries, and in alternative energy.

In general, the societal benefits in reducing global CO2 levels are tied to the increasing use of our products, particularly copper, in energy efficient applications that include electric vehicles. We strive to operate in the most energy efficient manner so the end use of our products can provide the largest leverage in reducing global CO2 emissions.

CC0.2**Reporting Year****Enter Periods that will be disclosed**

Fri 01 Jan 2016 - Sat 31 Dec 2016

CC0.3**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

United States of America
Chile
Peru
Congo, Democratic Republic of the
Indonesia
Spain
United Kingdom
Netherlands
Finland

CC0.4**Currency selection**

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

Further Information

Our greenhouse gas emissions are directly correlated to changes in mining rates, which are generally correlated to global economic activity; our indirect emissions are a direct function of the energy supply mix of the host countries where we operate. Our mining assets are generally characterized by high volumes of low-cost current production, with large mineral reserves and resources available for future development and growth. Although we have recently curtailed some higher-cost production in the Americas, our current 5-year business plans generally indicate increased haul truck fuel consumption resulting from longer and steeper material haulage routes and overall higher mining rates. Because material haulage is a significant component of our direct emissions profile, without a step-change in technology applicable for efficient operation of our assets, we are expecting increased direct emissions (both absolute and intensity-based emissions) in total. Freeport-McMoRan is committed to developing greenhouse gas emission reduction strategies, a number of which are developed at Freeport-McMoRan research and development facilities. A key strategy is to implement energy efficient mineral processing technologies when we are expanding our production. For example, the Cerro Verde concentrator expansion in Peru that was completed in late 2015 and start-up accomplished in early 2016 includes a High Pressure Grinding Roll circuit that is approximately 40 percent more energy efficient than a traditional Semi-Autogenous Grinding Mill circuit. The project tripled the concentrator facilities from 120,000 metric tons of ore per day to 360,000 metric tons of ore per day and is now the largest copper concentrator facility in the world. Additionally, the Morenci mill utilizes high efficiency ball mills and a hydraulic roll crusher to allow for higher volumes of ore processing with up to 25 percent more energy efficiency than other crushing circuits in the industry. We also aim to increase the use of purchased power that comes from renewable or low-carbon sources when feasible. Even with the implementation of these current strategies, we anticipate increased total emissions over time as we respond to increasing demand for our products, principally copper.

CAUTIONARY STATEMENT

This report contains forward-looking statements in which we discuss factors we believe may affect our performance in the future. Forward-looking statements are all statements other than statements of historical fact. We caution readers that our actual results may differ materially from those anticipated or projected in the forward-looking statements. Important factors that can cause our actual results to differ materially from those anticipated in the forward-looking statements are described in Freeport-McMoRan's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission and available on our website at fcx.com.

Module: Management**Page: CC1. Governance**

CC1.1**Where is the highest level of direct responsibility for climate change within your organization?**

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a**Please identify the position of the individual or name of the committee with this responsibility**

The Freeport-McMoRan Board of Directors (board) as a whole is responsible for risk oversight, with reviews of certain areas being conducted by the relevant board committees that report to the full board. In its risk oversight role, the board reviews, evaluates and discusses with appropriate members of management whether the risk management processes designed and implemented by management are adequate in identifying, assessing, managing and mitigating material risks facing the company. In addition, as reflected in our Principles of Business Conduct, the board seeks to establish a “tone at the top” communicating the board’s strong commitment to ethical behavior.

Board committees assist in fulfilling the board's oversight responsibilities with respect to certain areas of risk. Each committee regularly reports on these matters to the full board. The Corporate Responsibility Committee of our board is responsible for overseeing our policies and programs related to management of risks associated with the company’s safety and health policies and programs, environmental policy and implementation programs, human rights policy and practices, community health programs and related public health and medical matters, community policy and practices, governmental and stakeholder relations and social investment and sustainable development programs, charitable contributions, and political activity and spending practices. The committee examines key performance data and receives briefings concerning challenges and emerging issues in these areas.

The board believes that full and open communication between senior management and the board is essential to effective risk oversight. Our non-executive Chairman regularly meets with and discusses with our Chief Executive Officer a variety of matters including business strategies, opportunities, key challenges and risks facing the company, as well as management’s risk mitigation strategies. The board oversees the strategic direction of our company, and in doing so considers the potential rewards and risks of our business opportunities and challenges, and monitors the development and management of risks that impact our strategic goals.

