# Freeport-McMoRan 2023 CDP Climate Change Response



#### **CAUTIONARY STATEMENT**

This document contains our response to the CDP Climate Change Questionnaire, as submitted to CDP in July 2023. This response contains forward-looking statements in which we discuss our potential future performance. Forward-looking statements are all statements other than statements of historical facts, such as plans, projections, expectations, targets, objectives, strategies or goals relating to environmental performance, including expectations regarding execution of our energy and climate strategies, and the underlying assumptions and estimated impacts on our business and stakeholders related thereto; our approach to lower carbon and reduced emissions; our plans and expectations in relation to our future clean energy transition, including targeted reductions of GHG emissions, implementation of technologies and emissions reduction projects, achievement of our 2030 climate targets and our 2050 net zero aspiration; our operational resiliency and climate scenarios; our expectations regarding climate-related risks and future risk mitigation; and our commitment to deliver responsibly produced copper and molybdenum, including plans to implement, validate and maintain validation of our operating sites under specific frameworks. The words "anticipates," "may," "can," "commitments," "plans," "pursues," "believes," "estimates," "expects," "endeavors," "efforts," "initiatives," "seeks," "goal," "predicts," "strategy," "objective," "projects," "targets," "intends," "aspires," "likely," "will," "should," "could," "to be," "potential," "opportunities," "assumptions," "guidance," "forecasts," "future" and any similar expressions are intended to identify those assertions as forward-looking statements.

We caution 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 our actual results to differ materially from those anticipated in the forward-looking statements include, but are not limited to, the factors described under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the U.S. Securities and Exchange Commission (SEC), as updated by our subsequent filings with the SEC, and available on our website at fcx.com.

Many of the assumptions upon which our forward-looking statements are based are likely to change after the forward-looking statements are made. Further, we may make changes to our business plans that could affect our results. We caution investors that we undertake no obligation to update any forward-looking statements, which speak only as of the date indicated in the response, notwithstanding any changes in our assumptions, changes in business plans, actual experience or other changes.

This response contains statements based on hypothetical scenarios and assumptions, and these statements should not be viewed as representative of current risks or forecasts of expected risks. Third-party scenarios discussed in this response reflect the modeling assumptions and outputs of their respective authors, and their use or inclusion herein is not an endorsement of their underlying assumptions, likelihood or probability.

While certain matters discussed in this response may be significant and relevant to our investors, any significance should not be read as rising to the level of materiality for purposes of complying with the U.S. federal securities laws and regulations or the disclosure requirements of the SEC. The goals and projects described in this response are aspirational; as such, no guarantees or promises are made that these goals and projects will be met or successfully executed.

In addition, in certain instances, the CDP Climate Change Questionnaire requires information to be analyzed, calculated and presented solely to respond to the questions posed. Accordingly, this response should not be read in isolation and should be considered with specific regard to, and treated as confined by, the formulation of the question to which it responds.

Further, the data, statistics and metrics included in this response are non-audited estimates (with the exception of certain financial information and the GHG Scope 1, 2 and 3 emissions data, which have been third-party verified in accordance with ISO 14064 (Specifications 1 and 3) to a reasonable level of assurance), not prepared in accordance with U.S. generally accepted accounting principles, continue to evolve and may be based on assumptions believed to be reasonable at the time of preparation, but should not be considered guarantees and are subject to future revision.



# Welcome to your CDP Climate Change Questionnaire 2023

### C0. Introduction

#### C<sub>0.1</sub>

#### (C0.1) Give a general description and introduction to your organization.

Freeport-McMoRan Inc. (Freeport-McMoRan, Freeport, FCX or the Company) is a leading international mining company with headquarters in Phoenix, Arizona. FCX operates large, longlived, geographically diverse assets with significant proven and probable mineral reserves of copper, gold and molybdenum. FCX's 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. In North America, we operate seven copper mines -Morenci, Bagdad, Safford (including Lone Star), Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico, and two molybdenum mines - Henderson and Climax in Colorado. In addition to copper, certain of our North America copper mines also produce molybdenum concentrate, gold and silver. In South America, we operate two copper mines - Cerro Verde in Peru and El Abra in Chile. In addition to copper, the Cerro Verde mine also produces molybdenum concentrate and silver. In Indonesia, PT-FI operates in the Grasberg minerals district. In addition to copper, the Grasberg minerals district also produces gold and silver. For purposes of this report only, references to (1) FMC Mining includes all mining operations in North America and South America (the Americas), (2) Downstream Processing (Downstream Processing) includes all operations downstream of mining in the Americas and Europe, (3) Freeport Americas Copper includes all copper mining operations in the Americas plus the Miami Smelter and El Paso Refinery and (4) PT Freeport Indonesia or PT-FI includes our operations in Papua, Indonesia. As one of the world's largest copper producers, we understand our critical role in the low-carbon energy transition. We are dedicated to supplying the global economy with responsibly produced copper, which includes operating in a manner that manages and mitigates our GHG emissions and other climate-related risks and impacts. We aspire to participate in and positively contribute to a 2050 net zero economy. Our climate strategy is comprised of three pillars:

Reduction - We strive to reduce, manage and mitigate our GHG emissions, where
possible. We have four 2030 GHG emissions reduction targets, covering nearly 100%
of our Scope 1 and 2 GHG emissions, which help us to manage relevant, climaterelated risks and support the decarbonization of our business globally. Our



- decarbonization initiatives can be described by four primary levers: decarbonizing electricity supply, electrification of equipment, energy and asset efficiency, and process innovation. We believe that these four levers are the foundation that will help us to further define our decarbonization roadmap to achieve our 2030 GHG emissions reduction targets and beyond.
- Resilience We strive to enhance our resilience to climate change risks (both physical
  and transitional risks) for our current and future operations, our host communities and
  our stakeholders. This includes working to analyze and prepare for extreme weather
  events, water stress and other potential climate change impacts while also supporting
  our host communities and responding to anticipated market and regulatory demands.
- Contribution We strive to be a positive contributor beyond our operational boundaries
  by responsibly producing copper that will support the technologies needed to enable
  the energy transition. This includes collaborating with partners in our value chain, and
  industry associations, to identify climate-related solutions that will support the transition
  to a low-carbon economy and ultimately meet the goals of the Paris Agreement.

#### C<sub>0.2</sub>

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

#### Reporting year

#### Start date

January 1, 2022

#### **End date**

December 31, 2022

Indicate if you are providing emissions data for past reporting years No

#### C<sub>0.3</sub>

(C0.3) Select the countries/areas in which you operate.

Chile

Indonesia

Netherlands

Peru

Spain

United Kingdom of Great Britain and Northern Ireland

United States of America

#### C<sub>0.4</sub>

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD



#### C<sub>0.5</sub>

(C0.5) Select the option that describes the reporting boundary for which climaterelated impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

### **C-MM0.7**

(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?

#### Row 1

#### Mining

Copper

Gold

Silver

Other non-ferrous metal mining, please specify Molybdenum

#### **Processing metals**

Copper

Other non-ferrous metals, please specify Molybdenum

### C<sub>0.8</sub>

## (C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	NYSE Ticker: FCX
Yes, an ISIN code	US35671D8570
Yes, a CUSIP number	35671D857

## C1. Governance

### C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes



## C1.1a

## (C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

	Responsibilities for climate-related issues
individual	
or	
committee	
Board Chair	FCX's Chairman and Chief Executive Officer (CEO) has ultimate responsibility for the Company's sustainability/ESG performance, with active oversight from the Board of Directors (the Board), including with regard to climate strategy and performance. The Chairman and CEO communicates during the year with the Board regarding actions in support of our ESG plans, including climate-related matters. Executive officers are held accountable for the Company's ESG performance in part through the Company's performance-based annual incentive program (AIP) via pre-determined ESG metrics aligned with our key ESG commitments and priorities. In 2022, ESG metrics collectively accounted for 25% of the AIP (15% safety and 10% sustainability).
	FCX's CEO regularly engages with management on climate-related matters and is actively involved in the decision-making that drives our climate strategy and performance. For example, in 2022, FCX's CEO reviewed and approved the company's newly established 2030 GHG emissions reduction targets for Atlantic Copper and our primary molybdenum sites. These targets are in addition to our existing Americas Copper and PT-FI GHG reduction targets, which FCX's CEO previously reviewed and approved. FCX's CEO also approved the advancement of a comprehensive feasibility study to evaluate the potential to replace PT-FI's existing coal fired power plant- with a new high-efficiency, combined-cycle power plant to be fueled by LNG, which was initiated in 2022. Additionally, FCX's CEO was also actively involved in the development and approved the company's announcement in 2021 of its 2050 Net Zero Aspiration and he approved and signed the International Council on Mining & Metals' 2050 Net Zero Commitment, which was announced in October 2021.
Board-level committee	FCX's Corporate Responsibility Committee (CRC), on behalf of FCX's Board, oversees the Company's environmental and social policies and implementation programs and related risks, including climate. The CRC reviews the effectiveness of the Company's strategies, programs and policy implementation with respect to climate as well as other ESG-related topics including health and safety, responsible production frameworks, tailings management and stewardship, water stewardship, biodiversity and land management, waste management, human rights, stakeholder relations, social performance and Indigenous Peoples, responsible sourcing and political activity and spending practices.
	The CRC engages with management on several key ESG topics, including on its climate strategy, climate-related initiatives and climate performance. Topics discussed during the 2022 CRC meetings included advancement of our climate strategy, our 2030 GHG emissions reduction targets and performance against those targets, a summary



	of findings from our global scenario analysis, feedback from ESG shareholder engagements on our climate strategy and related disclosures and an update on other climate related strategic initiatives. In 2022, the CRC also formally approved the annual update to its charter, which includes climate-related oversight responsibilities, and endorsed management's newly established Atlantic Copper and primary molybdenum sites 2030 GHG reduction targets.
Board-level committee	The Board's Compensation Committee (CC) annually reviews and approves the goals and objectives relevant to the compensation of FCX's executive officers, including the CEO, evaluates the performance of the executive officers in light of those goals and objectives, and determines and approves the compensation of the executive officers based on this evaluation. The goal setting process is structured so that our annual incentive plan (AIP) provides significant motivation to achieve our targeted results. The CC established and formally approved target performance goals under the AIP for executive officers for 2022 across three categories: financial, operational and ESG. In 2022, the ESG component collectively accounted for 25% of the AIP (15% safety and 10% sustainability) and included climate-specific metrics, among other ESG priorities. Elements of our sustainability scorecard (scored from 1.0 to 5.0 based on the level of achievement as determined by the committee) included Copper Mark, Climate, Tailings Management, Workforce, and Human Rights. With respect to the ESG category and climate specifically, the CC established the following 2022 metrics: (1) Develop GHG emissions reduction targets for molybdenum sites and Atlantic Copper, (2) Advance Science Based Targets initiative verification process for 2030 GHG emissions reduction targets; and (3) Demonstrate progress towards 2030 GHG emissions intensity reduction targets (Americas and PT-FI). For more information, please refer to page 47 of our 2023 Proxy Statement - https://s22.q4cdn.com/529358580/files/doc_financials/proxy/FCX_Prox_2023.pdf

## C1.1b

## (C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate- related issues are integrated	Please explain
Scheduled – some meetings	Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Monitoring progress towards corporate targets	The Board and its committees are actively engaged in overseeing our strategy and take an active role in risk oversight. The Board oversees the strategic direction of the 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. The Board as a whole is responsible for risk oversight, with reviews of certain areas being conducted by the relevant Board committees that regularly report to the



		CHD and I see that a second of the second of
	Reviewing and guiding	_
	he risk management	evaluates and discusses with appropriate members of
p	rocess	management whether the risk management processes
		designed and implemented by management are
		adequate in identifying, assessing, managing and
		mitigating material risks facing the Company, including
		financial, international, operational, social and
		environmental risks. The Board also oversees and
		approves major capital expenditures which from time to
		time includes climate-related expenditures in
		connection with our strategy.
		In 2022, the Board and its committees engaged on
		several key ESG topics, including receiving
		presentations and having active dialogue with
		management around our initiatives and performance
		and providing guidance where appropriate. The
		Corporate Responsibility Committee (CRC) reviews the
		effectiveness of the Company's strategies, programs
		and policy implementation with respect to ESG matters,
		including climate. During 2022, the CRC had four
		regularly scheduled meetings. Climate-related topics
		discussed during these meetings included
		advancement of FCX's climate strategy, FCX's 2030
		GHG emissions reduction targets and performance
		against those targets, feedback from ESG shareholder
		engagement on FCX's climate strategy and related
		disclosures, and an update on other climate-related
		strategic initiatives.
		oratogio ilittativoo.

## C1.1d

## (C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	In the last five years, we have significantly refreshed our board, adding eight new directors to the board, seven of whom are independent, and successfully achieved our board refreshment objectives focused on thoughtfully enhancing the composition and size of the board, decreasing our average director tenure and age, increasing the gender, race and ethnic diversity of our board, and adding CEO experience, extractives industry experience, international experience, accounting



and financial expertise and ESG/sustainability experience, including climate expertise.

With these new appointments, FCX has seven directors with executive experience and natural resources, mining, commodities industries experience and nine directors with ESG/sustainability experience, including climate expertise. For example, one of these directors is a retired Chairman and CEO, once responsible for progressing another company's climate strategy and TCFD-aligned disclosures, and with broad experience with overseeing sustainability driven change, including the transition to emerging technologies. Another director is the chairman of a CEO-led initiative that aims to accelerate the oil and gas industry's response to climate change. A third director played a leadership role in developing and advancing a company's decarbonization plans and other key sustainability initiatives. The addition of these directors delivers on our multi-year refreshment strategy and our commitment to have a board with expansive and diverse experience, a deep understanding of the challenges and opportunities associated with our global business and a focus on value and sustainability for the benefit of all stakeholders.

### C1.2

## (C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

#### Position or committee

Chief Executive Officer (CEO)

#### Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)

Integrating climate-related issues into the strategy

Setting climate-related corporate targets

Monitoring progress against climate-related corporate targets

Assessing climate-related risks and opportunities

#### Coverage of responsibilities

#### Reporting line

Reports to the board directly

## Frequency of reporting to the board on climate-related issues via this reporting line



#### Annually

#### Please explain

FCX's CEO has ultimate responsibility for the Company's sustainability/ESG performance, with active oversight from the Board, including with regard to climate strategy and performance. The Chairman and CEO communicates during the year with the Board regarding actions in support of our ESG plans, including climate-related matters. Executive officers are held accountable for the Company's ESG performance in part through the Company's performance-based annual incentive program (AIP) via relevant pre-determined ESG metrics aligned with our key ESG commitments and priorities. In 2022, ESG metrics collectively accounted for 25% of the AIP (15% safety and 10% sustainability).

FCX's CEO regularly engages with management on climate-related matters and is actively involved in the decision-making that drives our climate strategy and performance. For example, in 2022, FCX's CEO reviewed and approved the company's two newly established 2030 GHG emissions reduction targets, including our 50% GHG reduction target for our Atlantic Copper operations and our 35% GHG emissions reduction target for our primary molybdenum operations, both compared to a 2018 baseline. Following the completion of a scoping study, FCX's CEO also approved the advancement of a feasibility study to evaluate the potential to replace PT-FI's existing coal-fired power plant with a new high-efficiency, combined-cycle power plant to be fueled by LNG, which was initiated in 2022. Additionally, FCX's CEO was also actively involved in the development and approved the company's announcement in 2021 of its 2050 Net Zero Aspiration and he approved and signed the International Council on Mining & Metals' 2050 Net Zero Commitment, which was announced in October 2021.

### C1.3

## (C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the managemen t of climate-related issues	Comment
Ro w 1	Yes	Climate performance is integrated into our executive compensation program. Executives are held accountable for FCX's ESG performance in part through its performance-based annual incentive program (AIP) through relevant predetermined metrics aligned with our ESG strategy. In 2022, ESG metrics collectively accounted for 25% of the AIP (15% safety/10% sustainability). For climate specifically, 2022 performance metrics included – 1. Develop GHG emissions reduction targets for molybdenum sites and Atlantic Copper 2. Advance Science Based Targets initiative verification process for 2030 GHG



emissions reduction targets 3. Demonstrate progress towards 2030 GHG emissions intensity reduction targets (Americas and PT-FI). For more information on each please refer to page 47 of our 2023 Proxy Statement - https://s22.q4cdn.com/529358580/files/doc\_financials/proxy/FCX\_Prox\_2023.p df

#### C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

#### **Entitled to incentive**

Chief Executive Officer (CEO)

#### Type of incentive

Monetary reward

#### Incentive(s)

Bonus - % of salary

#### Performance indicator(s)

Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative

#### Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

#### Further details of incentive(s)

Climate performance is integrated into our executive compensation program. Executives are held accountable for FCX's ESG performance (including climate) in part through its performance-based annual incentive program (AIP) through relevant pre-determined metrics aligned with our ESG strategy. In 2022, ESG metrics collectively accounted for 25% of the AIP (15% safety/10% sustainability). Climate was included in the sustainability component and, in 2022, included 1. Develop GHG emissions reduction targets for molybdenum sites and Atlantic Copper 2. Advance Science Based Targets initiative verification process for 2030 GHG emissions reduction targets 3. Demonstrate progress towards 2030 GHG emissions intensity reduction targets (Americas and PT-FI).

## Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The incentive is in line with our climate commitments and objectives to advance our climate strategy. The climate metrics included in the AIP incentive are structured to provide significant motivation to achieve practical steps towards our stated targets and climate strategy. The performance metrics and relative weightings selected for 2022



were designed to focus our executives' efforts on the critical elements of the company's strategic priorities – production, cost and capital discipline, generating cash flows and alignment with key ESG commitments, including climate.

## C2. Risks and opportunities

### C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

#### C2.1a

## (C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short- term	0	5	Our climate program and related scenario analysis defines short-term as (2023 –2027), medium-term (2027 – 2032) and long-term (2032 and beyond).
Medium- term	5	10	Our climate program and related scenario analysis defines short-term as (2023 –2027), medium-term (2027 – 2032) and long-term (2032 and beyond).
Long-term	10		Our climate program and related scenario analysis defines short-term as (2023 –2027), medium-term (2027 – 2032) and long-term (2032 and beyond).

#### C2.1b

## (C2.1b) How does your organization define substantive financial or strategic impact on your business?

FCX assesses risk and defines substantive financial or strategic impacts through multiple methods:

- (1) **SEC Material Risks:** From a traditional SEC material disclosure perspective, the determination of materiality is a facts and circumstances determination made on a case-by-case basis. Generally, a fact is "material" if there is a substantial likelihood that a reasonable investor would consider it important in making investment and proxy voting decisions or a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the "total mix" of information made available.
- (2) **Significant Environmental Event:** Our risk assessment uses a likelihood and consequence matrix with a scale on each axis from 1 through 4, with 4 being the highest



likelihood or consequence. Significant environmental events are defined as those with a rating of 3 or higher on the consequence scale.