Our Energy and Water Task Force is co-led by our Vice President – Technology and our Vice President Operational Improvement. Our Vice President – Environmental Services and Sustainable Development provides advisory and management support. The Energy and Water Task Force addresses climate change topics, and evaluates associated potential business ramifications such as supply chain impacts, operational issues and opportunities (e.g., energy efficiency), and the effects of proposed legislation and new regulatory requirements. The Task Force meets periodically on an as-needed basis. Members of the Task Force coordinate on a variety of matters including those related to climate change.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

No

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	All active mining and mineral processing operations.	> 6 years	Please see below for commentary on our risk management processes.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Freeport-McMoRan has instituted a Sustainable Development Risk Register (SDRR) process that is a formal management system for the identification and prioritization of sustainability issues across its mining and metals operations. This tool allows us to identify key risks and opportunities across the safety, environmental, social, economic and value chain spectrums (including climate change related). To ensure the process is inclusive, we consider feedback from our stakeholder engagement processes, emerging regulations, industry leading practice, and trends tracked by the media, nongovernmental organizations and

researchers. Each site (asset level) has a Sustainable Development Leader who facilitates identification through a cross-functional evaluation of risks and opportunities for that operation. All site-specific risk assessments are compiled into a company-wide SDRR. Our Project Development Sustainability Review process is used by our project teams to incorporate environmental, social and economic considerations into our development projects at the earliest stages (scoping or prefeasibility). Resulting sustainability focus areas identified through the SDRR process and project reviews are reviewed annually by our Sustainable Development Leadership Team (corporate level) and communicated to the board of directors. We are also a founding member of the International Council on Mining and Metals (ICMM), a CEO-led organization focused on improving contributions to sustainable development, including a climate change position statement (updated in 2015). A key benefit of our ICMM membership is the ability to identify risks and opportunities at the industry-wide level.

CC2.1c**How do you prioritize the risks and opportunities identified?**

The Freeport-McMoRan Sustainable Development framework is designed for alignment with the ICMM Sustainable Development Framework and implemented based on site-specific factors and influences. Essential to our framework is the SDRR process, which prioritizes safety, environmental, social, economic and value chain challenges and opportunities based on our views of potential impacts to our business and the importance of these topics to stakeholders. Stakeholders include local communities, the financial community, customers, NGOs, suppliers, and employees. Our Sustainable Development Department works with operational management teams to review processes to ensure prioritization of key business risks and associated action and monitoring plans.

The company's Sustainable Development Leadership Team considers both imminent matters and emerging trends, including those related to the topic of climate change, while providing strategic guidance for our programs. The team is sponsored by our Executive Vice President and Chief Administrative Officer, and is led by our Vice President of Environmental Services and Sustainable Development. Our Chief Operating Officer, business unit presidents, as well as Vice President-level or senior staff from the safety, supply chain, security, human resources, sales, legal/compliance, and land and water functions comprise the team. The team reviews the comprehensive site-level sustainable development risk register processes as well as considers more forward-looking trends that could impact our business. Subject matter reviewed is wide-ranging and includes topics related to climate change such as efficient mining and processing technologies and water management.

CC2.2**Is climate change integrated into your business strategy?**

Yes

CC2.2a**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

The SDRR process, developed as part of Freeport-McMoRan's sustainability program, is a formal management system for the identification of sustainability issues across operations. This SDRR allows us to identify key risks and opportunities across the safety, environmental, social, economic and value chain spectrums (including climate change related).

Through development of the corporate SDRR and creation of the multi-departmental Energy and Water Task Force, Freeport-McMoRan has determined that the potential climate change related aspects that could affect our operations include increased energy costs and long-term sustainable water availability. In response, there is a corporate-level effort to evaluate energy efficiency opportunities associated with milling and solution extraction/electrowinning, which are the most significant power consuming processes at our facilities. Mining sites in arid regions maintain water balance models to better understand water uses and to identify system losses (such as entrapment within tailings storage facilities) within the operation. Although the specific potential physical impacts of climate change on our operations are highly uncertain, operations in arid regions also conduct annual scenario planning to evaluate the potential impacts of hypothetical reductions of total water availability (physical or otherwise caused) and hypothetical extreme precipitation events. This program aims to help us plan to adapt operations to water shortage or extreme surplus time periods. As described below, we also recognize the critical link between increased energy consumption associated with the implementation of sustainable large-scale water supply projects.

Components of Freeport-McMoRan's long-term strategy are to monitor international legislative and regulatory developments pertaining to greenhouse gas emissions, renewable energy standards, greenhouse gas reduction schedules, reporting obligations, and to examine opportunities to increase renewable energy consumption. Freeport-McMoRan evaluates the business ramifications of potential changes in energy costs. Furthermore, we continue to engage with suppliers to discuss the potential for new overarching mining system practices and technologies that could be employed to considerably reduce the energy and greenhouse gas intensity of future projects. Subject to ore body characteristics, such step changes would also be predicated on technological innovation in material haulage and we are tracking this evolution closely. Freeport-McMoRan champions site-specific projects, that are within our span of control, such as renewable energy proposals relevant to our operations and/or property holdings, energy efficiency opportunities, and mining equipment purchases or operational improvements (mine planning, fleet management, etc.) that reduce direct emissions. For example, new milling technologies installed at expanded facilities deliver significant energy efficiency gains over more obsolete milling technology. Based on recent experience, Freeport-McMoRan achieves significant improvements in energy efficiency associated with new processing facilities (including milling technologies). However, these gains do not economically justify, even at a hypothetical \$50/ton carbon tax on total emissions, the replacement of existing plants solely to improve energy efficiency.

Freeport-McMoRan is assessing the feasibility of constructing a desalination plant near the Pacific Ocean to treat seawater for possible increased sulphide ore production through ore mill processing at our El Abra facility. Our Cerro Verde operation near Arequipa, Peru is located in an arid region. Water for our Cerro Verde mining operation in Peru comes from renewable sources through a series of storage reservoirs on the Rio Chili watershed that collect water primarily from seasonal precipitation. Its existing tailings storage facility also is among the world's best in terms of water recovery. The operation has constructed a wastewater treatment plant for the city of Arequipa, Peru as part of its large-scale expansion, and has obtained authorization to reuse an annual average of one cubic meter per second of the treated water. The plant is expected to improve regional water quality in the Rio Chili, reduce waterborne illnesses, and enhance the value of local agricultural products while providing water for an economically important operational expansion for the region.

CC2.2c**Does your company use an internal price on carbon?**

No, and we currently don't anticipate doing so in the next 2 years

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Other:	Undecided	Freeport-McMoRan is a member of the Arizona Department of Environmental Quality's Technical Work Group charged with developing Arizona's state plan to comply with the federal Clean Power Plan. The state and Technical Work Group met through 2016 to explore options for the Arizona plan.	While the company supports developing an Arizona plan that meets the requirements of the Clean Power Plan, we do not have a corporate position because the details of the Arizona plan have yet to be decided.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
International Council on Mining and Metals	Consistent	In October 2015, the International Council on Mining and Metals issued the following statement on climate change: Climate change is an undeniable and critical global challenge, and its causes must be addressed by all parts of society. ICMM member companies are committed to being part of the solution. We support an effective binding global agreement on climate change. We support a price on carbon, and other market mechanisms that drive reduction of greenhouse gas emissions and incentivize innovation. We recognize the need to reduce emissions from the use of coal, and support collaborative approaches to accelerate the use of low-emission coal technologies as part of a measured transition to a lower-emissions energy mix. That transition should recognize the importance of coal in the global economy, and particularly in the developing world. We support greater use of renewable energy and other cost effective low-emission technologies, and improved energy efficiency, including in our own operations. We will help our host communities, and equip our operations, to adapt to the physical impact of climate change. We will continue to ensure that climate change is a part of our planning process. We will engage with our peers, governments and society to share solutions and develop effective climate change policy.	As an active member of ICMM, Freeport-McMoRan participated in the development of the position statement along with other members and ICMM secretariat.

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Policy engagement is coordinated through the Legal and Environmental Services and Sustainable Development Departments at Freeport-McMoRan's corporate headquarters.

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

Page: CC3. Targets and Initiatives**CC3.1**

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

No

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

The nature of our operations makes an emissions reduction target of the type requested by this questionnaire impractical, if not physically impossible. First, our direct and indirect emissions are directly related to changes in our mining rates, which is generally correlated to global economic conditions. Consequently, changing market conditions, which are outside of our control, require adjustments to our mining rates. Although intensity metrics of emissions to copper equivalents roughly correlate over the past five years, it fluctuates because our mine sites do not move consistent amounts of waste material (i.e., rock with no metallic value) in order to access economically viable ore and the haul distances for both waste and ore vary year on year (which equates to more haul truck miles and therefore higher GHG emissions).

The majority of our direct emissions are from the operation of haul trucks to move extracted ore to processing facilities. As an open pit matures, haul road length increases and haul trucks are required to move ore additional distances. Additionally, when market conditions necessitate the mining and processing of lower grade ore, haul trucks must move more material for processing. Our current business plans at the asset level generally show increased fuel consumption caused by longer and steeper haulage. As such, without a step-change in technologies applicable to our assets, which are unavailable at this time, at certain operations our plans indicate increasing direct emissions (both total and intensity-based emissions) even without increased copper production.

We have implemented energy efficiency opportunities associated with milling and solution extraction/electrowinning, which are the most significant power consuming processes at our facilities. Based on recent experience, Freeport-McMoRan achieves significant improvements in energy efficiency associated with new processing facilities (including milling technologies). However, these gains do not economically justify, even at a hypothetical \$50/ton carbon tax on total emissions (Scope I and II), the replacement of existing plants solely to improve energy efficiency. The breakeven point on this type of replacement would take multiple decades. Nevertheless, we do anticipate that our energy efficiency in our operations will lead to a reduction in direct and indirect greenhouse gas emissions compared with emissions had those steps not been taken, particularly with implementation of new processing technologies.