While certain matters discussed in our reports may be significant and relevant to our investors, any significance should not be read as rising to the level of materiality for purposes of complying with the U.S. federal securities laws or the disclosure requirements of the SEC.

#### C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climaterelated risks and opportunities.

#### Value chain stage(s) covered

Direct operations Upstream Downstream

#### Risk management process

A specific climate-related risk management process

#### Frequency of assessment

Every three years or more

#### Time horizon(s) covered

Short-term Medium-term Long-term

#### **Description of process**

In early 2021, we completed our first global climate change scenario analysis considering both physical risks and transition risks and opportunities across three different climate scenarios: no climate action (formerly referred to as "current state") scenario (i.e., IPCC RCP 8.5, high-end estimate of non-climate policy scenarios), moderate climate action scenario (i.e., IPCC RCP 4.5, implementation of climate policies), and aggressive climate action scenario (i.e., IPCC RCP 2.6). In general, the results of the analysis demonstrated that physical risks are highest for FCX in the no climate action scenario and lowest in the aggressive climate action scenario. Conversely, transition risks and opportunities are highest in the aggressive climate action scenario and lowest in the no climate action scenario. Our global scenario analysis covered our operational and non-operational assets as well as our supply chain. The goal of the analysis was to gather additional data to inform our ongoing climate-related decision-making and better prepare the company for possible outcomes in the short- (5 years or less), medium- (5-10 years) and long-term (over 10 years).

Our global scenario analysis was conducted using the prospective time periods of 2030



and 2050 and incorporating a range of business considerations based on third-party GHG emissions trajectory scenarios and their corresponding implications for FCX. Physical risks were evaluated mainly using data from the Fifth Phase of the Coupled Model Intercomparison Project (CMIP5), which was used in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report.

Our global scenario analysis identified potential physical risks that may impact our sites across four main themes: wet extremes, heat extremes, emerging water stress and sea level rise. We have additional analysis underway using more localized models to better understand each of these themes and their potential impacts at the sites identified with this highest potential risk including work with third-party experts to develop regional and local data sets, which will enable us to better evaluate the potential effects of sea level rise under each scenario at our port locations and precipitation at all operating locations. From a transition risk perspective, our analysis indicated that although FCX is prepared for the potential growth in copper demand, we must continue to monitor evolving carbon and energy policies and prices and evaluate the potential implications for our business. For example, expanded electrification from market and regulatory drivers and increased customer demands for low-carbon products may increase market demand for copper and molybdenum. In addition, we may face challenges from sulfur supply deficits and price volatility if demand for oil and gas sharply declines, and refineries and natural gas processing plants that produce sulfur are decommissioned. Sulfur is necessary for sulfuric acid production, an essential material for SX / EW (leached) copper production for which fossil fuel production is the low-cost producer. We are collaborating with one of our industry associations on a scenario-based market study to better understand this potential challenge in 2023.

In addition to conducting global climate scenario analysis, we conducted additional evaluations of regional climate models, with the goal to yield more reliable, representative and decision-useful information for our operations. With support from a third-party consultant, in late 2021 and early 2022, we identified and selected appropriate downscaled regional climate models (using six to ten models per region) covering our areas of operation to further evaluate and refine three of the four physical risk themes identified in our global analysis: wet extremes, heat extremes and water stress.

Using these regional model projections, we created an internal dashboard to support analysis of the large, multi-dimensional dataset and facilitate dialogue with our sites on water management. The dashboard takes the complex projection database and visualizes it to provide a concise and transparent representation of site-level climate metrics including: maximum one-day rainfall, hottest temperature, and total annual rainfall. The dashboard is interactive, allowing users to select a FCX site or location, a climate metric (e.g., hottest temperature), a time horizon (e.g., 2030), an emission reference scenario (e.g., IPCC RCP 4.5) and model type (e.g., regional climate model). The data are displayed in box plots, which allow for quick visualization of the climate metrics, including individual and ensemble model projections, which indicates to the user whether the models agree, and the ensemble mean and median. This directly



informs our engineers and scientists on climate models' predictions at our locations and enables them to evaluate existing and future conditions and risks, as well as potential projects that could be affected by climate change impacts in the locations where we operate.

#### Value chain stage(s) covered

Direct operations Upstream Downstream

#### Risk management process

Integrated into multi-disciplinary company-wide risk management process

#### Frequency of assessment

Annually

#### Time horizon(s) covered

Short-term Medium-term Long-term

#### **Description of process**

Enterprise level risks are identified and assessed through our ERM program, designed to provide cross-functional executive insight across the business to identify and monitor risks, opportunities and emerging trends that can impact our strategic business objectives. Our ERM program provides the Board with information about the company's enterprise risk profile and allows the Board to assess and monitor the risks over the short, medium and long term, both within and outside our operational boundaries. Our ERM management committee is comprised of senior leaders with responsibility across operations and core business functions, and with a breadth of knowledge, influence and experience covering the risks the company faces. The ERM management committee reports to our president and periodically provides reports on, among other things, business strategy, geopolitical trends, markets, people, innovation and cybersecurity risks, to the audit committee, the CRC and full Board. The ERM management committee is responsible for providing input and oversight on the ERM program, which seeks to link our global operations and business functions to (1) identify enterprise risks and opportunities, (2) analyze and prioritize risks, (3) review risk control environments, including through internal audit, and determine additional management actions where warranted, and (4) monitor and report progress. Key ESG-related risks are included in the ERM program.

In 2022, the ERM function engaged company subject matter experts and third parties to further develop risk profiles for both physical and transition risks, including risk drivers, interdependencies within the broader ERM program, controls currently in place and planned response initiatives. During the year, our internal audit firm also conducted a foundational review of our physical and transition risk management practices. This



included a review of associated roles and responsibilities, policies, procedures and related communication mechanisms.

#### Value chain stage(s) covered

Direct operations Upstream Downstream

#### Risk management process

Integrated into multi-disciplinary company-wide risk management process

#### Frequency of assessment

More than once a year

#### Time horizon(s) covered

Short-term Medium-term Long-term

#### **Description of process**

We translate our responsible production commitments to everyday work through the use of our sustainability risk register process (risk register) which identifies, prioritizes, manages and tracks sustainability risks and actions at the corporate-and site-level. Defined in a global standard operating procedure, the process uses a risk assessment matrix to prioritize risks by both their likelihood and consequence, based on customized impact definitions by functional area to drive action. All risks require annual review, and detailed action plans are prepared for those rated as actionable.

Sites use the risk register to identify risks and opportunities in relation to their operation and stakeholders. The risk register prioritizes risks that could have negative consequences to our business and our stakeholders in areas such as health and safety, human rights, environmental management, community development and economic impact. It also enables sites to identify and prioritize opportunities that could have positive consequences. Once the risks and opportunities are prioritized, action plans are developed. The risk register and these plans are the foundation of internal and external assurance processes at both the corporate level and operating sites.

The risks included in the risk register are mapped to our external commitments, including all 39 ICMM performance expectations and associated Position Statement requirements (including Climate Change) and the Copper Mark's 32 ESG requirements. Our risk register assists our teams to identify and prioritize the most significant risks to our business and our stakeholders. We work cross-functionally to implement our various commitments, and our risk register enables site-level management teams to focus on priorities while promoting globally consistent implementation across our operations. In 2022, we developed and implemented a new digital solution to transform the risk register into a more effective tool, enabling sites to easily share identified risks and



action plans while digitally connecting identified risks to other tools in the system, such as action plans, stakeholder maps and incidents. Risks such as acute or chronic physical risks, current or emerging regulations, reputation, value chain, or others identified through our climate scenario analysis or by our operations teams are being integrated into site registers, and associated action plans are being developed and implemented. For example, our operational risks are updated annually and now include site-specific, climate-related risks for both physical risks, such as water stress and extreme events, and transition risks, such as the cost of energy and carbon taxes.

### C2.2a

## (C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Our operations are subject to extensive and complex laws and regulations, including environmental laws and regulations and other related matters. These laws and regulations are subject to change and to changing interpretation by governmental agencies and other bodies vested with broad supervisory authority. As a mining company, compliance with environmental, health and safety laws and regulations is an integral and costly part of our business. In addition, we must obtain regulatory permits and approvals to start, continue and expand operations.  In many of the jurisdictions in which we operate, governmental bodies are increasingly enacting legislation and regulations in response to the potential impacts of climate change. For example, as a result of the 2015 Paris Agreement, a number of governments, including the U.S., have pledged "Nationally Determined Contributions" to control and reduce greenhouse gas emissions. Additionally, the pledges made as part of the 2021 Glasgow Climate Pact could result in further policy changes in many of the jurisdictions in which we operate. Further, several states in the U.S., including Colorado and New Mexico, have advanced goals reducing or eliminating fossil fuel-based energy production. Carbon tax legislation also has been adopted in jurisdictions where we operate, including Indonesia, and we expect that such carbon taxes and other carbon pricing mechanisms will increase over time.
Emerging regulation	Relevant, always included	Changes in regulations could accelerate a reduction in both our Scope 1 and Scope 2 emissions and result in increased costs. Our most carbon-intensive assets have the highest carbon price exposure risk, including PT-FI, which currently relies predominately on coal-based power, and our larger Americas mining assets at Cerro Verde and Morenci. A surge in such policies could push us to invest capital at a



faster pace to decarbonize our operations. We also expect that carbon taxes and other carbon pricing mechanisms will increase over time. Depending on the future state of various climate policies and the speed at which the world adopts various policies and initiatives, we recognize that all of our operating regions must prepare for carbon pricing regimes. We anticipate that we will dedicate more resources and money to comply and remediate in response to legislative or regulatory changes, and our ability to modify our operations to avoid these costs may be limited in the near term. However, it is not yet possible to reasonably estimate the nature, extent, timing and cost or other impacts of any future carbon pricing mechanisms, other climate change regulatory programs or future legislative action that may be enacted.

Further, in March 2021, the SEC proposed new climate-related disclosure rules, which if finalized as expected in 2023, would require new climate-related disclosures in SEC filings and audited financial statements, including certain climate-related metrics and GHG emissions data, information about climate-related targets and goals, transition plans, if any, and attestation requirements. While it is not yet possible to reasonably estimate the nature, extent, timing and cost or other impacts of any future carbon pricing mechanisms, other climate change regulatory programs or future legislative action that may be enacted, we anticipate that we will dedicate more resources and money to comply and remediate in response to legislative or regulatory changes.

#### Technology

### Relevant, always included

Our operations are dependent on the use of heavy equipment for which low-carbon alternatives are not currently readily available and/or commercially viable. Our diesel-fueled mine trucks are a significant contributor to GHG emissions at our Americas operations. Reducing GHG emissions from these trucks will depend upon the development of alternative-fueled mining equipment by our third-party suppliers and the commercial viability and supply chain availability of equipment as well as the development of supporting infrastructure necessary to maintain the new technology at scale, once it does exist. Potential supply chain disruptions associated with shortages in metals or component inputs for these new technologies is also a risk, especially for those technologies heavily reliant on battery minerals, copper or platinum group metals (e.g., hydrogen).

Our operations require significant energy, much of which is currently from fossil fuel sources and is obtained from third parties under long-term contracts. The principal sources of energy consumption at our mining operations are diesel fuel, which powers mine trucks and other transportation equipment; purchased electricity, which powers core facilities and certain on-site metal processing operations; and coal and



natural gas, which provide electricity at certain operations. While we strive to transition to more renewable power sources for our mining operations, as a commercial consumer of power, our ability to reduce our GHG emissions associated with our power consumption demand is dependent upon the mix of our suppliers and locally-available renewable energy resources at our various sites.

Existing and proposed new governmental conventions, laws, regulations, policies and standards (both in the U.S. and internationally), including those related to climate and GHG emissions, may in the future add significantly to our operating costs, limit or modify our operations, impact the competitiveness of the commodities we produce, and require more resources to comply and remediate in response. In certain aspects of our operations, our ability to reduce our GHG emissions is directly dependent on the actions of third parties and technological solutions and innovation, and our ability to make significant, rapid changes in our GHG emissions in response to potential future regulations may be limited.

Legal

Relevant, always included Climate change could lead to changes in the physical risks posed to our operations, which could result in changes in our closure and reclamation plans to address such risks. Any modifications to our closure and reclamation plans that may be required to address physical climate risks may increase our financial assurance obligations and may materially increase the actual costs associated with implementing closure and reclamation at any or all of our active or inactive mine sites or smelter sites.

Certain federal and similar state laws and regulations may expose us to joint and several liability for environmental damages caused by our operations, or by previous owners or operators of properties we acquired or are currently operating or at sites where we previously sent materials for processing, recycling or disposal. As discussed in more detail in the risk factor relating to costs incurred for remediating environmental conditions on our properties that are no longer in operation, we have substantial obligations for environmental remediation on properties previously owned or operated by Freeport Minerals Corporation and certain of its affiliates. Noncompliance with these laws and regulations could result in material penalties or other liabilities. In addition, compliance with these laws may from time to time result in delays in or changes to our development or expansion plans. Compliance with these laws and regulations imposes substantial costs, which we expect will continue to increase over time because of increased regulatory oversight, adoption of increasingly stringent environmental standards, and other factors.



Market	Relevant, always included	A future with reduced oil and gas demand may negatively impact the security of our sulfur supply (since sulfur is a by-product of oil and gas processing), which is a critical operating material for FCX. Reduced sulfur supply may constrain our operational capacities. Sulfur is necessary for sulfuric acid production, an essential material for SX / EW (leached) copper production for which fossil fuel production is the low-cost producer. We may face challenges from supply deficits and price volatility. Specifically, FCX may have to manage through a disruption to sulfur supply if demand for oil and gas sharply declines, and refineries and natural gas processing plants that produce sulfur are decommissioned. Shipping costs could be negatively impacted if FCX were required to source sulfur from alternative vendors or regions. To date, FCX has successfully managed prior disruptions in the sulfur market through supplier diversification, on-site storage, contingency plans and risk management in vendor agreements.
Reputation	Relevant, always included	If we do not adapt to the expectations of stakeholders regarding a low-carbon future in a timely manner, it may result in reputational damage with key stakeholders, which can impact investor confidence, market value and access to, and cost of, capital. In response to climate change and societal demands for action, we have announced 2030 GHG emissions reduction targets and a 2050 net zero aspiration, which will result in additional costs to us, the totality of which we cannot currently estimate with accuracy, and we cannot guarantee that we will be able to achieve any current or future GHG emissions targets or aspirations.  Stakeholder scrutiny related to our ESG practices, commitments, performance and disclosures continues to increase. We have adopted certain ESG policies and programs. It is possible, however, that our stakeholders might not be satisfied with our ESG practices, goals, initiatives, commitments, performance and/or disclosures, or the speed of their adoption, implementation and measurable success. If we do not meet our stakeholders' evolving expectations, our reputation, access to and cost of capital, and stock price could be negatively impacted.
		Investor advocacy groups, certain institutional investors, investment funds, creditors and other influential investors are increasingly focused on our ESG practices and in recent years have placed increasing importance on the ESG implications of their investments and lending decisions.  Organizations that provide information to investors and financial institutions on ESG performance and related matters have developed quantitative and qualitative data collection processes and ratings processes for evaluating companies on their approach to ESG matters. Such ratings are used by some investors to inform their investment and



		voting decisions. In addition, many investors have created their own proprietary ratings that inform their investment and voting decisions. Unfavorable ratings or assessment of our ESG practices, including our compliance with certain voluntary disclosure standards and frameworks, may lead to negative investor sentiment toward us, which could have a negative impact on our stock price and our access to and cost of capital.
Acute physical	Relevant, always included	We recognize that as the climate changes, our operations, workforce, communities, supply chains and customers may be exposed to changes in the frequency, intensity and/or duration of intense storms, drought, flooding, wildfire, and other extreme weather events and patterns. Such potential physical impacts of climate change on our operations are highly uncertain and would vary by operation based on particular geographic circumstances. At many of our mine sites, climate change is projected to impact local precipitation regimes, resulting in shorter-duration, higher-intensity storm events and the potential for less precipitation overall. We could face increased operational costs associated with managing additional volumes of storm water during more intense future events, including potential down-time, supply disruption, delays, damage to or inaccessibility of our facilities and increased pricing of consumables and components we purchase. In addition, the potential for overall decreases in precipitation could affect the availability of water needed for our operations, leading to increased operating costs, or in extreme cases, disruptions to mining operations.  FCX sites are currently exposed to multiple physical risk hazards that are projected to potentially increase or decrease under future scenarios. Following completion of our physical risk exposure analysis, we identified four main themes including: wet extremes, heat extremes, emerging water stress and sea level rise. The analysis sought to capture the assets with the highest projected future increase in exposure to these themes versus current exposure.
Chronic physical	Relevant, always included	We have company-wide processes to address risks, including climate, that seek to cover the full life cycle of our assets — from a pre-project sustainability review process to resiliency planning for reclamation and closure. FCX sites are currently exposed to multiple physical risk hazards that are projected to potentially increase or decrease under future scenarios. Sea level rise was the fourth potential physical risk theme identified in our global climate scenario analysis in 2021. The global model projections suggested that the main risk to our business from sea level rise was the potential for coastal flooding to impact infrastructure at our Atlantic Copper site in Huelva, Spain, our Manyar smelter project near Surabaya, Indonesia, and our Amamapare port in Central Papua, Indonesia. In 2022, further analysis by DHI Group (DHI) – a global water management consultancy firm – determined that there



is negligible credible risk of coastal flooding at the Atlantic Copper site through 2050 and critical infrastructure is adequately raised above all credible coastal flood levels at the Manyar smelter project through 2050.

PT-FI's Amamapare port is exposed to rising sea levels. To evaluate coastal flooding risk, an assessment considered how multiple variables may change over the design life of the facility (through to 2061), including tides, mean sea level, storm surge, sea level rise, and settlement or subsidence. The study concluded that some infrastructure at the port needs to undergo mitigation to reduce the risk of flooding in the coming decades due to a combination of the variables listed above, some of which are driven or exacerbated by climate change. An additional study to further understand the impact of several of these variables is being scoped to complete the analysis. Together, these studies will enable evaluation of potential flood mitigation measures to improve resilience against coastal flooding at the port.

### C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

#### C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

#### **Identifier**

Risk 1

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Market

Increased cost of raw materials

#### Primary potential financial impact

Increased direct costs

#### Company-specific description

As identified in our TCFD-aligned global climate scenario analysis, sulfur supply may be at risk from reduced oil and gas demand with transition to low carbon. Sulfur is an important input material for FCX's leaching operations in the United States and Chile.