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Company-wide	<p>Freeport-McMoRan's products are used in technologies and infrastructure that may help alleviate climate change. Copper is a key component of renewable energy, transportation, power generation and telecommunications systems; it is used in plumbing, wiring, conductivity and connectivity. Molybdenum strengthens steel, resists heat and adds corrosion resistance to piping for water distribution systems and in solar cells. Cobalt is vital to alternative energy applications. These technologies include hybrid vehicles, wind turbines, high efficiency motors, and "green" buildings. The following examples illustrate the importance of our products to technologies that may help address climate change.</p> <ul style="list-style-type: none"> • Electric vehicles consume up to four times the amount of copper in terms of weight compared to vehicles of similar size with an internal combustion engine. Additionally, charging stations needed to fuel these vehicles will increase the size of the power grid. • Wind turbines consume four to five times the amount of copper per megawatt compared to carbon based power generation. Wind turbines range from 500kW to 8MW in size. • Solar power consumes incremental copper in terms of electrical grid extension and in small motors attached to each panel needed to follow the sun. • High efficiency motors consume up to 75% more copper than a standard motor. • Green buildings require additional meters and other electronics that are essential to optimizing energy use. Additionally, similar concepts will allow the national power grid to become "smart". • Cobalt is used in Lithium ion batteries needed to power hybrid/electric vehicles and consumer electronics. • The company implements a significant haul truck and shovel rebuild program that results in like-new productivity and cost performance with the benefit of significant capital avoidance. The program importantly results in lower 	Avoided emissions				

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	life-cycle impact (reduced energy and GHG emissions in particular) when compared to the production and purchase of new equipment.					

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	2	12718
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Processes	The Cerro Verde concentrator expansion project in Peru achieved capacity operating rates during 2016 and includes a High Pressure Grinding Roll (HPGR) circuit that is approximately 40 percent more energy efficient than a traditional Semi-Autogenous Grinding Mill circuit.	10600	Scope 2 (location-based)	Voluntary	1000000			Ongoing	The range of annual CO2e savings was determined based on the direct comparison to a traditional, grid-powered, Semi-Autogenous Grinding Mill circuit operating at a similar capacity as Cerro Verde's HPGR.
Energy efficiency: Processes	Freeport-McMoRan's Henderson Mine was able to reduce its electricity use by replacing metal halide and fluorescent fixtures with LED lighting.	2118	Scope 2 (location-based)	Voluntary	128193	718652	4-10 years	3-5 years	Estimated annual CO2e savings will vary depending on mine operations.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Financial optimization calculations	Energy represented approximately 20 percent of our copper mine site operating costs in 2016.

Further Information

Freeport-McMoRan is a member of the International Copper Association, for more information on the societal benefits of copper, please visit their website at: <http://copperalliance.org/benefits-of-copper/>

Page: CC4. Communication**CC4.1**

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Complete	10, 26-28	https://www.cdp.net/sites/2017/28/23228/Climate Change 2017/Shared Documents/Attachments/CC4.1/FCX_WTSD_2016.pdf	
In other regulatory filings	Complete	24, 52	https://www.cdp.net/sites/2017/28/23228/Climate Change 2017/Shared Documents/Attachments/CC4.1/FCX_10-K_2016.pdf	

Module: Risks and Opportunities**Page: CC5. Climate Change Risks****CC5.1**

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Air pollution limits
Description	The U.S. Environmental Protection Agency (EPA) has developed regulations to control greenhouse gas emissions from new, modified, and existing fossil fuel-fired power plants. Although some of these rules have been stayed by the U.S. Courts, this suite of regulations could increase the cost of electricity production and the cost of purchased power. The magnitude of the impact is uncertain at this time.
Potential impact	Increased operational cost
Timeframe	1 to 3 years
Direct/Indirect	Indirect (Supply chain)
Likelihood	Unknown
Magnitude of impact	Unknown
Estimated financial implications	Unknown
Management method	We have modeled a hypothetical carbon tax of \$50 per metric ton on 2014 total GHG emissions (Scope I and II) associated with our global copper mines. The associated hypothetical increase in operating costs, approximately 5-10%, would not necessitate operating plan changes as the cost implications are similar to possible fluctuations in mined ore grades. Applying this carbon tax model to our forecasted general emissions profile and near-term copper production plans does not alter our current operating plans.
Cost of management	Freeport-McMoRan's direct cost is to monitor the regulatory process and its possible effects.