Sulfur is necessary for sulfuric acid production, an essential material for SX / EW (leached) copper production for which fossil fuel production is the low-cost producer. We may face challenges from supply deficits and price volatility. Specifically, FCX may have to manage through a disruption to sulfur supply if demand for oil and gas sharply declines, and refineries and natural gas processing plants that produce sulfur are decommissioned. Shipping costs could be negatively impacted if FCX were required to source sulfur from alternative vendors or regions. To date, FCX has successfully managed prior disruptions in the sulfur market through supplier diversification, on-site storage, contingency plans and risk management in vendor agreements.

#### Time horizon

Long-term

#### Likelihood

More likely than not

#### Magnitude of impact

Low

#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

**Explanation of financial impact figure** 

Cost of response to risk

#### Description of response and explanation of cost calculation

In the short- to medium-term, we are working to diversify our sulfur supply from sources outside of the U.S., to help mitigate the potential supply risks associated with declining supply from domestic U.S. sources. In the longer term, we seek to better understand and quantify this potential risk by working with industry peers to conduct a study to evaluate the potential market dynamics and challenges that may occur for both sulfur and sulfuric acid under various climate scenarios in more detail. This study will help inform the development of mid- to long-term alternative plans and sourcing opportunities should they be required.

#### Comment



#### Identifier

Risk 2

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

#### Primary potential financial impact

Increased direct costs

#### Company-specific description

Energy or carbon regulations to reduce GHG emissions and shift to clean energy could impact mining economics or generate incentives to invest in clean energy. Evolving carbon pricing policies could increase the cost of doing business or could impact the competitiveness of FCX's commodities. Existing and proposed conventions, laws, regulations and standards (both in the U.S. and internationally), including those related to climate and GHG emissions, may in the future add significantly to our operating costs, limit or modify our operations, and require more resources to comply and remediate in response.

In many of the jurisdictions in which we operate, governmental bodies are increasingly enacting legislation and regulations in response to the potential impacts of climate change. For example, as a result of the Paris Agreement, a number of governments, including the U.S., have pledged "Nationally Determined Contributions" to control and reduce GHG emissions. Pledges made as part of the 2021 Glasgow Climate Pact could result in further policy changes in many jurisdictions where we operate. Further, several U.S. states, including CO and NM, have advanced goals reducing or eliminating fossil fuel-based energy production. Carbon tax legislation also has been adopted in jurisdictions where we operate, including Indonesia, and we expect that such carbon taxes and other carbon pricing mechanisms will increase over time. Additionally, the European Commission is implementing its Carbon Border Adjustment Mechanism, which aims to reduce the import of goods with a higher carbon burden which could potentially impact pricing of goods procured for our operations and projects in Europe.

While it is not yet possible to reasonably estimate the nature, extent, timing, cost or other impacts of any future carbon pricing mechanisms, other climate change regulatory programs or future legislation, we anticipate that we will dedicate more resources and money to comply and remediate in response to legislative or regulatory changes.

#### **Time horizon**

Medium-term

#### Likelihood



More likely than not

#### Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact figure**

In 2021, FCX provided Deloitte ten years of historical energy consumption and GHG emission data to gain an understanding of current operations and trends. Deloitte used that historical data and certain assumptions to estimate the Company's projected fuel and purchased electricity, and carbon price exposure. For this effort, Deloitte developed a financial model to estimate the projected impacts on the business through three climate scenarios (No Climate Action, Moderate Climate Action, and Aggressive Mitigation), and two- time horizons (2030 and 2040). Deloitte reviewed the ten years of historical data from FCX to pull selected outputs as the starting point for the forecast. Deloitte projected the results to 2030 and 2040, not a continuous timeseries of values. This is driven by the availability of publicly available scientific research, which typically provides insights as snapshots in time as opposed to year-by-year results. The Model does not project data to 2050, as the IEA source data does not present the granularity of data required through this time horizon.

#### Cost of response to risk

#### Description of response and explanation of cost calculation

To address potential future carbon tax or other regulatory mechanisms, FCX continues to pursue long-term decarbonization efforts which require capital investments and operational transformations, such as sourcing energy from renewable options and electrifying haulage trucks and equipment. In certain aspects of our operations, our ability to reduce our GHG emissions is directly dependent on the actions of third parties, technological solutions and innovation, and our ability to make significant, rapid changes in our GHG emissions in response to potential future regulations may be limited.

To help quantify the potential costs associated with decarbonizing our global operations at different paces under different scenarios, we have established internal carbon shadow pricing to help drive decarbonization efforts and fully understand the potential financial ramifications of project options. We believe that a price range of \$50-150/metric ton of CO2 equivalent will provide a key input to our decision-making for both current



and future projects. We are working to integrate this into our business processes to evaluate the potential impacts of an imposed carbon pricing regime on our current operations, longer-term business plans and potential future projects.

#### Comment

#### Identifier

Risk 3

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

#### Primary potential financial impact

Increased capital expenditures

#### Company-specific description

We aspire to participate in and positively contribute to a 2050 net zero economy. We have set 2030 GHG emissions intensity reduction targets that cover nearly 100% of our global Scope 1 and 2 GHG emissions in order to help manage relevant, climate-related risks and support the decarbonization of our business. FCX's long-term decarbonization efforts will require capital investments and operational transformations, such as sourcing energy from renewable options and electrifying haulage trucks and equipment. In certain aspects of our operations, our ability to reduce our GHG emissions is directly dependent on the actions of third parties and technological solutions and innovation, and our ability to make significant, rapid changes in our GHG emissions in response to potential future regulations may be limited.

For example, our diesel-fueled mine trucks are a significant contributor to GHG emissions at our North America and South America operations, but reduction of emissions from mine trucks will depend upon the development of alternative-fueled mining equipment by our third-party suppliers and commercial viability and availability of equipment once technology does exist.

At our remote operations in Indonesia, we own and operate a coal-fired power plant, and our ability to transition to commercially viable alternative sources of energy will depend on, among other things, additional studies, technological considerations and permit approvals. PT-FI is working to integrate a lower-carbon power source at our operations with the development of a new 129MW dual-fuel power plant, which has completed construction and is currently in its final permitting stage.

#### Time horizon



Long-term

#### Likelihood

Likely

#### Magnitude of impact

Medium-high

#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

**Explanation of financial impact figure** 

Cost of response to risk

#### Description of response and explanation of cost calculation

As a part of our global climate strategy initiatives and risk management processes, we are working both to engage across the supply chain and across various industry consortium to develop commercially viable solutions and to develop corresponding estimates. In 2022, we committed to formal collaboration programs with Caterpillar's Early Learner program and Komatsu's GHG Alliance, both of which are focused on the development and advancement of zero-emissions mining trucks and supporting technologies and infrastructure. As such, we believe we need more time to better understand how new various technologies are developing to be able to accurately quantify both the unabated financial impact of the technological risk as well as the response to those risks.

#### Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical



Heavy precipitation (rain, hail, snow/ice)

#### Primary potential financial impact

Increased direct costs

#### Company-specific description

Our Arizona operations currently have a "moderate to high" exposure to significant rainfall events. Under the No Climate Action (4°C) scenario, a 2°C rate of warming reached by 2050 could result in an approximate 20% increase in frequency and 5% increase in intensity, with a 20% projected increase in the total precipitation during each event. In addition, Central Papua currently experiences the highest rainfall out of all our operations, averaging approximately 200 inches annually. We are in the process of conducting additional localized studies to refine these data, which will enable us to revisit internal guidelines for infrastructure and operating procedures.

#### **Time horizon**

Long-term

#### Likelihood

About as likely as not

#### **Magnitude of impact**

Medium-low

#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

**Explanation of financial impact figure** 

Cost of response to risk

#### Description of response and explanation of cost calculation

Following our global climate scenario analysis, in 2022, FCX conducted three follow-on third-party studies focused on enhancing our understanding of how the potential climate-related physical risks identified in our global study might materialize at a more localized level. This includes analysis of the physical risks we may face at our locations, including storm frequency and intensity and increasing water stress. This is being done using a combination of regional climate models, local historical data, and meteorological analysis, which will enable us to develop credible site-specific projections of likely



precipitation and temperature outcomes through 2100. Our engineering and site teams are using this data as it becomes available to assess how the climate projections may impact our facilities and how they compare with established management practices. Additional ongoing work includes our water team developing precipitation sequences on a site-by-site basis for use in our water models to forecast daily precipitation patterns for future years. This will better enable us to model precipitation patterns at the mine-level and the potential impact on regional water supplies. The combination of this work with the additional information from our scenario analysis, will enable us to take a more comprehensive approach to water management, including related infrastructure, at the site level.

#### Comment

We are in the process of conducting additional localized studies to refine these data, which will enable us to revisit internal guidelines for infrastructure and operating procedures.

#### Identifier

Risk 5

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Chronic physical Water scarcity

#### Primary potential financial impact

Increased direct costs

#### Company-specific description

Our operations in Chile could experience significant future increases in heat wave days, extended periods without rain and increased water stress. The projected increases are most significant under a No Climate Action (4°C) scenario. In addition, our operations in Peru also are projected to experience increased water stress, combined with longer periods without rain. These increases are projected under both the Moderate Climate Action (2.5°C) and No Climate Action (4°C) scenarios. At both operations, we have previously designated water stress as a significant future issue and will continue working to address the risks these potential changes pose to our business.

#### **Time horizon**

Medium-term

#### Likelihood

More likely than not

#### Magnitude of impact

Medium



#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

**Explanation of financial impact figure** 

Cost of response to risk

#### Description of response and explanation of cost calculation

Following our global climate scenario analysis, in 2022, FCX conducted three follow-on third-party studies focused on enhancing our understanding of how the potential climaterelated physical risks identified in our global study might materialize at a more localized level. This includes analysis of the physical risks we may face at our locations, including storm frequency and intensity and increasing water stress. This is being done using a combination of regional climate models, local historical data, and meteorological analysis, which will enable us to develop credible site-specific projections of likely precipitation and temperature outcomes through 2100. Our engineering and site teams are using this data as it becomes available to assess how the climate projections may impact our facilities and how they compare with established management practices. Additional ongoing work includes our water team developing precipitation sequences on a site-by-site basis for use in our water models to forecast daily precipitation patterns for future years. This will better enable us to model precipitation patterns at the mine-level and the potential impact on regional water supplies. The combination of this work with the additional analysis information from our scenario analysis, will enable us to take a more comprehensive approach to water management, including related infrastructure, at the site level.

#### Comment

**Identifier** 

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver



Acute physical Drought

#### **Primary potential financial impact**

Increased direct costs

#### Company-specific description

Our Arizona operations are also projected to experience overall declines in annual rainfall and extended periods without rain. Under a Moderate Climate Action (2.5°C) scenario, our facilities also are projected to experience a 5% to 11% decline in total annual rainfall by 2050. We are in the process of conducting additional localized studies to refine these data, which will enable us to revisit internal guidelines for infrastructure and operating procedures.

#### Time horizon

Short-term

#### Likelihood

About as likely as not

#### Magnitude of impact

Medium-low

#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure - maximum (currency)

#### **Explanation of financial impact figure**

Following our global climate scenario analysis, in 2022, FCX conducted three follow-on third-party studies focused on enhancing our understanding of how the potential climate-related physical risks identified in our global study might materialize at a more localized level. This includes analysis of the physical risks we may face at our locations, including storm frequency and intensity and increasing water stress. This is being done using a combination of regional climate models, local historical data, and meteorological analysis, which will enable us to develop credible site-specific projections of likely precipitation and temperature outcomes through 2100. Our engineering and site teams are using this data as it becomes available to assess how the climate projections may impact our facilities and how they compare with established management practices. Additional ongoing work includes our water team developing precipitation sequences on a site-by-site basis for use in our water models to forecast daily precipitation patterns for future years. This will better enable us to model precipitation patterns at the mine-level



and the potential impact on regional water supplies. The combination of this work with the additional analysis information from our scenario analysis, will enable us to take a more comprehensive approach to water management, including related infrastructure, at the site level.

#### Cost of response to risk

#### Description of response and explanation of cost calculation

#### Comment

We are in the process of conducting additional localized studies to refine these data, which we believe will enable us to revisit internal guidelines for infrastructure and operating procedures.

#### Identifier

Risk 7

#### Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Chronic physical Sea level rise

#### **Primary potential financial impact**

Increased direct costs

#### Company-specific description

We analyzed the projected exposures of our coastal operations to sea level rise. PT-FI's Amamapare port is exposed to rising sea levels, located in the warm tropics, projected to be at a significant potential risk of extreme events linked to sea level rise. This could lead to significant disruption to the timely delivery of essential materials to PT-FI and exports of commodities to our markets. It also exposes the coastal power plant that supplies PT-FI's energy to risk of damage and shutdown, thus increasing the likelihood of power outages to our operations. Sections of tailings management infrastructure at PT-FI that are exposed to marine water levels already include adjustments for sea level rise in their designs.

#### Time horizon

Medium-term

#### Likelihood

More likely than not

#### Magnitude of impact

Low



#### Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

**Explanation of financial impact figure** 

Cost of response to risk

#### Description of response and explanation of cost calculation

In 2022 and early 2023, DHI undertook a detailed risk assessment of the potential for coastal flooding at FCX's Amamapare port on the southern coast of Central Papua, Indonesia. The Amamapare port is the main shipping hub for our Grasberg copper concentrates and where the power plant for the entirety of the Grasberg operations and many other support services are located. To evaluate coastal flooding risk, the assessment considered how multiple variables may change over the design life of the facility (through to 2061), including tides, mean sea level, storm surge, sea level rise, and settlement or subsidence. The study concluded that some infrastructure at the port needs to undergo mitigation to reduce the risk of flooding in the coming decades due to a combination of the variables listed above, some of which are driven or exacerbated by climate change. An additional study to further understand the impact of several of these variables is being scoped to complete the analysis. Together, these studies will enable evaluation of potential flood mitigation measures to improve resilience against coastal flooding at the port.

#### Comment

#### C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

#### C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.



#### Identifier

Opp1

#### Where in the value chain does the opportunity occur?

Downstream

#### **Opportunity type**

Products and services

#### Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

#### **Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

#### Company-specific description

Copper and other precious metals are already essential materials for the electronics, appliances, equipment and vehicles that make modern quality of life possible. These metals are also critical enablers for the technologies that will support the energy transition and future low-carbon economy. For example, copper is a key component in the technologies that will be deployed in a highly electrified and low-carbon economy, including solar and wind energy, electric vehicles (EVs), and other energy efficient technologies. Copper's durability, reliability, superior conductivity and recyclability are some of the unique properties that benefit batteries, wiring, electrical equipment and supporting infrastructure – such as transformers, generators, inverters and cooling systems. Copper is a necessary material for clean energy generation, transmission and storage. Renewable energy generation technologies rely more on copper than higher carbon alternatives.

Drivers of growth in applications of copper are expected to support underlying copper demand and fundamentals. Revenue growth could come in the form of higher commodity prices and/or increased production. With its very long-life cycle, copper is a circular material and not only a good investment but also can be recycled with no loss in its physical properties. ICA estimates that since 1900, two-thirds of the 550 MMT of previously mined copper is still in productive use.

To help support increased demand for copper and fill a gap in the recycling of waste from electrical and electronic equipment (WEEE) FCX is building a new WEEE recycling facility in Huelva, Spain (Project CirCular). Atlantic Copper's existing smelting and refining facilities provide synergies to recycle this type of material, and the project is expected to recycle 60,000 tons per year of e-material recovering copper, gold, silver, palladium, platinum, tin and nickel.

#### Time horizon

Medium-term

#### Likelihood

Very likely



#### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

60,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

We estimate Project CirCular will contribute approximately \$60 million annually in incremental EBITDA. This calculation is based on a 3-year average price for each of the metals we expect to recycle. The new facility is projected to recycle 60,000 tons per year of e-material recovering copper, gold, silver, palladium, platinum, tin and nickel. Commissioning the new facility is currently anticipated to occur in 2024, with full capacity currently anticipated in 2025. Please refer to FCX Conference Call 1st Quarter 2023 Results

https://s22.q4cdn.com/529358580/files/doc\_presentations/2023/FCX\_1Q23\_CC.pdf

#### Cost to realize opportunity

330,000,000

#### Strategy to realize opportunity and explanation of cost calculation

Through Project CirCular, FCX is building a new WEEE recycling facility in Huelva, Spain. Atlantic Copper's existing smelting and refining facilities provide synergies to recycle this type of material, and the project is expected to recycle 60,000 tons per year of e-material recovering copper, gold, silver, palladium, platinum, tin and nickel. Project CirCular contributes to several strategic objectives: support for the EU's WEEE recycling regulations, meeting increased demand for copper and other metals with lower GHG-intensity materials and aligning with the SDGs, among others. The estimated cost calculation above is based on the cost to build the new facility and associated environmental compliance infrastructure.

#### Comment

## C3. Business Strategy

### C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?



#### Row 1

#### Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

## Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

We have established many elements of our climate transition plan, including: governance and accountability, shareholder engagement, GHG emissions reduction targets covering almost 100% of our Scope 1 & 2 GHG emissions, commitment to undertake the SBTi review process, scenario analysis and resultant action plans, collaboration with suppliers and customers, shadow carbon pricing, working with our industry associations to encourage progressive action, as well as publicly disclosing third-party verified Scope 1, 2 and 3 GHG emissions. Work is ongoing around better estimating the potential financial implications of various climate risks and the potential costs to avoid or mitigate those risks.

We believe we have a view of the primary challenges to achieve net zero GHG emissions. EX: there is currently no commercially viable alternative to the diesel-fueled haul trucks critical to our open-pit mining operations. In Indonesia, we are challenged to shift away from coal for reliable electricity production in the short-to-medium term given, among other things, the remote nature of our operations. We acknowledge that future climate-related challenges will require a meaningful shift in powering our operations and related equipment and potentially significant financial commitments. We also know that our path to net zero carbon emissions will require new technological solutions and innovation.

FCX is dedicated to exploring and contributing to viable solutions including through our work with the International Council on Mining and Metals (ICMM) and the International Copper Association. We are actively engaged with the ICMM's Innovation for Cleaner, Safer Vehicles initiative focused on developing low-GHG emissions mining equipment as well as with our own equipment manufacturers. In Central Papua, at our PT-FI operations, we are also evaluating alternative fuel options including the feasibility of LNG as a coal substitute. We believe we are uniquely positioned to eventually meet stakeholder expectations for both our contribution to – and our alignment with – a 1.5°C scenario.