Risk driver	Emission reporting obligations
Description	The U.S. Environmental Protection Agency has promulgated regulations requiring facilities in certain source categories whose emissions exceed threshold levels to report their greenhouse gas emissions. Freeport-McMoRan has four facilities that are required to report emissions pursuant to this program (the smelting operation in Miami, Arizona; the refinery and rod mill in El Paso, Texas; and the mines in Morenci, Arizona and Chino, New Mexico).
Potential impact	Other: Increased reporting cost
Timeframe	Up to 1 year
Direct/Indirect	Direct
Likelihood	Virtually certain
Magnitude of impact	Low
Estimated financial implications	The EPA's mandatory reporting rule requires facilities to monitor and report greenhouse gas emissions. The primary financial implications have been the development of internal procedures to monitor, track, and calculate these emissions.
Management method	Freeport-McMoRan has developed procedures for the calculation and reporting of greenhouse gases that have been certified to meet the requirements of all applicable national and international protocols.
Cost of management	The costs incurred by Freeport-McMoRan have been internal costs to develop a process to calculate these emissions, internally verify them, and voluntarily receive external, independent verification.

Risk driver	Emission reporting obligations
Description	New Mexico has promulgated regulations requiring sources in certain categories to report their greenhouse gas emissions. As a result, Freeport-McMoRan's New Mexico operations are subject to these reporting requirements.
Potential impact	Increased operational cost
Timeframe	Up to 1 year
Direct/Indirect	Direct
Likelihood	Virtually certain
Magnitude of impact	Low
Estimated financial implications	New Mexico requires greenhouse gas reporting for categories of sources. As a result, Freeport-McMoRan's New Mexico operations are subject to this requirement. The primary financial implications have been the development of internal procedures to monitor, track, and calculate these emissions.
Management method	Freeport-McMoRan has developed procedures for the calculation and reporting of greenhouse gases that have been certified to meet the requirements of all applicable national and international protocols.
Cost of management	The costs incurred by Freeport-McMoRan have been internal costs to develop a process to calculate these emissions, internally verify them, and voluntarily receive external, independent verification.

Risk driver	General environmental regulations, including planning
Description	The U.S. Environmental Protection Agency has begun promulgating regulations for certain source categories that emit greenhouse gases. As the U.S. EPA continues to regulate more sources of greenhouse gases, the price of raw materials and other inputs may increase.
Potential impact	Increased operational cost
Timeframe	Unknown
Direct/Indirect	Indirect (Supply chain)
Likelihood	About as likely as not
Magnitude of impact	Unknown
Estimated financial implications	Unknown
Management method	The components of Freeport-McMoRan's long term strategy are to monitor legislative and regulatory developments pertaining to greenhouse gas emissions.
Cost of management	Freeport-McMoRan's direct cost is to monitor the regulatory process and its possible effects.

Risk driver	Cap and trade schemes
Description	Freeport-McMoRan's Atlantic Copper smelter in Spain is subject to the European Union Emissions Trading Scheme.
Potential impact	Other: Please see estimated financial implications below
Timeframe	Up to 1 year
Direct/Indirect	Direct
Likelihood	Virtually certain
Magnitude of impact	Low
Estimated financial implications	At this time, there is no cost to Atlantic Copper because its emissions do not exceed its allowance allocation.
Management method	Under the European Union Emissions Trading Scheme, Atlantic Copper obtains free allowances that cover its allowance obligations.
Cost of management	At this time, there is no cost to Atlantic Copper because its emissions do not exceed its allowance allocation.

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

The potential specific physical impacts of climate change on our operations are highly uncertain. Operations in arid regions conduct annual scenario planning to evaluate the potential impacts of hypothetical reductions of total water availability (physical or otherwise caused) and hypothetical extreme precipitation events. This program aims to help us plan to adapt operations to water shortage or extreme surplus time periods.

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation

Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Product efficiency regulations and standards
Description	Freeport-McMoRan's products are used in technologies and infrastructure that may help alleviate climate change. Copper is a key component of renewable energy, transportation, power generation and telecommunications systems; it is used in plumbing, wiring, conductivity and connectivity. Molybdenum strengthens steel, resists heat and adds corrosion resistance to piping for water distribution systems and in solar cells. Cobalt is vital to alternative energy applications. Thus, regulations requiring increased efficiency to address climate change could potentially increase the demand for these products. These technologies include hybrid vehicles, wind turbines, high efficiency motors, and "green" buildings. The following examples illustrate the importance of our products to technologies that may help address climate change. • Electric vehicles consume up to four times the amount of copper in terms of weight compared to vehicles of similar size with an internal combustion engine. Additionally, charging stations needed to fuel these vehicles will increase the size of the power grid. • Wind turbines consume four to five times the amount of copper per megawatt compared to carbon based power generation. Wind turbines range from 500kW to 8MW in size. • Solar power consumes incremental copper in terms of electrical grid extension and in small motors attached to each panel needed to follow the sun. • High efficiency motors consume up to 75% more copper than a standard motor. • Green buildings require additional meters and other electronics that are essential to optimizing energy use. Additionally, similar concepts will allow the national power grid to become "smart". • Cobalt is used in Lithium ion batteries needed to power hybrid/electric vehicles and consumer electronics.
Potential impact	Increased demand for existing products/services
Timeframe	Unknown
Direct/Indirect	Indirect (Client)
Likelihood	More likely than not
Magnitude of impact	Unknown
Estimated financial implications	While copper and other metals produced by Freeport-McMoRan are an important component of technologies used to reduce or avoid emissions (e.g., hybrid vehicles, wind turbines, high efficiency motors, and "green" buildings), it is impossible to quantify the specific financial implications to Freeport-McMoRan's global revenues driven by the future increased use of these materials.