A key concern regarding the success of the global transition are potential supply shortages metals markets may face depending on the timing of the transition. This could lead to supply chain disruptions for new technologies – especially those which are heavily reliant on battery minerals, copper or platinum group metals (e.g. hydrogen).



## C3.2

# (C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	
Row 1	Yes, qualitative and quantitative	

## C3.2a

## (C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate- related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA NZE 2050	Company- wide		This scenario uses a qualitative and quantitative analysis and is characterized by global collaboration to reduce GHG emissions in alignment with the Paris Agreement goals and reduce emission to net zero by 2050 and further limiting the global temperature increase by the year 2100 to around 1.5°C.  This scenario assumes: (i) global energy-related and industrial process CO2 emissions fall by nearly 40% between 2020 and 2030 and become net zero in 2050, (ii) the market sees an accelerated transition to renewables and electrification, and (iii) governments implement aggressive regulations to limit the extraction and use of fossil fuels in most sectors and all major economies, including carbon pricing. In addition, energy efficiency, wind and solar photovoltaic production methods would provide around half of the necessary emissions reductions until 2030. After 2030, decarbonization would continue with increased electrification, hydrogen use and carbon capture, utilization and storage (CCUS) deployment. Importantly, this scenario assumes the deployment of technologies not widely available on a commercial scale today.  In advanced economies, assume carbon prices would be \$130 by 2030 and \$250 by 2050; in select emerging markets and developing economies (China, Brazil, Russia, South Africa), assume \$90 by 2030 and \$200 by 2050; in other emerging markets and developing economies, assume \$15 by 2030 and \$55



		by 2050.
		Solar photovoltaic and wind are the leading sources of electricity in 2030; and provide 70% of electricity generation globally in 2050. 60% of global car sales are electric by 2030 and 50% of heavy truck sales are electric and no new internal combustion engine car sales by 2035.  Phase out of unabated coal in advanced economies by 2030 and phase out of all unabated coal and oil power plants by 2040. By 2050, up to 75% projected decline in oil and gas demand; remaining fossil fuels used in production of nonenergy goods (like plastics), in plants with CCUS, and in sectors where low emissions options are scarce.  This scenario is based off of reference to IEA Net Zero Emissions by 2050 for transition risks and opportunities.
Physical climate scenarios RCP 2.6	Company-wide	This scenario uses a qualitative and quantitative analysis and is characterized by global collaboration to 1) reduce GHG emissions in alignment with the Paris Agreement goals, 2) reduce emissions to net zero by 2050, and 3) further limit the global temperature increase by the year 2100 to around 1.5°C.  The data underlying our physical risk assessment include: (i) historic and future projections from 10 Coupled Model Intercomparison Project 5 (CMIP5) global climate models, (ii) the IPCC Fifth Assessment Report and peer-reviewed scientific journal publications, and (iii) datasets from NASA, The Global Facility for Disaster Reduction and Recovery (ThinkHazard), the World Resources Institute and others. We selected physical hazards for analysis based on stakeholder interviews, internal documentation describing historic impacts and historical data from the sources listed above. The physical risk assessment undertaken provides us with an initial screening of projected ranges of our potential risk.



		To assess our vulnerability to physical risks, we created a future exposure rating to examine four primary physical hazards based on the geographic location of each site and the potential future exposure change relative to historic exposure:  1) EXTREME WET: Projected increase in maximum rain in a day for a year in future compared to present day;  2) EXTREME HEAT: Projected increase in the annual number of days contributing to long (6+ days) heatwaves compared to present day,  3) WATER STRESS: Projected increase in the longest number of consecutive days in a year where rainfall is less than 1mm (dry spell) compared to present day; and  4) SEA LEVEL RISE: Certain of our ports and operations may be exposed to rising sea levels with projected risk of extreme events linked to sea level rise.  The model projections used in our initial assessment produced a wide range of projected changes in risk ratings over the baseline, with results varying from negative to positive change. We evaluated the model results using the multi-model ensemble median and not individual model projections to reduce biases and provide a higher-quality output than what would be associated with an individual model.
Transition scenarios IEA STEPS (previously IEA NPS)	Company- wide	This scenario uses a qualitative and quantitative analysis and considers a curb in global GHG emissions based on existing policies and announced commitments including Nationally Determined Contributions, but efforts fall short of meeting the Paris Agreement targets with disorderly progress. Under this scenario, the global economy would moderately constrain GHG emissions limiting the global temperature increase by the year 2100 to around 2.5°C.  This scenario assumes: (i) the majority of energy sources are renewable-based, although coal would continue to play an important role in electricity generation in emerging economies to 2050, and (ii) carbon prices would rise in certain FCX operating regions. This scenario also anticipates a divergence



		between the advanced economies and the emerging market and developing economies, with advanced economies seeing greater technological progress, reduced energy demand and cleaner fuel switching and emerging economies seeing economic growth and urbanization and infrastructure expansion, outweighing improvements in energy efficiency and clean technology deployment. In certain FCX operating regions (Chile, Europe and the U.K.), carbon prices range between \$8 and \$35 by 2030; between \$20 and \$52 by 2040.  55% of global electricity generation in 2050 mainly driven by solar photovoltaic and wind. Coal continues to play an important role in electricity generation in emerging economies to 2050, with demand in power and industry sectors expected to grow in India, Indonesia and other countries in southeast Asia. Global oil demand returns to pre-COVID-19 pandemic levels around 2023, with increase up to 2030 and levelling in 2050.  Natural gas demand projected to quickly recover post COVID-19 pandemic and be nearly 15% higher in 2030 than in 2019 and almost 50% higher in 2050.
Physical climate scenarios RCP 4.5	Company- wide	Scenario uses a qualitative and quantitative analysis and considers a curb in global GHG emissions based on existing policies and announced commitments including NDCs but efforts fall short of meeting Paris Agreement targets with disorderly progress; the global economy would moderately constrain GHG emissions limiting the global temperature increase by year 2100 to ~ 2.5°C.
		The data underlying our physical risk assessment include: (i) historic and future projections from 10 Coupled Model Intercomparison Project 5 (CMIP5) global climate models, (ii) IPCC Fifth Assessment Report and peer-reviewed scientific journal publications, and (iii) NASA datasets, The Global Facility for Disaster Reduction and Recovery (ThinkHazard), World Resources Institute and others. We selected physical hazards for analysis based on stakeholder interviews, internal documentation describing historic impacts and historical data from the



		above sources. The physical risk assessment undertaken provides us with an initial screening of projected ranges of potential risk. The use of global climate models to project future impacts is subject to several limitations, including the spatial and temporal precision necessary to conduct detailed engineering analyses to assess how local climate impacts may require us to alter our operations.  We examine four primary physical hazards based on the geographic location of each site and their potential future exposure change relative to historic exposure:  1) EXTREME WET: Projected increase in maximum rain in a day for a year in future compared to present;  2) EXTREME HEAT: Projected increase in the annual number of days contributing to long (6+ days) heatwaves compared to present,  3) WATER STRESS: Projected increase in the longest number of consecutive days in a year where rainfall is less than 1mm (dry spell) compared to present;  4) SEA LEVEL RISE: Certain of our ports and operations may be exposed to rising sea levels with projected risk of extreme events linked to sea level
		rise.  For results and definitions of low, medium & high changes for each hazard, please see our 2020 Climate Report. Model projections used in our initial assessment produced a wide range of projected changes in risk ratings over the baseline, with results varying from negative to positive change. We evaluated model results using the multi-model ensemble median and not individual model projections to reduce biases and provide higher-quality output than from an individual model.
Transition scenarios IEA CPS	Company- wide	This scenario uses a qualitative and quantitative analysis and considers a baseline for how global emissions would evolve if governments and markets make no changes to their existing policies or low-carbon investments and fail to meet their Nationally Determined Contributions. Under this scenario, the global economy would maintain business as usual without constraining GHG emissions anticipating the global temperature increases by the year 2100 to around 4.0°C.



		This scenario assumes limited emissions reduction policies and a lack of global coordination to address climate change. In comparison to the Moderate Climate Action scenario, this scenario assumes that countries fail to deliver on announced policies under the Nationally Determined Contributions and fall wellshort of their stated ambitions, leading to increased GHG emissions and physical risks relative to the other scenarios we considered. Furthermore, the slow pace of transition leads to an insufficient momentum behind clean energy deployment to offset the effects of an expanding global economy and growing population. Effects of climate change become more visible and require significant investments in adaptation measures to protect assets, infrastructure, communities and workforce in the long-term. This scenario also assumes no- or low-carbon prices, continued reliance on fossil fuels, and energy-intensive activities and lifestyles.  Policies and carbon pricing initiatives remain relatively low. In certain FCX operating regions (Chile, Europe, and the U.K.), carbon prices range between \$0 and \$30, which would minimally impact FCX.  With the slow transition to low-carbon, solar and wind renewables account for less than 30% of global electricity production by 2050, and the sale of electric vehicles grows at a slow pace.  Continued reliance on fossil fuels, and energy intensive activities and lifestyles, continued major share of oil and gas in the global economy, and increased demand despite short-term decrease in demand from the COVID-19 pandemic.
Physical climate scenarios RCP 8.5	Company- wide	This scenario uses a qualitative and quantitative analysis and considers a baseline for how global emissions would evolve if governments and markets make no changes to their existing policies or low-carbon investments and fail to meet their NDCs; the global economy would maintain business as usual without constraining GHG emissions anticipating global temperature increases by year 2100 to ~4.0°C.



Data underlying our physical risk assessment: (i) historic & future projections from 10 Coupled Model Intercomparison Project 5 (CMIP5) global climate models, (ii) IPCC Fifth Assessment Report & peerreviewed scientific journal publications, and (iii) NASA datasets, The Global Facility for Disaster Reduction and Recovery (ThinkHazard), World Resources Institute & others. We selected physical hazards for analysis based on stakeholder interviews, internal documentation describing historic impacts and historical data from the above sources. The physical risk assessment undertaken provides us with an initial screening of projected ranges of our potential risk.

To assess our vulnerability to physical risks, we created a future exposure rating that examines four primary physical hazards based on the geographic location of each site and the potential future exposure change relative to historic exposure:

- 1) EXTREME WET: Projected increase in maximum rain in a day for a year in future compared to present day;
- 2) EXTREME HEAT: Projected increase in the annual number of days contributing to long (6+ days) heatwaves compared to present day,
- 3) WATER STRESS: Projected increase in the longest number of consecutive days in a year where rainfall is less than 1mm (dry spell) compared to present day; and
- 4) SEA LEVEL RISE: Certain of our ports and operations may be exposed to rising sea levels with projected risk of extreme events linked to sea level rise.

Model projections used in our initial assessment produced a wide range of projected changes in risk ratings over the baseline, with results varying from negative change to positive change. We evaluated model results using the multi-model ensemble median and not individual model projections to reduce biases and provide higher-quality output than from an individual model.



## C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

#### Row 1

### **Focal questions**

In 2020-21, we completed our first global climate scenario analysis with support from a third-party consultant to identify potential climate-related risks and opportunities across our business. The goal of the analysis was to gather additional data on potential physical and transition risks that may impact our business in order to inform our ongoing climate-related decision-making and better prepare the company for possible outcomes in the short-, medium- and long-term.

FCX has adopted the TCFD's categorization of climate-related risks as either "transition" or "physical" climate risks. Transition risks are those climate-related risks arising out of governmental, market or other actions associated with the transition to a low-carbon economy. These may include events such as a change in general consumer preferences, the implementation of climate-progressive governmental regulations, the deployment of clean energy technologies or an increase in legal liability for high carbon-emitting entities. Physical risks are those climate-related risks that arise from the physical impacts of climate change.

The primary focal questions that our company has sought to address through our scenario analysis include: What climate risks would impact our operations and/or affected stakeholders in the short, medium and long term depending on how quickly the global energy transition occurs?; What opportunities may impact our operations and/or affected stakeholders over the short, medium and long term depending on how quickly the global energy transition occurs? As a result, we selected 1.5°C, ~2.5°C and ~4°C scenarios to determine the physical risks and transition risks and opportunities associated with aggressive, moderate or no climate action. The analysis sought to specifically identify where our most significant operational, technological and regulatory risks may exist and has helped inform our next steps including where additional work and/or additional studies may be required to more fully understand the potential risks.

## Results of the climate-related scenario analysis with respect to the focal questions

For physical risks, we evaluated the key risks and opportunities across three different climate scenarios: No Climate Action (4°C) Moderate Climate Action (2.5°C) and Aggressive Climate Action (i.e., action in line with the Paris Agreement goals), across the prospective time periods of 2030 and 2050 and incorporating a range of business considerations based on third-party GHG emissions trajectory scenarios and their corresponding implications for FCX. Our analysis identified potential physical risks that may impact our sites across four main themes: wet extremes, heat extremes, emerging



water stress and sea level rise. For example, our facilities in Arizona currently have a "moderate to high" exposure to significant rainfall events. Under the No Climate Action (4°C) scenario, a 2°C rate of warming reached by 2050 could result in an approximate 20% increase in frequency and 5% increase in intensity, with a 20% projected increase in the total precipitation during each event. Our facilities in Arizona are also projected to experience large future increases in heat wave days, overall declines in annual rainfall and extended periods without rain. In all three scenarios, Arizona is projected to experience an increase of 25 - 69 days in long heat waves by 2050, with the magnitude of the change depending on scenario. Under a Moderate Climate Action (2.5°C) scenario, our facilities also are projected to experience a 5-11% decline in total annual rainfall by 2050. We are now in the process of conducting additional localized studies to refine these physical risk findings, which will enable us to revisit internal guidelines for infrastructure and operating procedures. We currently have additional analysis underway using more localized models to better understand each of these themes and their potential impacts at the sites identified with this highest potential risk.

## C3.3

# (C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Based on an aggressive climate action scenario (1.5°C), the projected increase in demand for copper and molybdenum as the world transitions to a low-carbon economy may create opportunities for FCX to grow and increase production over the coming decades, for example by making more reserves economic to produce.  As demonstrated by initiatives such as our mining innovations and Copper Mark certifications, we also could continue to seek out ways to advance sustainable operations to differentiate ourself and create competitive advantages as compared to our peer companies during this transition. We continue to work with our industry peers and third-party experts to develop a methodology for estimating copper's carbon footprint.  Additionally, we plan to commission a new WEEE (waste from electrical and electronic equipment) recycling facility in Huelva, Spain in 2024 to support increased demand for copper and fill a gap in the recycling of WEEE. The new



		facility is projected to recycle 60,000 tons per year of e- material recovering copper, gold, silver, palladium, platinum, tin and nickel.
Supply chain and/or value chain	Yes	The identification of the challenges associated with decarbonizing our haulage equipment (Scope 1 emissions) has led us to participate in a number of consortiums while also engaging directly with our original equipment manufacturers to better understand how and when technological advances in haulage and other mining equipment may become available. Following our participation in the Charge on Innovation Challenge, we continue to engage with two of the selected innovators, focused on next generation trolley assist systems and fast charging stations, to accelerate the technology development and further the future roll-out of zero-emissions fleets. We are also participating in regional hydrogen innovation collaborations. Through our membership in ICMM, we participate in the Innovation for Cleaner, Safer Vehicles (ICSV) initiative. The goal of the ICSV is to accelerate the development of a new generation of mining vehicles and improve existing ones in order to introduce GHG emission-free surface mining vehicles by 2040, to minimize the operational impact of diesel exhaust by 2025 and to develop vehicle collision avoidance technology for the mining industry by 2025. We have also begun to trial diesel-electric haulage equipment at our Americas operations. The identification of the challenges associated with decarbonizing our electrical supply (Scope 2 emissions) has led us to begin developing a strategy for our electricity purchases.
Investment in R&D	Yes	Through process innovations, we seek to identify and implement new leach technologies that enable us to advance operations technologically, often leading to reduced energy and GHG emissions. FCX currently has an estimated 38 billion pounds of copper in our active leach stockpiles that has not been accounted for in our traditional leaching approach, as it had previously been considered either uneconomic and/or unrecoverable. Because this copper is already contained within our stockpiles, it does not require additional mining. If successful, this could enable us to provide additional copper production with a lower carbon footprint. By the end of 2023, we are targeting a run rate of 200 million pounds of copper per annum.  To address this opportunity, we initiated a program — Leach



		to the Last Drop — which is focused on further optimizing our approach to leaching with the aim of enhancing recovery rates closer to 85%.
		As part of this program, operations teams use advanced computational modeling and improved sensors to better understand how to optimize our current leaching approaches. We also are piloting a new approach aimed at leaching a type of ore called chalcopyrite, which has traditionally been considered unsuitable for the leaching process. If successful, this new approach could enable us to utilize existing stockpiles and could be applied more broadly across our global operations.
		We are continuing our work to apply covers to the leach stockpiles because heat retention has been found to enhance recoveries. Early indications show the potential to recover an additional 10% of copper from our stockpiles when heat is retained.
		We are also working to advance our existing concentrate leach plant (CLP) innovation in place at Morenci and Bagdad which allows for the hydrometallurgical processing of copper sulfide concentrates and advanced processing of molybdenum concentrates, respectively. For copper, CLP allows us to skip the energy intensive smelting step and for molybdenum, CLP results in a more refined product directly at the mine site, rather than shipping overseas for processing. In both cases, CLP reduces associated energy and carbon emissions.
Operations	Yes	The General Manager of Sustainable Mining is responsible for driving the link between mine efficiency efforts and sustainability, focusing on mine operations, equipment lifecycle management, mine technology opportunities and carbon emissions reduction.
		Increased energy & asset efficiency at our sites can help support both our operational- and emissions-related performance. EX: by providing our operators with predictive data from machine learning technology, we have successfully enhanced concentrator throughput & efficiency at certain of our sites. We also have an extensive haul truck rebuild program to extend the life of our existing equipment.
		Electrification of our haul trucks and other ancillary and light



duty equipment will be critical to decreasing our Scope 1 GHG emissions across our global operations. There is currently no commercially viable alternative to the dieselfueled haul trucks used at our open-pit operations. To help address this challenge, we are actively engaged with a number of consortiums that bring together industry leaders with OEMs to work together to develop innovate solutions. In 2021, we joined and participated in the Charge on Innovation Challenge (The Challenge) as a patron supporter. The Challenge was a global competition expected to drive technology innovators across all industries to develop new concepts and solutions for large-scale haul truck electrification systems aimed at significantly cutting emissions from surface mining. FCX continues to engage with two of the selected innovators, focused on next generation trolley assist systems and fast charging stations, to accelerate the technology development and further the future roll-out of zero-emissions fleets. To further the decarbonization of our operations FCX is participating in regional hydrogen innovation collaborations.

We have Komatsu and Caterpillar 400-ton class (dieselelectric) truck trials underway at our Cerro Verde operation in Peru. These trucks would enable us to invest in a technology (electric drive) that is more easily adapted to potential new technologies such as electrification or trolley assist.

PT-FI designed and built an autonomous electric train underground. The train replaces the work of traditional electric underground trucks. We are evaluating options for electrifying ancillary and light duty equipment across our operations.

## C3.4

# (C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence	
Row	Direct costs	With the benefit of our global scenario analysis, as well as input and	
1	Indirect costs	ongoing dialogue with external stakeholders and associations, FCX has	
	Capital	established internal carbon shadow prices that include \$50, \$100, and	
	expenditures	\$150 per metric ton of CO2 equivalent. We continue to work to integrate	



these carbon prices into our business processes to evaluate the potential impacts of an imposed carbon pricing regime on our current operations, longer-term business plans and potential future projects. We have integrated the carbon shadow price range into life-of-mine plans and continue to socialize the use of internal carbon shadow prices with our project teams, incorporating its use in evaluating select projects as additional input to our decision-making for both existing operations and future projects (such as the ongoing PT-FI feasibility study). We recognize that climate-related policy changes are dynamic and rapidly shifting, and that our pricing assumptions must also be iterative and flexible. Accordingly, we are committed to reviewing our carbon pricing scale periodically so that the range is appropriate and relevant.

We are continually looking for ways to reduce the amount of energy used. Our operations require significant energy, much of which is currently from fossil fuel sources and is obtained from third parties under long-term contracts. Energy represented approximately 21% of our copper mine site operating costs in 2022 and is expected to increase to approximately 24% in 2023. The principal sources of energy consumption at our mining operations are: diesel fuel, which powers mine trucks and other transportation equipment; purchased electricity, which powers core facilities and certain on-site metal processing operations; and coal and natural gas, which provides electricity at certain operations.

Equipment electrification offers significant opportunities to decarbonize at both our open-pit and underground mines, by switching from less efficient fuel combustion and leveraging our electricity decarbonization efforts. At our Americas operations, we are evaluating diesel-electric, ultra-class haul trucks to potentially integrate into our decarbonization roadmap for our open-pit mines. These high-payload-capacity, diesel-electric haul trucks can provide immediate benefits such as reduced unit costs, increased load capacity, and reduced energy consumption and GHG emissions. They also can provide us with a more flexible platform for the future. In order to evaluate performance, we began trial and commission of both Komatsu and Caterpillar 400-ton class diesel-electric trucks at our Cerro Verde operations in Peru.

Several years ago, we anticipated the increase in Grasberg's overall energy requirements, resulting from the transition to fully underground mining, which has led to increased ventilation needs, as well as changes in ore composition, which are expected to result in more energy intensive processing requirements in the coming years. To support this, PT-FI designed and built a new 129MW dual-fuel power plant (DFPP) at our port facility, which utilizes high-efficiency dual-fuel reciprocating engines on a flexible platform that can operate on either biodiesel or



natural gas. The DFPP is undergoing commissioning and final permitting. Additionally, in 2022, we conducted a preliminary scoping study to assess the viability of replacing PT-Fl's coal-fired power plant with a gas-fired combined cycle facility fueled by liquified natural gas (LNG). The findings show LNG has the potential to be an especially durable, lower-carbon energy source for our remote and complex operations in Indonesia. We are currently undertaking a comprehensive feasibility study and permit engineering, which we expect to complete by the end of 2023. These two projects at PT-FI could further reduce GHG emissions and provide other benefits, including potential energy cost savings and a reduction in PT-FI's NOx, SO2 and particulate matter emissions.

Through Project CirCular, FCX is building a new WEEE recycling facility in Huelva, Spain. The facility is projected to recycle 60,000 tons per year of e-material recovering copper, gold, silver, palladium, platinum, tin and nickel. Project CirCular contributes to several strategic objectives: support for the EU's WEEE recycling regulations, meeting increased demand for copper and other metals with lower GHG-intensity materials and aligning with the SDGs, among others. The cost calculation above is based on the cost to build the new facility and associated environmental compliance infrastructure.

We estimate Project CirCular will cost approximately \$330 million and contribute approximately \$60 million annually in incremental EBITDA. This calculation is based on a 3-year average price for each of the metals we expect to recycle. The new facility is projected to recycle 60,000 tons per year of e-material recovering copper, gold, silver, palladium, platinum, tin and nickel. Commissioning the new facility is currently anticipated to occur in 2024, with full capacity currently anticipated in 2025.

## C3.5

# (C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	No, and we do not plan to in the next two years



## C4. Targets and performance

## C4.1

## (C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target Intensity target

## C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

## Target reference number

Abs 1

## Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

## **Target ambition**

1.5°C aligned

## Year target was set

2022

## **Target coverage**

Site/facility

### Scope(s)

Scope 1

Scope 2

## Scope 2 accounting method

Market-based

## Scope 3 category(ies)

### Base year

2018

## Base year Scope 1 emissions covered by target (metric tons CO2e)

57,767

## Base year Scope 2 emissions covered by target (metric tons CO2e)

119,098



Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

176,865

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

4

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year



emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)



Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

2.17

**Target year** 

2030

Targeted reduction from base year (%)

50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

88,432.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 47,265.75

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 42,169.44



Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

89,435.19

#### Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated] 98.8661521499

#### Target status in reporting year

Underway

### Please explain target coverage and identify any exclusions

In 2022, we established an absolute GHG emissions reduction target for our Atlantic Copper smelter & refinery in Spain. Now, nearly 100% of our global GHG emissions (Scope 1 and 2) are covered by reduction targets. After considering the context and operation plan of this site, with more demanding regulations and market demands, and the approach of our smelter & refinery competitors in the European Union, we established an absolute emissions reduction target rather than an intensity target. We report GHG emissions on a 100% operational basis.

We have signed a commitment letter and plan to submit our interim 2030 GHG reduction targets to the Science-based Target initiative (SBTi) to evaluate if our targets



are aligned with the SBTi's target-setting criteria and adequately support the Paris Agreement's goals.

## Plan for achieving target, and progress made to the end of the reporting year

We plan to incorporate more renewable sources of energy through power purchase agreements (PPAs) and energy efficient projects, such as heat recovery and process innovation energy efficiency opportunities. Additionally, our emissions profile has and will continue to directly benefit from our energy supplier's decarbonization of the grid. Through these measures and expected additional grid decarbonization, we expect our Atlantic Copper smelter & refinery to continue leading copper smelters in energy use efficiency. In 2022, Atlantic Copper completed a 78-day planned maintenance shutdown, which typically occur approximately every eight years. This led to a 21% reduction in its GHG emissions for the year compared to 2021 and a 49% reduction since the 2018 baseline. In 2023, GHG emissions are expected to increase to more normalized levels commensurate with production plans.

# List the emissions reduction initiatives which contributed most to achieving this target

## Target reference number

Abs 2

### Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

### **Target ambition**

1.5°C aligned

### Year target was set

2022

### Target coverage

Site/facility

## Scope(s)

Scope 1

Scope 2

### Scope 2 accounting method

Market-based

#### Scope 3 category(ies)

## Base year

2018



Base year Scope 1 emissions covered by target (metric tons CO2e) 81,959

Base year Scope 2 emissions covered by target (metric tons CO2e) 226,177

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)



Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

308,136

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

2

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

7

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)



Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)



Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

3.78

Target year

2030

Targeted reduction from base year (%)

35

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

200,288.4

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 102,333.37



Scope 2 emissions in reporting year covered by target (metric tons CO2e) 173,130.9

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)



Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

275,464.27

## Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated] 30.2943505465

Target status in reporting year

Underway

### Please explain target coverage and identify any exclusions

In 2022, we established an absolute emissions reduction target for our standalone molybdenum operations (Climax and Henderson mines located in Colorado, USA, and three molybdenum processing facilities). At our molybdenum processing facilities, we process molybdenum concentrate from our primary molybdenum mines and certain of our primary copper mines where molybdenum is a by-product. Considering the various products processed and produced at our downstream molybdenum facilities and FCX's operational business, we established an absolute emissions reduction target rather than



an intensity reduction target. We report GHG emissions on a 100% operational basis. Emissions associated with molybdenum produced as a by-product are excluded from the scope of this target because those emissions are included in the scope of our Americas copper production and processing target (Int 1). Nearly 100% of our global GHG emissions (Scope 1 and 2) are covered by reduction targets.

We have signed a commitment letter and plan to submit our interim 2030 GHG reduction targets to the Science-based Target initiative (SBTi) to evaluate if our targets are aligned with the SBTi's target-setting criteria and adequately support the Paris Agreement's goals.

## Plan for achieving target, and progress made to the end of the reporting year

Our primary molybdenum sites saw a 19% increase in GHG emissions in 2022 compared to 2021; however, GHG emissions remain 11% below the 2018 baseline year. This increase was primarily due to a significant increase in production at our Climax mine (17%) and the related pit expansion to enable increased production rates in the future, all of which required additional material haulage and diesel use, without any compensating metal production. Looking forward, multiple GHG emissions reduction initiatives are either already in process or are under evaluation across our global business. These initiatives fall into four primary categories: (1) Decarbonizing our electricity supply by converting power supplies to renewable energy on the grid through power purchase agreements (PPAs) and through site-related renewables projects to reduce our emissions; (2) Optimizing energy and asset efficiency; (3) Electrification of equipment to reduce use of diesel; and (4) Process innovation.

At our primary molybdenum mines in Colorado, the energy supplier has developed a roadmap to decarbonize their energy system by 2030 and provide carbon-free electricity by 2050. Our emissions profile will directly benefit from the energy supplier's decarbonization plans. Additionally, we are working to evaluate carbon efficiency opportunities in the feasibility phase of potential future projects, optimizing energy and asset efficiency and seeking other decarbonization opportunities such as process innovation at our primary molybdenum mines and molybdenum processing facilities.

On the Scope 1 side, across our Americas operations, we are evaluating diesel-electric, ultra-class haul trucks to potentially integrate into our decarbonization roadmap for our open-pit mines. These high-payload-capacity, diesel-electric haul trucks can provide immediate benefits such as reduced unit costs, increased load capacity, and reduced energy consumption and GHG emissions. They also can provide us with a more flexible platform for the future.

List the emissions reduction initiatives which contributed most to achieving this target



## C4.1b

# (C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

## Target reference number

Int 1

## Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

### **Target ambition**

1.5°C aligned

## Year target was set

2020

## **Target coverage**

Other, please specify

Copper produced, Americas

### Scope(s)

Scope 1

Scope 2

## Scope 2 accounting method

Market-based

## Scope 3 category(ies)

## Intensity metric

Other, please specify

Metric tons CO2e per metric ton of copper cathode

## Base year

2018

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity) 2.13

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)



Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)



Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

3.724

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

43

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

88

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure



% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure



% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

60

**Target year** 

2030

Targeted reduction from base year (%)

15

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

3.1654

% change anticipated in absolute Scope 1+2 emissions

-3.25

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

1.7

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

1.93



Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)



Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

3.63

#### Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated] 16.8277837451

#### Target status in reporting year

Underway

#### Please explain target coverage and identify any exclusions

We continue to pursue our 2030 GHG emissions reduction target for our Americas copper business. In 2020, we established this initial public target to reduce our GHG emissions intensity in the Americas by 15% per metric ton of copper cathode by 2030 from our 2018 baseline. This target covers the copper producing mines and refining facilities of our Americas operations. This intensity target includes all payable copper forms up to cathode (which includes concentrate, anode, and cathode) but excludes rod and wire. We report GHG emissions on a 100% operational basis.

We have signed a commitment letter and plan to submit our interim 2030 GHG reduction targets to the Science-based Target initiative (SBTi) to evaluate if our targets



are aligned with the SBTi's target-setting criteria and adequately support the Paris Agreement's goals.

### Plan for achieving target, and progress made to the end of the reporting year

In 2022, our Americas Copper GHG emissions intensity increased by 1.3% compared to the prior year; however, its intensity remains a 2.5% improvement over the 2018 baseline year. The increase in 2022 was the result of several factors, including the resumption of production related activities deferred due to COVID-19 and several significant weather events in the winter months, which led to increased demand for natural gas and electricity, increasing emissions intensity at some sites. This also resulted in lower production due to impacts to our open pit mines that cannot be mitigated during or immediately after significant rainfall due to unsafe conditions.

In support of our 2030 target, we continue to advance our Copper Skies initiative aimed at integrating more renewables into our electricity supply and to seek lower carbon options for both haulage and support equipment for our mines. We are evaluating how we can best accelerate our renewable energy supply within our existing PPAs in Chile and Peru, because in South America, open electricity markets allow our operations to contract directly with energy generation suppliers. We are well-positioned in North America to accelerate the delivery of renewable sources of electricity to our mine sites because we are vertically integrated into the electricity value-chain.

We are evaluating diesel-electric, ultra-class haul trucks to potentially integrate into our decarbonization roadmap for our open-pit mines. These high-payload-capacity, diesel-electric haul trucks can provide immediate benefits such as reduced unit costs, increased load capacity, and reduced energy consumption and GHG emissions. We are trialing both Komatsu and Caterpillar 400-ton class diesel-electric trucks at our Cerro Verde operations in Peru.

We are actively engaged with the ICMM's Innovation for Cleaner, Safer Vehicles initiative focused on developing low-GHG emissions mining equipment with our OEMs. Following our participation in the Charge on Innovation Challenge, we continue to engage with two of the selected innovators, focused on next generation trolley assist systems and fast charging stations, to accelerate the technology development and further the future roll-out of zero-emissions fleets. We are also participating in regional hydrogen innovation collaborations.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Int 2

Is this a science-based target?



Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

## **Target ambition**

1.5°C aligned

#### Year target was set

2021

#### **Target coverage**

Other, please specify
Payable copper produced, Indonesia

## Scope(s)

Scope 1

Scope 2

#### Scope 2 accounting method

Market-based

## Scope 3 category(ies)

## Intensity metric

Other, please specify

Metric tons CO2e per metric ton of payable copper

#### Base year

2018

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)
4.76

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)



Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)



Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

4.76

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

53

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

0

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure



% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure



% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

32

**Target year** 

2030

Targeted reduction from base year (%)

30

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

3.332

% change anticipated in absolute Scope 1+2 emissions

-5.54

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

3.52

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)



Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)



# Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

3.52

#### Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

## % of target achieved relative to base year [auto-calculated]

86.8347338936

## Target status in reporting year

Underway

### Please explain target coverage and identify any exclusions

Our 2030 GHG emissions intensity reduction target for our PT-FI operations in Indonesia targets reducing Scope 1 emissions only; our PT-FI operations do not have any Scope 2 GHG emissions because we own the coal-fired and diesel power plant that is used to generate reliable electricity for our remote operations in Central Papua, Indonesia, and we use diesel to generate power for mobile equipment and provide peak and backup capacity for the power plant. PT-FI's operations generate approximately 33% of our global absolute GHG emissions and approximately 51% of our global Scope 1 emissions. We report GHG emissions on a 100% operational basis. This target is based on payable copper produced in concentrate. PT-FI concentrate is currently smelted and refined by PT Smelting (PTS) and third-party smelters / refineries, which are currently accounted for as Scope 3 emissions and not included in this target. Upon completion of the PTS expansion and the construction of the new Manyar smelter at Gresik, GHG emissions for smelting and refining are expected to shift from Scope 3 to Scopes 1 or 2, and we will adjust our target and baseline in line with the GHG Protocol at such time.

We have signed a commitment letter and plan to submit our interim 2030 GHG reduction targets to the Science-based Target initiative (SBTi) to evaluate if our targets are aligned with the SBTi's target-setting criteria and adequately support the Paris Agreement's goals.

## Plan for achieving target, and progress made to the end of the reporting year

In 2022, we continued to reduce PT-FI's GHG emissions intensity with a 5.2% improvement over 2021 and a 26% improvement since our 2018 baseline year largely driven by completion of the underground transition at the Grasberg minerals district. In the coming years, we expect this performance to vary due to changes in ore



composition and related processing requirements, which can impact emissions intensity performance.

We continue to make meaningful progress in advancing efforts to decarbonize our electricity supply. In 2022, we conducted a preliminary scoping study to assess the viability of replacing PT-FI's coal-fired power plant with a gas-fired combined cycle facility fueled by liquified natural gas (LNG). The findings show LNG has the potential to be an especially durable, lower-carbon energy source for our remote and complex operations in Indonesia. While we recognize that LNG is not a renewable energy source, we are encouraged by the potential to achieve a meaningful reduction in emissions at PT-FI where solar and wind face challenges to becoming stable, singleenergy solution to powering one of the world's largest copper and gold mining operations. We are proceeding with a comprehensive feasibility study and permit engineering, which we expect to complete by the end of 2023. Our preliminary studies indicate that a new power plant fueled by LNG could drive an approximate 60% reduction in PT-FI's Scope 1 GHG emissions intensity versus its 2018 baseline double the reduction set out by PT-FI's current 2030 target. There are logistical and technical challenges that may challenge the feasibility of the project, including supply chain constraints.

List the emissions reduction initiatives which contributed most to achieving this target

## C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

## C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

## C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	34	684,736
To be implemented*	14	1,909,415



Implementation commenced*	6	83,190
Implemented*	3	154
Not to be implemented	0	0

## C4.3b

## (C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

#### Initiative category & Initiative type

Energy efficiency in production processes Machine/equipment replacement

## Estimated annual CO2e savings (metric tonnes CO2e)

79.86

## Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

## Annual monetary savings (unit currency – as specified in C0.4)

0

## Investment required (unit currency - as specified in C0.4)

0

## Payback period

1-3 years

#### Estimated lifetime of the initiative

6-10 years

### Comment

During 2022, our Cerro Verde mine began using hybrid mill liners in one of the mills. The hybrid liners resulted in less downtime and therefore an increase in processed tonnage as well as an associated energy reduction. Additionally, the design of these coatings reduces the use of steel for traditional liners during upstream manufacturing and therefore a reduction in Scope 3 emissions is likely.