Management method	We have a dynamic portfolio of long-lived mining assets and are positioned to respond to society's demand for copper – a fundamental material used in numerous products relied upon by consumers everywhere, including those around the globe looking to improve their standard of living.
Cost of management	There are no costs to Freeport-McMoRan (other than regular operating costs) for the increased use of technologies that reduce emissions of greenhouse gases and that also use high levels of copper or other Freeport-McMoRan products.

Opportunity driver	Renewable energy regulation
Description	Several U.S. states have instituted short- and long-term goals for the use of renewable energy sources by power providers. Also, the U.S. Environmental Protection Agency has proposed regulations to control greenhouse gas emissions from new, modified, and existing fossil fuel-fired power plants. This suite of regulations could shutter some fossil fuel-fired generating facilities and increase the cost of electricity production at others. These policies may increase the value of electricity generated from solar operations. Freeport-McMoRan has been actively engaged in utilizing its substantial property holdings for solar electricity production facilities.
Potential impact	Premium price opportunities
Timeframe	1 to 3 years
Direct/Indirect	Indirect (Supply chain)
Likelihood	More likely than not
Magnitude of impact	Low
Estimated financial implications	We have two types of partnerships with solar companies and power providers for the installation of solar facilities. In transactions like those in Ajo, Arizona, we are only the land lessor. The power generated goes to the provider and the financial impact arises from the lease agreement. In transactions like those in Bagdad, Arizona, we are the lessor and have entered into an agreement to purchase the power generated at a fixed rate. Any savings depends upon the relative future electricity cost.
Management method	Freeport-McMoRan engages with solar energy developers to determine whether solar power projects may prove beneficial on any of Freeport-McMoRan's property.
Cost of management	As the lessor of land for these projects, Freeport-McMoRan does not incur any costs associated with their implementation.

CC6.1c

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Changing consumer behavior
Description	Freeport-McMoRan's products are used in technologies and infrastructure that may help alleviate climate change. Copper is a key component of renewable energy, transportation, power generation and telecommunications systems; it is used in plumbing, wiring, conductivity and connectivity. Molybdenum strengthens steel, resists heat and adds corrosion resistance to piping for water distribution systems and in solar cells. Cobalt is vital to alternative energy applications. Thus, changing consumer behavior could potentially increase the demand for these products. These technologies include hybrid vehicles, wind turbines, high efficiency motors, and "green" buildings. The following examples illustrate the importance of our products to technologies that may alleviate climate change. • Electric vehicles consume up to four times the amount of copper in terms of weight compared to vehicles of similar size with an internal combustion engine. Additionally, charging stations needed to fuel these vehicles will increase the size of the power grid. • Wind turbines consume four to five times the amount of copper per megawatt compared to carbon based power generation. Wind turbines range from 500kW to 8MW in size. • Solar power consumes incremental copper in terms of electrical grid extension and in small motors attached to each panel needed to follow the sun. • High efficiency motors consume up to 75% more copper than a standard motor. • Green buildings require additional meters and other electronics that are essential to optimizing energy use. Additionally, similar concepts will allow the national power grid to become "smart". • Cobalt is used in Lithium ion batteries needed to power hybrid/electric vehicles and consumer electronics.
Potential impact	Increased demand for existing products/services
Timeframe	Unknown
Direct/Indirect	Indirect (Client)
Likelihood	More likely than not
Magnitude of impact	Unknown
Estimated financial implications	While copper and other metals produced by Freeport-McMoRan are an important component of technologies used to reduce or avoid emissions (e.g., hybrid vehicles, wind turbines, high efficiency motors, and "green" buildings), it is impossible to quantify the specific financial implications to Freeport-McMoRan's global revenues driven by the future increased use of these materials.
Management method	We have a dynamic portfolio of long-lived mining assets and are positioned to respond to society's demand for copper – a fundamental material used in numerous products relied upon by consumers everywhere, including those around the globe looking to improve their standard of living.
Cost of management	There are no costs to Freeport-McMoRan (other than regular operating costs) for the increased use of technologies that reduce emissions of greenhouse gases and that also use high levels of copper or other Freeport-McMoRan products.