## C4.3c

# (C4.3c) What methods do you use to drive investment in emissions reduction activities?



Method	Comment
Other Sustaining capital and maintenance plans	Over the last decade, sustaining capital and maintenance plans have enabled us to become leaders in asset optimization – maximizing the lives of our haul trucks and enabling each truck to operate well beyond the industry average.
Internal price on carbon	In 2022, we continued integrating a cost of carbon into our Life of Mine Models and authorizations for expenditure (AFE) via an internal shadow price developed from extensive research in our Scenario Analysis and across peers (50/100/150 USD per metric ton).
Employee engagement	In 2020, we began conducting brainstorming workshops at our sites to engage cross functionally to identify and evaluate projects that could contribute to emissions reduction. These workshops are led by corporate subject matter experts and develop into prioritized lists of projects that our site then implement. In late 2021 and early 2022, we engaged four of our more significant GHG emitting sites to begin analysis of potential GHG reduction projects and development of site-specific abatement curves.
Compliance with regulatory requirements/standards	Changes in regulations could accelerate a reduction in both our Scope 1 and Scope 2 emissions and result in increased costs. Recent examples are the reductions made at Atlantic Copper which have been driven by the EU ETS as well as new legislation in the EU related to achieving net zero emissions in 2050.
Marginal abatement cost curve	Abatement curves can provide an indication of which projects could be economical with or without a carbon tax or incentive and the potential GHG emissions reduction on an annual basis by project. In late 2021 and early 2022, FCX engaged Partners in Performance, a global management consulting firm, to help develop a conceptual abatement curve for projects at four sites, which comprise 50% of our total Scope 1 and 2 GHG emissions. Over the last year, we have built capacity internally and enhanced our processes to expand the scope of our original abatement curve work. As a result, we have now incorporated projects from an additional five sites, providing what we believe is a diverse view of potential decarbonization projects across different types of operations and jurisdictions. In 2023, we plan to continue adding projects as they are developed for evaluation to our global abatement curve.

## C4.5

# (C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

No



## **C5. Emissions methodology**

## C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

## C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

#### Row 1

Has there been a structural change?

No

## C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

## C5.2

(C5.2) Provide your base year and base year emissions.

#### Scope 1

#### Base year start

January 1, 2018

## Base year end

December 31, 2018

## Base year emissions (metric tons CO2e)

4,964,720

#### Comment

In our 2021 Annual Report on Sustainability, we adjusted 2018, 2019 and 2020 emissions data at our Atlantic Copper site, which reflect improvements in our reporting and calculation process to a market-based method and to align with EU ETS reporting expectations.

### Scope 2 (location-based)



#### Base year start

January 1, 2018

#### Base year end

December 31, 2018

## Base year emissions (metric tons CO2e)

## Comment

For 2021 we have implemented GHG Scope 2 dual reporting in our disclosures, presenting both location-based and market-based emissions. Therefore, location-based emissions are not available for 2018, but are provided for 2021 and beyond.

### Scope 2 (market-based)

#### Base year start

January 1, 2018

## Base year end

December 31, 2018

### Base year emissions (metric tons CO2e)

3,197,643

#### Comment

In our 2021 Annual Report on Sustainability, we adjusted 2018, 2019 and 2020 emissions data at our Atlantic Copper site, which reflect improvements in our reporting and calculation process to a market-based method and to align with EU ETS reporting expectations.

## Scope 3 category 1: Purchased goods and services

### Base year start

January 1, 2021

#### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

2,849,703

#### Comment

FCX uses a combination of spend-based quantification for non-material goods, services, and other Scope 3 activities, and average-data emission quantification for key operational inputs using process-based life cycle inventory database emission factors.

## Scope 3 category 2: Capital goods

#### Base year start

January 1, 2021



## Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

0

#### Comment

Due to all spend data being included within Category 1 above, we do not have any emissions data to report for this category.

# Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

#### Base year start

January 1, 2021

#### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

551,616

## Comment

FCX uses a combination of spend-based quantification for non-material goods, services, and other Scope 3 activities, and average-data emission quantification for key operational inputs using process-based life cycle inventory database emission factors.

## Scope 3 category 4: Upstream transportation and distribution

#### Base year start

January 1, 2021

### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

426,360

#### Comment

FCX uses a combination of spend-based quantification for non-material goods, services, and other Scope 3 activities, and average-data emission quantification for key operational inputs using process-based life cycle inventory database emission factors.

#### Scope 3 category 5: Waste generated in operations

#### Base year start

January 1, 2021

## Base year end

December 31, 2021



#### Base year emissions (metric tons CO2e)

8.665

#### Comment

FCX uses a combination of spend-based quantification for non-material goods, services, and other Scope 3 activities, and average-data emission quantification for key operational inputs using process-based life cycle inventory database emission factors.

### Scope 3 category 6: Business travel

#### Base year start

January 1, 2021

## Base year end

December 31, 2021

### Base year emissions (metric tons CO2e)

1.315

#### Comment

FCX uses a supplier tool and data based on the Greenhouse Gas Protocol to quantify and manage greenhouse gas emissions. We also follow the UK Department for Business, Energy & Industrial Strategy (UK BEIS) methodology (previously published by DEFRA and DECC) for determining flight emissions factors and use UK BEISS data to calculate flight emissions.

## Scope 3 category 7: Employee commuting

### Base year start

January 1, 2021

#### Base year end

December 31, 2021

#### Base year emissions (metric tons CO2e)

14.485

#### Comment

FCX uses a combination of spend-based quantification for non-material goods, services, and other Scope 3 activities, and average-data emission quantification for key operational inputs using process-based life cycle inventory database emission factors.

#### Scope 3 category 8: Upstream leased assets

#### Base year start

January 1, 2021

#### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)



0

#### Comment

There are no material upstream leased assets

### Scope 3 category 9: Downstream transportation and distribution

#### Base year start

January 1, 2021

#### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

442,010

#### Comment

Emissions have been calculated for different products generated at FCX sites, considering volumes, transport method and regions where they are delivered.

## Scope 3 category 10: Processing of sold products

## Base year start

January 1, 2021

### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

885.367

#### Comment

Emissions have been calculated using site specific information on emission factors from smelter-refineries owned by FCX, averaging estimated factors considering the wide environments, processes and operational performance that we have across our sites.

#### Scope 3 category 11: Use of sold products

## Base year start

January 1, 2021

## Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

#### Comment

FCX is a producer of base metals products that do not cause any direct use phase emissions. According to analysis by the International Copper Association, use of sold



products has no significant impact for the copper industry. This is a result of copper not producing direct emissions during its use phase.

## Scope 3 category 12: End of life treatment of sold products

#### Base year start

January 1, 2021

## Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

#### Comment

Scope 3 emissions related to copper under category 12, end of life treatment of sold products, are minimal and considered not relevant. According to analysis by the International Copper Association, end of life treatment of sold products for the copper industry is less than 0.5% of total Scope 3 emissions and have a minimal amount of emissions at the end of life.

## Scope 3 category 13: Downstream leased assets

## Base year start

January 1, 2021

## Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

0

#### Comment

FCX does not have any downstream leased assets to be accounted for.

## Scope 3 category 14: Franchises

#### Base year start

January 1, 2021

## Base year end

December 31, 2021

#### Base year emissions (metric tons CO2e)

0

### Comment

FCX does not have any franchises to be accounted for.

## Scope 3 category 15: Investments



#### Base year start

January 1, 2021

#### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

#### Comment

There are no significant investments that are not already covered in Scope 1 and Scope 2, or other Scope 3 categories.

## Scope 3: Other (upstream)

#### Base year start

January 1, 2021

#### Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

0

#### Comment

No other upstream emissions to report.

## Scope 3: Other (downstream)

## Base year start

January 1, 2021

## Base year end

December 31, 2021

## Base year emissions (metric tons CO2e)

0

#### Comment

No other downstream emissions to report.

## C5.3

# (C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

Energy Information Administration 1605(b)

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

ISO 14064-1



The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

US EPA Center for Corporate Climate Leadership: Direct Fugitive Emissions from Refrigeration,

Air Conditioning, Fire Suppression, and Industrial Gases

US EPA Emissions & Generation Resource Integrated Database (eGRID)

## C6. Emissions data

## C<sub>6</sub>.1

# (C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

#### Reporting year

## Gross global Scope 1 emissions (metric tons CO2e)

4,927,823

#### Comment

Our global Scope 1 emissions increased compared with 2021 due to higher production rates at PT-FI, Cerro Verde, Safford and El Abra, as well as the resumption of overburden removal, production and maintenance projects previously delayed due to COVID-19.

There were also several significant weather events during winter months, which led to increased demand for natural gas at some sites.

Also, at our primary molybdenum sites we saw an increase in GHG emissions primarily due to a significant increase in production at our Climax mine and the related pit expansion to enable increased production rates in the future, all of which required additional material haulage and diesel use without an increase in production.

## C6.2

#### (C6.2) Describe your organization's approach to reporting Scope 2 emissions.

#### Row 1

#### Scope 2, location-based

We are reporting a Scope 2, location-based figure

## Scope 2, market-based

We are reporting a Scope 2, market-based figure

#### Comment



Starting in 2018, Scope 2 emissions were calculated using a market-based method. In 2021, we implemented GHG Scope 2 dual reporting in our disclosures, presenting both location-based and market-based emissions. Therefore, location-based emissions are not available for 2018, but are provided for 2021 and 2022.

## C6.3

## (C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

#### Reporting year

## Scope 2, location-based

2,881,405

## Scope 2, market-based (if applicable)

2.757.463

#### Comment

Our global Scope 2 emissions increased compared with 2021 due to higher production rates at PT-FI, Cerro Verde, Safford and El Abra, as well as the resumption of overburden removal, production and maintenance projects previously delayed due to COVID-19.

There were also several significant weather events during winter months, which led to increased demand for electricity at some sites.

## C<sub>6.4</sub>

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

## C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

## Purchased goods and services

#### **Evaluation status**

Relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

3,087,916

## **Emissions calculation methodology**

Hybrid method



Other, please specify
Life cycle database and EEIO

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

## Please explain

FCX uses a combination of spend-based quantification for non-material goods, services, and other Scope 3 activities, and average-data emission quantification for key operational inputs using process-based life cycle inventory database emission factors.

## Capital goods

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Due to all spend data being included within Category 1 above, we do not have any emissions data to report for this category.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

#### **Evaluation status**

Relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

938,832

#### **Emissions calculation methodology**

Spend-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

#### Please explain

FCX uses a spend-based approach for material and non-material goods, services, and other Scope 3 activities included in this category.

#### **Upstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

331,996

#### **Emissions calculation methodology**

Spend-based method



# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

FCX uses a spend-based approach for material and non-material goods, services, and other Scope 3 activities included in this category.

#### Waste generated in operations

#### **Evaluation status**

Not relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

6,254

#### **Emissions calculation methodology**

Spend-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

## Please explain

FCX uses a spend-based approach for material and non-material goods, services, and other Scope 3 activities included in this category.

#### **Business travel**

#### **Evaluation status**

Not relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

4,667

## **Emissions calculation methodology**

Supplier-specific method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

### Please explain

FCX uses a supplier tool and data based on the Greenhouse Gas Protocol to quantify emissions from this category. We follow the UK Department for Business, Energy & Industrial Strategy (UK BEIS) methodology (previously published by DEFRA and DECC) for determining flight emissions factors and use UK BEISS data to calculate flight emissions.

### **Employee commuting**



#### **Evaluation status**

Not relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

12,764

## **Emissions calculation methodology**

Spend-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

## Please explain

FCX uses a spend-based approach for material and non-material goods, services, and other Scope 3 activities included in this category.

## **Upstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

## Please explain

There are no material upstream leased assets.

## Downstream transportation and distribution

#### **Evaluation status**

Relevant, calculated

### **Emissions in reporting year (metric tons CO2e)**

399,201

## **Emissions calculation methodology**

Average data method

Distance-based method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emissions have been calculated for different copper products generated at FCX sites, considering volumes, transport method and regions where they are delivered.

## **Processing of sold products**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**



1,110,743

## **Emissions calculation methodology**

Average data method Site-specific method

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

#### Please explain

Emissions have been calculated by averaging emission factors from smelter-refineries owned by FCX. This is appropriate considering the variety of environments, processes and operational performance that we have throughout our sites.

## Use of sold products

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

FCX is a producer of base metals products that do not cause any direct use phase emissions. According to analysis by the International Copper Association, use of sold products has no significant impact for the copper industry. This is a result of copper not producing direct emissions during its use phase.

## End of life treatment of sold products

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Scope 3 emissions related to copper under category 12, end of life treatment of sold products, are minimal and considered not relevant. According to analysis by the International Copper Association, end of life treatment of sold products for the copper industry is less than 0.5% of total Scope 3 emissions and have a minimal amount of emissions at the end of life.

#### **Downstream leased assets**

## **Evaluation status**

Not relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

0

## **Emissions calculation methodology**

Other, please specify

FCX does not have any downstream leased assets to be accounted for



# Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

## Please explain

FCX does not have any downstream leased assets to be accounted for. Therefore there are no emissions (0 MT CO2e) to be accounted for.

#### **Franchises**

#### **Evaluation status**

Not relevant, calculated

## **Emissions in reporting year (metric tons CO2e)**

0

## **Emissions calculation methodology**

Other, please specify

FCX does not have any franchises to be accounted for

# Percentage of emissions calculated using data obtained from suppliers or value chain partners

## Please explain

FCX does not have any franchises to be accounted for. Therefore there are no emissions (0 MT CO2e) to be accounted for.

#### Investments

#### **Evaluation status**

Not relevant, explanation provided

### Please explain

There are no material emissions associated to investments that are already covered in Scope 1 and Scope 2, or other Scope 3 categories

## Other (upstream)

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

No additional Scope 3 upstream emissions to be added.

## Other (downstream)

#### **Evaluation status**

Not relevant, explanation provided



## Please explain

No additional Scope 3 downstream emissions to be added.

## **C6.7**

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

## C<sub>6</sub>.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

## Intensity figure

0.000337

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

7,685,286

### **Metric denominator**

unit total revenue

Metric denominator: Unit total

22,780,000,000

#### Scope 2 figure used

Market-based

% change from previous year

7

#### **Direction of change**

Increased

## Reason(s) for change

Change in revenue

Change in physical operating conditions

### Please explain

GHG emissions intensity on a revenue basis increased due to higher production rates at PT-FI, Cerro Verde, Safford and El Abra, as well as the resumption of overburden removal, production and maintenance projects previously delayed due to COVID-19.



## C7. Emissions breakdowns

## C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

## C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	4,656,109	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	9,742	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	227,118	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	34,852	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify Fluorinated gases	19,115	IPCC Fifth Assessment Report (AR5 – 100 year)

## C7.2

## (C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Europe	55,104
South America	749,423
United States of America	1,619,636
Indonesia	2,504,660

## **C7.3**

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility



## C7.3b

## (C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Bagdad	179,776	34.585708	-113.23085
Cerro Verde	664,044	- 16.534133	-71.6
Chino/Cobre	87,190	32.787416	- 108.070976
Climax	57,480	39.373353	- 106.176472
El Abra	84,379	- 21.919744	-68.8291
Henderson	17,159	39.769816	- 105.837471
Morenci	656,640	33.088676	- 109.354852
Safford	202,373	32.9585	- 109.674103
Sierrita	145,309	31.860362	- 111.053585
Tyrone	46,535	32.644743	- 108.372658
Atlantic Copper Smelter-Refinery	47,266	40.451366	-3.691782
Ft Madison Moly Special Products	19,856	40.584161	-91.425586
Miami Smelter & Rod	97,114	33.404421	- 110.891921
Rotterdam	7,752	51.883915	4.250161
Stowmarket	86	52.179451	1.009059
El Paso Refinery and Rod	110,204	31.762217	- 106.380313
PT-FI	2,504,660	-4.057359	137.112766



# C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Metals and mining production activities	4,927,823	

## **C7.5**

## (C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Europe	74,737	42,469
United States of America	1,990,714	2,119,723
South America	815,954	595,271
Indonesia $\Omega_1$	0	0

<sup>□</sup>¹PT-FI generates its own electricity. As a result, there are no Scope 2 emissions associated with our PT-FI operations.

## **C7.6**

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

## C7.6b

## (C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Bagdad	171,875	159,923
Cerro Verde	626,393	405,710
Chino/Cobre	176,394	145,538
Climax	88,436	74,891
El Abra	189,561	189,561
Henderson	102,492	86,794



Morenci	771,091	815,734
Safford	147,994	156,530
Sierrita	211,029	331,758
Tyrone	110,453	91,193
Atlantic Copper Smelter & Refinery	69,379	42,169
Ft Madison Moly Special Products	11,146	11,146
Miami Smelter & Rod	168,738	227,545
Rotterdam	5,058	0
Stowmarket	300	300
El Paso Rod & Refinery	31,065	18,670
PT-FI	0	0

## **C7.7**

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

# C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Metals and mining production activities	2,881,405	2,757,463	

## **C7.9**

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased



## C7.9a

(C7.9a) 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.

previous year.						
	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation		
Change in renewable energy consumption	143,308	Increased	1.86	Scope 2 emissions increased due additional energy required for increased production		
Other emissions reduction activities	129	Decreased	0.002	Projects implemented during 2022		
Divestment	0	No change				
Acquisitions	0	No change				
Mergers	0	No change				
Change in output	352,393	Increased	4.59	Scope 1 emissions increase associated with the increase in production rates in our sites (Safford, Cerro Verde and El Abra and PT-FI) as well as the resumption of production related activities deferred due to COVID.19 and several significant weather events in the winter months, which led to increased demand for natural gas.		
Change in methodology	0	No change				
Change in boundary	0	No change				
Change in physical operating conditions	0	No change				
Unidentified	0	No change				
Other	0	No change				



## C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

## C8. Energy

## **C8.1**

# (C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 20% but less than or equal to 25%

## C8.2

## (C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy- related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

## C8.2a

## (C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

Heating	MWh from	MWh from non-	Total (renewable
value	renewable	renewable	and non-
	sources	sources	renewable) MWh



Consumption of fuel (excluding feedstock)	HHV (higher heating value)	154,514	16,844,987	16,999,501
Consumption of purchased or acquired electricity		3,867,526	6,097,611	9,965,135
Consumption of self- generated non-fuel renewable energy		10,862		10,862
Total energy consumption		4,022,040	22,942,595	26,964,634

## **C-MM8.2a**

# (C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	HHV (higher heating value)	16,888,501
Consumption of purchased or acquired electricity		9,965,135
Consumption of self-generated non-fuel renewable energy		10,861
Total energy consumption		26,964,634

## C8.2b

## (C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No



## C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

#### Sustainable biomass

## **Heating value**

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

#### Other biomass

#### **Heating value**

HHV

Total fuel MWh consumed by the organization

2,439,545

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

## Comment

Biofuels B5 and B30 consumed at Cerro Verde, PT-FI, and Henderson

## Other renewable fuels (e.g. renewable hydrogen)

## **Heating value**

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat



0

#### Comment

#### Coal

#### **Heating value**

HHV

## Total fuel MWh consumed by the organization

4,901,173

## MWh fuel consumed for self-generation of electricity

4,889,500

## MWh fuel consumed for self-generation of heat

11,673

### Comment

Our main consumption of coal is a result of our energy generation facility in our remote operation in the eastern province of Papua, Indonesia, where we control and operate an energy generation.

#### Oil

#### **Heating value**

HHV

## Total fuel MWh consumed by the organization

43,913

## MWh fuel consumed for self-generation of electricity

0

## MWh fuel consumed for self-generation of heat

0

## Comment

We include here used oil reported for our PT-FI site

### Gas

### **Heating value**

HHV

## Total fuel MWh consumed by the organization

1,833,883

## MWh fuel consumed for self-generation of electricity

0



## MWh fuel consumed for self-generation of heat

0

#### Comment

Natural gas reported

## Other non-renewable fuels (e.g. non-renewable hydrogen)

## **Heating value**

HHV

Total fuel MWh consumed by the organization

7,780,988

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

#### **Total fuel**

## **Heating value**

HHV

Total fuel MWh consumed by the organization

16,999,247

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

## C8.2d

# (C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

		Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Е	lectricity	6,759,899	6,759,899	0	0



Heat				
Steam				
Cooling	0	0	0	0

## **C-MM8.2d**

(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	6,759,899	6,759,899
Heat	0	0
Steam	0	0
Cooling	0	0

## C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

### Country/area of low-carbon energy consumption

Peru

### **Sourcing method**

Physical power purchase agreement (physical PPA) with a grid-connected generator

### **Energy carrier**

Electricity

### Low-carbon technology type

Large hydropower (>25 MW)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2,181,432

## **Tracking instrument used**

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Peru



## Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

# Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

1973

#### Comment

Commissioning year of the energy generation facility is 1973 (1st Stage Mantaro)

## Country/area of low-carbon energy consumption

United States of America

### Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

### **Energy carrier**

Electricity

## Low-carbon technology type

Solar

## Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

34,352

#### **Tracking instrument used**

**US-REC** 

## Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

# Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2011

#### Comment

This is solar power utilized at our Bagdad facility.

#### Country/area of low-carbon energy consumption



United States of America

#### Sourcing method

Retail supply contract with an electricity supplier (retail green electricity)

#### **Energy carrier**

Electricity

### Low-carbon technology type

Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

27,452

## Tracking instrument used

**US-REC** 

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2020

#### Comment

This is solar power we purchase for our Miami smelter.

## **C8.2g**

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

#### Country/area

Chile

Consumption of purchased electricity (MWh)

630,610

Consumption of self-generated electricity (MWh)

n

Consumption of purchased heat, steam, and cooling (MWh)



0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

630,610

### Country/area

United States of America

Consumption of purchased electricity (MWh)

5,454,195

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

5,454,195

### Country/area

Peru

Consumption of purchased electricity (MWh)

3,641,820

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,641,820



### Country/area

Spain

Consumption of purchased electricity (MWh)

223,361

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

223,361

### Country/area

Netherlands

Consumption of purchased electricity (MWh)

13,740

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

13,740

## Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

1,409

Consumption of self-generated electricity (MWh)



0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,409

## C9. Additional metrics

## C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

## C-MM9.3a

(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.

## **Output product**

Copper

Capacity, metric tons

Production, metric tons

1,879,713

Production, copper-equivalent units (metric tons)

1,879,713

Scope 1 emissions

4,570,905

Scope 2 emissions

2,295,947

Scope 2 emissions approach

Market-based

Pricing methodology for copper-equivalent figure



Copper production does not require pricing methodology for copper-equivalent figure.

#### Comment

Emissions correspond to Copper Mining Sites.

#### **Output product**

Other non-ferrous metal mining (Please specify) Molybdenum

Capacity, metric tons

Production, metric tons

38,555

Production, copper-equivalent units (metric tons)

181,857

Scope 1 emissions

74,639

Scope 2 emissions

161,685

Scope 2 emissions approach

Market-based

#### Pricing methodology for copper-equivalent figure

Copper-equivalent has been estimated using 2022 prices published in FCX Annual Report. Methodology has been applied for a 1-year period of prices. Factor of 4,72 \$t/\$CuEq has been utilized.

### Comment

Emissions correspond to Molybdenum mining. Molybdenum production is obtained as primary production but also as by-product from copper production.

### **Output product**

Gold

Capacity, metric tons

Production, metric tons

56.33

Production, copper-equivalent units (metric tons)



380,581.56

#### Scope 1 emissions

0

## Scope 2 emissions

0

## Scope 2 emissions approach

Market-based

### Pricing methodology for copper-equivalent figure

Copper-equivalent has been estimated using 2022 prices published in the FCX Annual Report. Methodology has been applied for a 1-year period of prices. Factor of 6,578,95 \$t/\$CuEq has been utilized.

#### Comment

Emissions correspond to Gold production that is content in copper concentrates and considered by-product from copper production.

### **Output product**

Silver

Capacity, metric tons

### Production, metric tons

137

## Production, copper-equivalent units (metric tons)

10,414

## Scope 1 emissions

0

#### Scope 2 emissions

0

### Scope 2 emissions approach

Market-based

## Pricing methodology for copper-equivalent figure

Copper-equivalent has been estimated using 2022 prices published in the FCX 10k. Methodology has been applied for a 1-year period of prices. Factor of 76,10 \$t/\$CuEq has been utilized.

#### Comment



Emissions correspond to Silver production that is content in copper concentrates and considered by-product from copper production.

## **C-MM9.3b**

(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.

### **Output product**

Copper

### Capacity (metric tons)

630,000

## **Production (metric tons)**

499,643

## Annual production in copper-equivalent units (thousand tons)

499,643

#### Scope 1 emissions (metric tons CO2e)

254,584

## Scope 2 emissions (metric tons CO2e)

288,384

### Scope 2 emissions approach

Market-based

#### Pricing methodology for-copper equivalent figure

Copper production does not require pricing methodology for copper-equivalent figure.

#### Comment

Process metrics only consider copper smelter and refinery units. Together with mining activities previously reported in 9.3a, we are covering over 99% of total emissions. Remaining percentage corresponds to molybdenum processing facilities.

# C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	



## C-MM9.6a

(C-MM9.6a) Provide details of your organization's investments in low-carbon R&D for metals and mining production activities over the last three years.

## **Technology** area

Metal recycling

## Stage of development in the reporting year

Applied research and development

Average % of total R&D investment over the last 3 years 56

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

Average % of total R&D investment planned over the next 5 years

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

This investment pertains to the CirCular project at our Atlantic Copper Smelter & Refinery where in 2021, preliminary studies for the construction of an innovative end-of-life recycling plant, which will process recycled electronic material from WEEE (waste electrical and electronic equipment in disuse) and recover key metals used for the energy transition.

## C10. Verification

## C<sub>10.1</sub>

## (C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

## C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.



### Verification or assurance cycle in place

Annual process

### Status in the current reporting year

Complete

### Type of verification or assurance

Reasonable assurance

#### Attach the statement

11221937-LTR-14-Att-1-Verification Opinion.pdf

### Page/ section reference

Page 1 and Page 5

#### Relevant standard

ISO14064-1

## Proportion of reported emissions verified (%)

100

## C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

### Scope 2 approach

Scope 2 location-based

#### Verification or assurance cycle in place

Annual process

### Status in the current reporting year

Complete

### Type of verification or assurance

Reasonable assurance

## Attach the statement

11221937-LTR-14-Att-1-Verification Opinion.pdf

### Page/ section reference

Page 1 and Page 5



#### Relevant standard

ISO14064-1

### Proportion of reported emissions verified (%)

100

### Scope 2 approach

Scope 2 market-based

#### Verification or assurance cycle in place

Annual process

### Status in the current reporting year

Complete

#### Type of verification or assurance

Reasonable assurance

### Attach the statement

11221937-LTR-14-Att-1-Verification Opinion (002).pdf

### Page/ section reference

Page 1 and Page 5

### Relevant standard

ISO14064-1

### Proportion of reported emissions verified (%)

100

## C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

### **Scope 3 category**

- Scope 3: Purchased goods and services
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Upstream leased assets
- Scope 3: Downstream transportation and distribution



Scope 3: Processing of sold products

#### Verification or assurance cycle in place

Annual process

## Status in the current reporting year

Complete

### Type of verification or assurance

Reasonable assurance

#### Attach the statement

11221937-LTR-14-Att-1-Verification Opinion.pdf

## Page/section reference

#### Relevant standard

ISO14064-3

### Proportion of reported emissions verified (%)

100

## C<sub>10.2</sub>

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

## C11. Carbon pricing

### C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

## C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

## C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.



#### **EU ETS**

% of Scope 1 emissions covered by the ETS

1.12

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

71,986

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

54,130

Verified Scope 2 emissions in metric tons CO2e

0

**Details of ownership** 

Facilities we own and operate

#### Comment

Considers emissions from Rotterdam (The Netherlands) and Atlantic Copper (Spain). Values for both sites have been added.

## C11.1d

## (C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

In many of the jurisdictions in which we operate, governmental bodies are increasingly enacting legislation and regulations in response to the potential impacts of climate change. Carbon tax legislation also has been adopted in jurisdictions where we operate, including Indonesia, and we expect that such carbon taxes and other carbon pricing mechanisms will increase over time. The Indonesia government is also considering other carbon pricing initiatives. Depending on the future state of various climate policies and the speed at which the world adopts various policies and initiatives, we recognize that all of our operating regions must prepare for carbon pricing regimes. With the benefit of our global scenario analysis, as well as input and ongoing dialogue with external stakeholders and associations, FCX has established internal carbon shadow prices that include \$50, \$100, and \$150 per metric ton of CO2 equivalent, reflecting the results and inputs from our three scenarios — No Climate Action



(~4.0°C), Moderate Climate Action (~2.5°C) and Aggressive Climate Action (1.5°C) — evaluated in our global climate scenario analysis completed in 2021.

We continue to work to integrate these carbon prices into our business processes to evaluate the potential impacts of an imposed carbon pricing regime on our current operations, longer-term business plans and potential future projects. We have integrated the carbon shadow price range into life-of-mine plans and continue to socialize the use of internal carbon shadow prices with our project teams, incorporating its use in evaluating select projects as additional input to our decision-making for both existing operations and future projects. We recognize that climate-related policy changes are dynamic and rapidly shifting, and that our pricing assumptions must also be iterative and flexible. Accordingly, we are committed to reviewing our carbon pricing scale periodically so that the range is appropriate and relevant as part of our decision-making factors.

We anticipate that we will dedicate more resources and money to comply and remediate in response to legislative or regulatory changes, and our ability to modify our operations to avoid these costs may be limited in the near term. However, it is not yet possible to reasonably estimate the nature, extent, timing and cost or other impacts of any future carbon pricing mechanisms, other climate change regulatory programs or future legislative action that may be enacted.

Currently, the only jurisdiction in which we are regulated with regard to GHG emissions is in Europe, where our Atlantic Copper Smelter and Refinery (AC) in Spain and our Rotterdam molybdenum processing plant in the Netherlands are covered by the European Union Emissions Trading Scheme (EU ETS). Both facilities comply with the EU ETS by maintaining GHG emissions levels lower than their allocated allowance. AC processes over 1 million metric tons of copper concentrate annually. According to a Wood Mackenzie study conducted in 2007, AC was benchmarked as one of the most energy efficient smelters in the world, despite being built in the 1970s. It was the first copper smelter in the world to be certified to ISO 50001 Energy Management System and currently consumes 51% of its electricity from renewable sources or on-site, high-efficiency cogeneration. Over the past decade, through a series of energy improvement projects, AC has improved its already industry-leading energy efficiency by almost 20% per ton of material processed. Projects implemented to achieve this reduction include redesign of refining furnaces, reduction of fuel oil consumption, increased recovery and reuse of energy from the smelting process and improvement of power plant efficiency. In 2019, AC signed the first of two long-term energy purchase contracts through a platform for large industrial consumers in Spain to help develop renewable energy projects in Spain. We plan to incorporate more renewable sources of energy through power purchase agreements and energy efficient projects, such as heat recovery and process innovation energy efficiency opportunities. Additionally, our emissions profile has and will continue to directly benefit from our energy supplier's decarbonization of the grid. Through these measures and expected additional grid decarbonization, we expect AC to continue to be a leading copper smelter in energy use efficiency.



## C11.2

## (C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

## C11.3

## (C11.3) Does your organization use an internal price on carbon?

Yes

## C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

## Type of internal carbon price

Shadow price

### How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Alignment with the price of a carbon tax

Benchmarking against peers

Other, please specify

With the benefit of our global scenario analysis and input and dialogue with external stakeholders we established internal carbon shadow prices of \$50, \$100, and \$150 per metric ton of CO2 equivalent

#### Objective(s) for implementing this internal carbon price

Change internal behavior

Drive low-carbon investment

Identify and seize low-carbon opportunities

Navigate GHG regulations

Stress test investments

#### Scope(s) covered

Scope 1

Scope 2

### Pricing approach used – spatial variance

Uniform

### Pricing approach used - temporal variance

Static

Indicate how you expect the price to change over time



Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

50

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

150

Business decision-making processes this internal carbon price is applied to

Capital expenditure

Operations

Mandatory enforcement of this internal carbon price within these business decision-making processes

No

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

We continue to work to integrate these carbon prices into our business processes to evaluate the potential impacts of an imposed carbon pricing regime on our current operations, longer-term business plans and potential future projects. We have integrated the carbon shadow price range into life-of-mine plans and continue to socialize the use of internal carbon shadow prices with our project teams, incorporating its use in evaluating select projects (such as the ongoing PT-FI feasibility study) as additional input to our decision-making for both existing operations and future projects.

## C12. Engagement

## C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

## C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

#### Type of engagement

Innovation & collaboration (changing markets)

#### **Details of engagement**

Other, please specify



Industry collaboration to bring to market technologies for lower-carbon technologies for use in the mining industry.

## % of suppliers by number

0.26

#### % total procurement spend (direct and indirect)

7.51

## % of supplier-related Scope 3 emissions as reported in C6.5

8.9

### Rationale for the coverage of your engagement

FCX recognizes that mining companies and Original Equipment Manufacturers (OEMs) must work together collaboratively in order to develop and advance technologies that will support industry-wide decarbonization. FCX is actively leveraging its existing strategic partnerships with its OEMs to better understand their emissions goals and objectives for haulage as well as other critical equipment. At this stage we are working with a number of our top suppliers of haul trucks, ancillary mobile equipment, drilling, and processing equipment (by spend) to share our programs, develop agreements for new technology and encourage support for alignment with the goals of the Paris Agreement.

#### Impact of engagement, including measures of success

We are currently working with our two main haul truck OEMs on new technology development, including active diesel-electric haul truck trials that are ongoing at our Cerro Verde operation currently. We are also collaborating with key mining and processing equipment suppliers on general climate program development including methods to estimate improvements in a joint fashion to better enable consistency. In addition, we are actively engaged with a number of consortiums that bring together industry leaders with OEMs to work together to develop innovate solutions. In 2021, we joined The Charge on Innovation Challenge (The Challenge) as a patron supporter. FCX continues to engage with two of the selected innovators, focused on next generation trolley assist systems and fast charging stations, to accelerate the technology development and further the future roll-out of zero-emissions fleets.

#### Comment

## C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

### Type of engagement & Details of engagement

Education/information sharing



Run an engagement campaign to education customers about your climate change performance and strategy

## % of customers by number

52

% of customer - related Scope 3 emissions as reported in C6.5

## Please explain the rationale for selecting this group of customers and scope of engagement

In an effort to drive collaboration and better understand customer needs, FCX began engaging key customers on our climate strategy and Copper Mark implementation in 2020. In 2022 and through June 2023, we engaged more than 50% of our refined copper (i.e., cathode and rod) customers responsible for 75% of 2022 sales by volume (lbs) in the Americas. This group of customers purchase the majority of the refined copper we produce, and as a result have a direct connection to the main markets into which our copper is delivered. We have also provided information and held meaningful discussions with customers who purchase smaller amounts, on an ad hoc basis. In most cases, we have engaged with our direct customers; in some cases, we have worked with our customers' customers (e.g., downstream automotive OEMs). Finally, we also engage other customers (including for molybdenum) in other regions on climate and will continue to do so, but focusing on the Americas has enabled us meaningful progress because of the vertical integration in this region.

### Impact of engagement, including measures of success

The engagements have helped to educate our customers on our processes and the emissions we generate, as well as our current and planned efforts around each of our decarbonization levers. This then enables them to have more direct conversations with their customers regarding the potential pace of decarbonization in primary copper production. Some engagements have led to face-to-face workshops or meetings with our customers which have allowed us to identify collaborative dialogues across the value chain. Additionally, several of our customers have joined the Copper Mark (as participants or partners) and we have supported their efforts to work toward achieving the Copper Mark.

## C12.1d

## (C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

We are working collaboratively with various industry consortiums and equipment manufactures to develop viable technological solutions necessary to achieve our climate commitments. In addition to our commitment to the Copper Mark, FCX 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 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 our value chains.

We also believe that industry associations are an important vehicle for collaboration and advancement of the contribution that our products make to the energy transition. Through our involvement in these associations, we seek to share and drive best practices, develop new methodologies, invest in research on critical topics related to material stewardship, and support the development of effective policy. We are actively engaged with the ICMM's Innovation for Cleaner, Safer Vehicles initiative focused on developing low-GHG emissions mining equipment with our OEMs. In 2021, we joined and participated in the Charge on Innovation Challenge (The Challenge) as a patron supporter. The Challenge was a global competition expected to drive technology innovators across all industries to develop new concepts and solutions for large-scale haul truck electrification systems aimed at significantly cutting emissions from surface mining. FCX continues to engage with two of the selected innovators, focused on next generation trolley assist systems and fast charging stations, to accelerate the technology development and further the future roll-out of zero-emissions fleets. FCX is also participating in regional hydrogen innovation collaborations. In the U.S., an initiative called H2Hubs establishes networks of hydrogen producers, consumers and local connective infrastructure to accelerate the use of hydrogen as an alternative to fossil fuel-based energy. As part of this initiative, FCX is participating in the Southwest Clean Hydrogen Innovation Network to complete an assessment of potential hydrogen use at our mines. FCX has also joined two consortiums in South America, H2-Chile and H2-Peru, which are both collaborative efforts between public, private and academic entities focused primarily on enabling the use of hydrogen in haul trucks and to support the energy transition more broadly.