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

We operate long-lived assets in fixed geographic locations around the globe. We have not identified that changes of physical climate parameters such as temperature or precipitation may present noteworthy opportunities in our current asset portfolio.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO ₂ e)
Scope 1	Tue 01 Jan 2008 - Wed 31 Dec 2008	5399371
Scope 2 (location-based)	Tue 01 Jan 2008 - Wed 31 Dec 2008	5003970
Scope 2 (market-based)		

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO ₂	IPCC Fifth Assessment Report (AR5 - 100 year)
CH ₄	IPCC Fifth Assessment Report (AR5 - 100 year)
N ₂ O	IPCC Fifth Assessment Report (AR5 - 100 year)
HFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
SF ₆	IPCC Fifth Assessment Report (AR5 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: Spreadsheet attached			

Further Information

Excel spreadsheet with data for CC7.4 attached

Attachments

[https://www.cdp.net/sites/2017/28/23228/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC7.EmissionsMethodology/CDP Climate Change - CC7.4 Emission Factors for 2016.xlsx](https://www.cdp.net/sites/2017/28/23228/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC7.EmissionsMethodology/CDP%20Climate%20Change%20-%20CC7.4%20Emission%20Factors%20for%202016.xlsx)

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

5418730

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We have operations where we are able to access electricity supplier emissions factors or residual emissions factors, but are unable to report a Scope 2, market-based figure	At present, we are only able to disclose our Scope 2, location-based emissions. We do not receive sufficient transparency from our suppliers to engage in market-based accounting at this time.

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
4923748		

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Independent Offices	Emissions are not relevant	Emissions are not relevant		Office locations not associated with a mining or processing facility are not included as the emissions associated with them (primarily Scope 2) are immaterial compared to Freeport-McMoRan's mining and processing operations.
Discontinued Operations	Emissions are not relevant	Emissions are not relevant		Minimal activity may occur at Freeport-McMoRan's discontinued operations (mining and processing facilities that are no longer active) however these emissions are immaterial compared to the active mining and processing operations.

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Metering/ Measurement Constraints	Estimates of CO ₂ from leaching operations are based on stoichiometry assuming a total conversion to CO ₂ . The accuracy of this method is untested and over-estimates emissions.
Scope 2 (location-based)	Less than or equal to 2%	Other: Published emission factors	Emission factors from eGRID (U.S.) and WRI were used to calculate emissions from purchased electricity.
Scope 2 (market-based)			

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/28/23228/Climate Change 2017/Shared Documents/Attachments/CC8.6a/CDP_Climate Change_FCX_Verification Statement.pdf	Page 1 and 2	ISO14064-3	100

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/28/23228/Climate Change 2017/Shared Documents/Attachments/CC8.7a/CDP_Climate Change_FCX_Verification Statement.pdf	Page 1 and 2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year change in emissions (Scope 1 and 2)	Third party verification is performed on an annual basis. As part of this effort, the verifier evaluates the year-on-year change in emissions for Scope 1 and 2.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Yes

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

36725

Further Information

The emissions data above is associated with biodiesel used by several Freeport-McMoRan operations.

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
United States of America	1377846
Chile	107513
Peru	465540
Congo, Democratic Republic of the	318400
Indonesia	3082181
Spain	56040
United Kingdom	86
Netherlands	5928
Finland	5195

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By GHG type

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	5111918
CH4	13109
N2O	253160
HFCs	32
SF6	2127

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO ₂ e)	Scope 2, market-based (metric tonnes CO ₂ e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market- based approach (MWh)
United States of America	3281580		6072945	
Chile	461525		604090	
Peru	1064808		3403485	
Congo, Democratic Republic of the	0		632804	
Indonesia	0		0	
Spain	93065		348558	
United Kingdom	659		1465	
Netherlands	0		15238	
Finland	22111		90251	

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 15% but less than or equal to 20%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	0
Steam	0
Cooling	0

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

16640831

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Sub bituminous coal	5616166
Coke oven coke	21088
Motor gasoline	94029
Biodiesels	2831726
Diesel/Gas oil	6291459
Propane	40081

Fuels	MWh
Natural gas	1578912
Aviation gasoline	77436
Waste oils	89933

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO ₂ e per MWh)	Comment

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
17965899	11168837	6797062	20	20	Our PT Freeport Indonesia operation has a self-generating power facility, which has generated 6797042 MWh in 2016. Our EI Abra operation has a gravity-assist conveyor system, which has generated 20 MWh of renewable energy for internal use in 2016.