Life Cycle Assessments (LCAs) provide an overview of environmental impacts across a product's life cycle to enable producers to identify improvement opportunities and trade-offs. In 2022, ICA completed an update to its previous global LCA profile for copper concentrate and cathode. FCX played a key role in this work, providing data from our mining, smelting and refining facilities. In 2022, ICA also released guidance for producers to enable a more consistent calculation of the carbon footprint of copper production across the industry. The Copper Development Association (the partner organization to ICA in North America) also reinitiated a project to conduct an LCA of copper rod used for electrical applications. Work on this project will continue in 2023. In 2022, we worked with our peers at ICA to publish a carbon footprint methodology for copper. This methodology is expected to enable more consistent, comparable and higher quality datasets across the industry. In addition, it is generally expected to help downstream companies and stakeholders gain knowledge of the overall carbon footprint of copper. The aforementioned GCDR project also included setting a baseline for Scope 1, 2 and 3 emissions for the industry and assessing the associated abatement potential of various decarbonization pathways to 2030 and 2050. This now enables participants in the value chain from mine to semi-fabricated copper to develop and contextualize their own decarbonization roadmaps in relation to their place in the value chain. At FCX, we are using the results to further inform our climate strategy, drive continuous improvement and, as appropriate, to provide FCX-specific results to customers and other value-chain participants.



## C12.2

## (C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

### C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

#### Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

FCX Environmental Policy.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, which is why we offer expertise to, and partner with, various external organizations and industry associations committed to our industry and to advancing sustainability. In 2022, we conducted an evaluation of our memberships in various industry and business associations globally with the aim of analyzing the extent of alignment between our climate-related commitments and aspirations and the positions and commitments of those associations. Further detail of this analysis can be found in our Climate Report.



## C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

#### **Trade association**

Other, please specify
International Copper Association (ICA)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

ICA's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.).

In 2022, FCX held a leadership role as Chair of ICA. Further, we actively engaged with fellow ICA members to complete the development of a Global Copper Decarbonization Roadmap (GCDR) to Net Zero by 2050. In 2022, ICA completed an update to its previous global LCA profile for copper concentrate and copper cathode. FCX played a key role in this work, providing data from our mining, smelting and refining facilities. ICA also released guidance for producers to enable a more consistent calculation of the carbon footprint of copper production across the industry. This "best practice" guidance provides a harmonized and consistent approach to determining the carbon footprint of copper operations and the products they produce. The Copper Development Association (the partner organization to ICA in North America) also reinitiated a project to conduct an LCA of copper rod used for electrical applications. Work on this project is expected to continue in 2023.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

500,000

Describe the aim of your organization's funding



FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid more than \$500,000 in membership fees to ICA.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

International Council on Mining & Metals (ICMM)

## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

ICMM is an organization dedicated to a safe, fair and sustainable mining and metals industry. As a founding member, FCX has been a leader for over 20 years, and FCX's Chairman and CEO served as Chair of ICMM from 2008-2011 and 2020-2022. ICMM member companies are required to comply with its 39 performance expectations and its 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 39 performance expectations must be validated by a third-party at the site level with annual activities published, including how expectations will be met.

ICMM member companies are required, among other things, to implement processes for governance, engagement and disclosure, advance site-level adaptation and mitigation solutions, engage with host communities and others in the value chain, and monitor and disclose Scope 1, 2 and 3 GHG emissions. In 2021, FCX contributed to the development of and signed the ICMM Net Zero Climate Change Statement, which commits member companies to a goal of net zero Scope 1 and 2 GHG emissions by



2050 or sooner in line with the ambitions of the Paris Agreement.

ICMM's Climate Change position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.). In 2021, we played a significant role in the development of and endorsed the ICMM Climate Change Statement, which commits member companies to, among other things, establish Scope 3 targets. In 2022, we actively worked within the ICMM Climate Change Working Group and its sub groups with our peers to develop guidelines for conforming to the position statement commitments.

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

100,000

### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid \$100,000-\$499,000 in membership fees to ICMM.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

Other, please specify

The International Molybdenum Association (IMOA)

## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position



## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

IMOA's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.).

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

500,000

### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid more than \$500,000 in membership fees to IMOA.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

Other, please specify Consejo Minero

## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Consejo Minero's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.). An FCX representative serves on the Board of Consejo Minero.



# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

100.000

#### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid \$100,000-\$499,000 in membership fees to Consejo Minero.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

Other, please specify
EIT RAWMATERIALS E.V. (EIT)

## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

EIT's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.). An FCX representative serves on the Executive Board of EIT.

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

100,000

### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important



vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid \$100,000-\$499,000 in membership fees to EIT.

## Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### Trade association

Other, please specify
Sociedad Nacional de Mineria, Petroleo y Energia

## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Sociedad Nacional de Mineria, Petroleo y Energia's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.). An FCX representative serves on the Board of Sociedad Nacional de Mineria, Petroleo y Energia.

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

100,000

#### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.



Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid \$100,000-\$499,000 in membership fees to Sociedad Nacional de Mineria, Petroleo y Energia.

## Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### **Trade association**

**Business Roundtable** 

## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Business Roundtable's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.).

## Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

100,000

#### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid \$100,000-\$499,000 in membership fees to Business Roundtable.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned



#### **Trade association**

**National Mining Association** 

## Is your organization's position on climate change policy consistent with theirs?

Mixed

## Has your organization attempted to influence their position in the reporting year?

Yes, we attempted to influence them but they did not change their position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

In 2022, we continued working with NMA's ESG Task Force, playing a leading role in advancing the organization's position and activities with regard to climate and other sustainability matters. Based on our review of publicly-available information, we believe NMA's publicly-stated position is generally supportive of the commitments or goals in the Paris Agreement, but our position is more explicit on some commitments or goals in the Paris Agreement. Accordingly, we consider that NMA's climate position is only partially aligned with our climate position. As a result, we will continue to work with NMA with the aim of developing a more advanced position in support of the Paris Agreement.

# Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

500,000

### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid more than \$500,000 in membership fees to NMA.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

#### Trade association

US Chamber of Commerce



## Is your organization's position on climate change policy consistent with theirs?

Consistent

## Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

## Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

U.S. Chamber of Commerce's position is in line with our position and we actively work within the organization to develop their position and to support it externally (e.g., speaking at and attending conferences, collaborating with peers, advocacy, etc.).

## Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

100,000

#### Describe the aim of your organization's funding

FCX is a member of various industry and business associations that provide a platform for advancing sustainability. Industry and business associations can be an important vehicle for furthering industry contributions at the global, national, regional and local level. We recognize the importance of collaboration with thought leaders to help drive progress, and we believe that engagement with stakeholders is fundamental to our success.

Through our Climate Report we disclose a range of membership fees paid. In 2022, FCX paid \$100,000-\$499,000 in membership fees to the U.S. Chamber of Commerce.

# Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

## C12.4

(C12.4) 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**

In voluntary communications

#### **Status**

Underway – previous year attached



#### Attach the document

FCX 2021-Climate-Report.pdf

## Page/Section reference

Full report

#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

Other, please specify

TCFD Index

#### Comment

#### **Publication**

In voluntary sustainability report

### **Status**

Complete

#### Attach the document

 $\ensuremath{\mathbb{Q}}$  FCX 2022-annual-report-on-sustainability.pdf

### Page/Section reference

20-23, 27-28, 80-84, 114-115, 126-136

#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

#### Comment

### **Publication**

In mainstream reports, incorporating the TCFD recommendations



### **Status**

Complete

### Attach the document

FCX\_AR\_2022.pdf

⊕ FCX\_Prox\_2023.pdf

## Page/Section reference

10-K

Climate Change Regulations/Carbon Tax page 9 Risk Factors pages 48-68

AR

Climate Strategy pages 22-23

Proxy

Stakeholder engagement page 8

Targets page 9

Climate Strategy page 10

Board oversight page 11, 16, 17, 33

Annual Incentive Program pages 46-47

#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emission targets** 

### Comment

## C12.5

# (C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row	Science Based Targets Network	Science Based Targets Network (SBTN) - We have
1	(SBTN)	committed to seek validation of our four GHG reduction
	UN Global Compact	targets by the Science Based Targets initiative in the next
	Other, please specify	two years; completed analysis of SBTi target criteria
	The International Council on Mining & Metals (ICMM),	relating to our Scopes 1, 2 and 3 GHG emissions; conducted strategic review with external firm of potential



International Copper Association, International Molybdenum Association, Copper Mark, Wildlife Habitat Council sectoral decarbonization approach for copper.

UN Global Compact - The UN Global Compact is a voluntary, corporate sustainability initiative of CEO commitments to implement universal sustainability principles and to support the Sustainable Development Goals (SDGs). FCX became a supporting member in March 2020 and seeks to contribute to achievement of the SDGs in the communities where FCX operates as well as through the commodities FCX produces.

ICMM - The International Council on Mining & Metals (ICMM) is dedicated to a safe, fair and sustainable mining and metals industry, aiming continuously to strengthen ESG performance across the global mining and metals industry. As a member company, FCX is required to implement the 10 Mining Principles which define good ESG practices, and associated position statements, while also meeting 39 performance expectations. FCX was a founding member of the ICMM in 2001, and FCX's Chairman and CEO served as Chair of ICMM from 2008 to 2011 and 2020 to 2022.

International Copper Association - 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 sustainable development through greater use of copper in applications that support sustainability. FCX has been a member since its inception in 1989. FCX's Chief Administrative Officer served as Chair of the ICA Board of Directors from 2020 to 2022.

Copper Mark - The Copper Mark is a comprehensive assurance framework that promotes responsible production practices. It is the first and only framework developed specifically for the copper industry. FCX has achieved the Copper Mark at all 12 of its copper producing sites globally, including most recently at PT-FI in February 2023. In addition, following the extension of the Copper Mark framework to molybdenum producers in 2022, our two primary molybdenum mines and our four copper mines that produce by-product molybdenum were awarded the Molybdenum Mark.

FCX played a leading role in the development of the Copper Mark by actively participating in the organization's



multi-stakeholder processes to further develop and work toward achieving its short- and long-term goals for growth. We continue to encourage our stakeholders, peers, customers and downstream users to join, collaborate and promote uptake of the Copper Mark validation process globally, with the ultimate goal of transparently demonstrating responsible production all the way to the end user.
Wildlife Habitat Council - The Wildlife Habitat Council (WHC) promotes and certifies habitat conservation and management on corporate lands through partnerships and education. FCX has been a member of the WHC since 2006.

## C15. Biodiversity

## C15.1

# (C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	We are committed to proactively managing and mitigating the impacts of our operations on biodiversity, land and surrounding ecosystems, which includes effectively identifying and managing biodiversity-related risks. We focus on biodiversity and land management across the life cycle of our operations. Our sites and subject matter experts on our corporate team collaborate to evaluate each potential project area in order to identify and map key features related to biodiversity, cultural resources, water resources and various other environmental factors before the project can proceed. Biodiversity and conservation are also key components of our reclamation plans and activities at our sites. Our Environmental Policy states our commitment to contribute to the conservation of biodiversity including an explicit commitment not to explore nor mine at any United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites. The Corporate Responsibility Committee (CRC) of the Board of Directors (Board) last amended the Environmental Policy December 7, 2021.



The CRC, on behalf of the Board, oversees the company's environmental and social policies and implementation programs and related risks. The CRC reviews the effectiveness of the Company's strategies, programs, and policy implementation with respect to ESG-related topics, including biodiversity and land management. During 2022, the CRC had four regularly scheduled meetings.

FCX's Chairman and CEO has ultimate responsibility for the Company's sustainability performance, with active oversight from the Board. FCX crossfunctional Sustainability Leadership Team (SLT) includes members of management tasked with defining the sustainability strategy and implementing our sustainability policies, systems and programs across the organization to achieve integrated decision making for responsible production and performance.

## C15.2

# (C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples	SDG Other, please specify Wildlife Habitat Council

## C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment



## Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

## C15.4

(C15.4) Does your organization have activities located in or near to biodiversitysensitive areas in the reporting year?

## C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?
Row 1	

## C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	nitor nce
Row	

## C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Other, please specify	<b>(</b> ) 1
In voluntary sustainability report or other voluntary communications	Governance	<b>Q</b> 2



1 FCX 2022-annual-report-on-sustainability.pdf

<sup>2</sup>FCX Environmental Policy.pdf

## C16. Signoff

## C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

## C16.1

## (C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Vice President & Chief Sustainability Officer	Chief Sustainability Officer (CSO)

## SC. Supply chain module

## SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

In 2019, we began reaching out to customers to begin dialogue on climate change. This dialogue has evolved from simply sharing our strategy and programs to now providing specific data to customers to help them fulfil their reporting obligations and develop and meet their carbon-related goals.

FCX is uniquely positioned due to our vertical integration of both copper and molybdenum production, enabling us to directly manage and work towards mitigating the emissions associated with our products that would for many producers be downstream in their value chain. We also seek to collaborate with our industry, customers and other stakeholders to drive change, whether in responsible production certifications, developing carbon footprint models or advancing policy on climate. Because we are situated at the beginning of a complex supply chain, there are challenges to sharing customer allocations of our emissions from our inventory, beyond just using an average calculation for a region.

## SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

**Annual Revenue** 



Row 1	

## **SC1.1**

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member		
Scope of emissions		
Scope 2 accounting method		
Scope 3 category(ies)		
Allocation level		
Allocation level detail		
Emissions in metric tonnes of CO2e		
Uncertainty (±%)		
Major sources of emissions		
Verified		
Allocation method		
Market value or quantity of goods/services supplied to the requesting member		
Unit for market value or quantity of goods/services supplied		
Please explain how you have identified the GHG source, including major limitations to this process and assumptions made		



## SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

## **SC1.3**

# (SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	FCX's vertically integrated copper portfolio (from earth to cathode) in the Americas and Europe enables the company to directly manage and mitigate GHG emissions that would typically be Scope 3 downstream processing emissions for other producers. Approximately 45% of FCX's overall copper concentrate production is vertically integrated, with our Miami smelter and Morenci Concentrate Leach Plant both located in Arizona and our Atlantic Copper smelter in Spain, collectively processing approximately 1.3 million metric tons of internally produced copper concentrate per year. In addition to copper concentrate provided by the company, our Atlantic Copper smelter purchases and processes approximately 70% of its copper concentrate annually from unaffiliated third parties. AC is also investing in a project to increase its recycling capacity by processing end of life electronics waste. In Miami, Arizona, and El Paso, Texas, our rod plants manufacture copper rod products for electrical markets. Specifically, our rod mills process nearly 70% of our internal cathode production, which enables us to provide our customers with a secure and efficient supply of rod while managing and reducing our GHG emissions from earth to rod.  This leads us to the unique challenge that depending on when and from where product is purchased, it can carry a different carbon footprint due to the upstream complexity of concentrate and scrap sourcing, blending and by-products. We sell concentrate, cathodes, rod, and processed molybdenum products to customers and traders, depending on their location and place in the upstream supply chain. In addition, we are often changing the balances and inputs of our smelters and chemical processing facilities to address changing ore bodies or



availability of feed due to global supply and demand and supply chain constraints. In addition, the multi-metal nature of our ore bodies leads to the need to allocate various emissions between products, which is a complex process that has several dynamics at play – many of which are highly confidential. As a result, our current preference is to engage directly with our customers to provide the data they need to fulfil their reporting obligations and develop and meet their carbon-related goals.

To help address this challenge and streamline our work, we are collaborating with our Industry Associations and expert consultants as noted below in 1.4a.

Doing so would require we disclose business sensitive/proprietary information

We have the unique challenge that depending on when and from where product is purchased, it can carry a different carbon footprint due to the upstream complexity of concentrate and scrap sourcing and which product is purchased from where. We sell concentrate, cathodes, rod, and processed molybdenum products to customers and traders, depending on their location and place in the upstream supply chain. In addition, we are often changing the balances and inputs of our smelters and chemical processing facilities to address changing ore bodies or availability of feed due to global supply and demand. In addition, the multi-metal nature of our ore bodies leads to the need to allocate various emissions between products, which is a complex process that has several dynamics at play - many of which are highly confidential. As a result, our current preference is to engage directly with our customers to provide the data they need to fulfil their reporting obligations and develop and meet their carbon-related goals.

To help address this challenge and streamline our work, we are collaborating with our Industry Associations and expert consultants as noted below in 1.4a to develop guidance and models to solve this challenge. In addition, we are working with the Copper Mark on a Chain of Custody approach that aspires to enable porting of assurance and data through the value chain. We are also focusing on our own carbon footprint and related inventories, emissions reduction targets and LCA efforts.

## SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes



## SC1.4a

### (SC1.4a) Describe how you plan to develop your capabilities.

Life Cycle Assessments (LCAs) provide an overview of environmental impacts across a product's life cycle to enable producers to identify improvement opportunities and trade-offs. Globally, governments are increasingly using LCAs as impact assessments in Circular Economy frameworks and for carbon and water footprint comparisons.

In 2022, ICA completed an update to its previous global LCA profile for copper concentrate and cathode. FCX played a key role in this work, providing data from our mining, smelting and refining facilities. In 2022, ICA also released guidance for producers to enable a more consistent calculation of the carbon footprint of copper production across the industry. This "best practice" guidance provides a harmonized and consistent approach to determining the carbon footprint of copper operations and the products they produce. The Copper Development Association (the partner organization to ICA in North America) also reinitiated a project to conduct an LCA of copper rod used for electrical applications. Work on this project will continue in 2023. We are also participating in the ICA's Global Copper Decarbonization Roadmap (GCDR) project with peers and other interested organizations (such as the Copper Mark and the International Wrought Copper Council) to develop a carbon footprint methodology for copper, as well as a roadmap for decarbonization of the global copper industry. This carbon footprint methodology is expected to enable more consistent, comparable and higher quality datasets across the industry. In addition, it is expected to help downstream companies and stakeholders in general to gain knowledge of the overall carbon footprint of copper. The GCDR project also includes setting a baseline for Scope 1, 2 and 3 emissions for the industry and assessing the associated abatement potential of various decarbonization pathways to 2030 and 2050. This now enables participants in the value chain from earth to semi-fabricated copper to develop and contextualize their own decarbonization roadmaps in relation to their place in the value chain. At FCX, we are using the results to further inform our climate strategy, drive continuous improvement and, as appropriate, to provide FCX-specific results to customers and other value-chain participants.

FCX is also critically focused on our own carbon footprint, and in particular, on reducing our Scope 1 and 2 GHG emissions. FCX now has four 2030 GHG emissions (Scope 1 and 2) reduction targets, which collectively cover nearly 100% of our global Scope 1 and 2 GHG emissions and are critical to reducing the carbon footprint of our products. In 2022, we also published a significant update to our Scope 3 GHG emissions inventory globally and continue to refine and improve our Scope 3 GHG emissions inventory. Finally, we are also advancing our LCA efforts to develop carbon footprint datasets for each of our products to support our downstream customers and OEMs to better estimate their own emissions and decarbonization progress.

In addition, we are working with our suppliers to obtain improved Scope 3 upstream data over the coming few years.



## SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

## **SC2.2**

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

## SC4.1

No

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

## **Submit your response**

In which language are you submitting your response?

## Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options		Public

Please confirm below