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities			
Divestment			
Acquisitions			
Mergers			
Change in output	2.42	Decrease	Our GHG emissions are generally directly correlated to changes in mining rates. Although both copper equivalent production and GHG emissions increased at Cerro Verde related to its expansion, operating plans for the North America copper mines were revised to adjust production to reflect market conditions; operations at the El Abra mine in Chile were adjusted to reduce mining and stacking rates by approximately 50 percent and the Henderson molybdenum mine in Colorado operated at reduced rates during 2016. $[(10342478 - 10598921) / 10598921] * 100 = 2.41951987\%$
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.000724	metric tonnes CO2e	14276000000	Location-based	5.24	Decrease	Decrease was driven by year-over-year increase in revenue and a 2.42% decrease in year over year GHG emissions.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
3.6	metric tonnes CO2e	Other: Tonne copper equivalent produced	2876500	Location-based	18.18	Decrease	Change due in part to Cerro Verde's year-over-year copper equivalent production increase of 51% (2016 copper production was 1,108 million pounds) versus its increased GHG emissions of only 34%.

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Fri 01 Jan 2016 - Sat 31 Dec 2016	81849	0	60701	Facilities we own and operate

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Atlantic Copper is within the EU Emission Trading System. We have authorization for greenhouse gas emissions rights and receive allocated emissions. We are obligated to report the verified emissions yearly to the ETS Spanish authorities.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	217571	Emissions represented are an estimate of emissions from the production of lime (calcium oxide) purchased by Freeport-McMoRan facilities for use in flotation and other processes. The estimate is made by using molar masses and assuming a complete reaction of calcium carbonate to calcium oxide and CO2.	0.00%	
Capital goods	Not evaluated				
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not evaluated				
Upstream transportation and distribution	Not evaluated				
Waste generated in operations	Not evaluated				
Business travel	Relevant, calculated	8895	Emissions total represents commercial airline travel by Freeport-McMoRan employees. Emission factor used is from the GHG Protocol Mobile Guide v. 1.3.	0.00%	
Employee commuting	Not evaluated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Upstream leased assets	Not evaluated				
Downstream transportation and distribution	Relevant, calculated	6335	Emissions total includes ground transportation of copper "concentrate" (i.e. the product of milling copper ore) and copper anodes (copper product from the smelter) within the U.S. Emission factor used is from IPCC SAR Road Transport.	0.00%	
Processing of sold products	Relevant, calculated	315326	Because Freeport-McMoRan operates vertically integrated assets, many downstream processing emissions that would be considered Scope 3 emissions for other companies are Scope 1 emissions for Freeport-McMoRan. For example, the majority of copper concentrate product produced at Freeport-McMoRan mines is smelted by Freeport-McMoRan-owned smelters and the majority of copper anodes produced by the smelter are processed in Freeport-McMoRan owned Refineries. However, some concentrate and anodes are sold to third parties for smelting. The emissions reported here only represent emissions from the smelting of concentrate and the refining of copper anodes sold to third parties. Emissions were calculated by applying the average emissions at Freeport-McMoRan smelters and refinery to the amount of concentrate and anodes sold to third parties.	0.00%	
Use of sold products	Not relevant, explanation provided				As a producer of commodities, all products produced by Freeport-McMoRan require further processing for use; we do not have access to emissions information for the broad spectrum of downstream processing and manufacturing. None of our products are

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					directly used and thus do not have any direct or indirect use-phase emissions.
End of life treatment of sold products	Not evaluated				The lifespans of copper products, other than vehicles, and molybdenum use in stainless steel are measured in decades. Both copper and molybdenum have very high end of life recycling rates.
Downstream leased assets	Not relevant, explanation provided				Freeport-McMoRan does not have downstream leased assets.
Franchises	Not relevant, explanation provided				Freeport-McMoRan does not operate any franchises.
Investments	Not evaluated				
Other (upstream)	Not evaluated				
Other (downstream)	Not evaluated				

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/28/23228/Climate Change 2017/Shared Documents/Attachments/CC14.2a/CDP_Climate Change_FCX_Verification Statement.pdf	Page 1 and 2	ISO14064-3	100

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Other: Increase in use of lime	1	Increase	
Business travel	Other: Decrease in business air travel	21	Decrease	Cost reduction initiatives, including video conferencing, resulted in a decrease in business air travel.
Downstream transportation and distribution	Other: Eliminated emission calculations associated with transport in Africa	87	Decrease	Eliminated emission calculations associated with transport in Africa due to pending divestiture of assets in this region.
Processing of sold products	Other: Processing of concentrate at non-Freeport-McMoRan smelters	48	Increase	The emission profile of our Miami smelter has changed. Consequently, the emission factor applied to the amount of concentrate and anodes sold to third parties had a proportional impact.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

Certain customers at various downstream layers of the value chain request information concerning energy management and GHG emissions, including at specific operations. This engagement helps inform our assessment of related risks. Freeport-McMoRan has worked with our commodity associations to develop life cycle assessment and life cycle inventory analyses of both copper and molybdenum, which are being used by customers to develop integrated carbon footprint assessments for various products.

Module: Sign Off**Page: CC15. Sign Off****CC15.1**

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
William Cobb	Vice President of Environmental Services and Sustainable Development	Environment/Sustainability manager

CDP 2017 Climate Change 2017 Information Request